

# HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation  
06/2017 s.66.0901(7) Wis. Stats

Proposal Number: **013**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Waukesha	2759-03-70	WISC 2020074	North Avenue; Calhoun Road To E County Line	CTH M

## ADDENDUM REQUIRED ATTACHED AT BACK

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: \$510,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: March 10, 2020 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code  <h3 style="margin: 0;">SAMPLE</h3> <h3 style="margin: 0;">NOT FOR BIDDING PURPOSES</h3> <p style="margin: 0;">This contract is exempt from federal oversight.</p>
Contract Completion Time November 19, 2021	
Assigned Disadvantaged Business Enterprise Goal <span style="float: right;"><b>15%</b></span>	

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)

\_\_\_\_\_  
(Bidder Signature)

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

\_\_\_\_\_  
(Print or Type Bidder Name)

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

\_\_\_\_\_  
(Bidder Title)

Notary Seal

Type of Work:	For Department Use Only
Mill, Storm Sewer, Sanitary Sewer, Culvert Pipe, Water Main, Base, Concrete Pavement, Asphalt Pavement, Curb & Gutter, Sidewalk, Beam Guard, Signals, Signing, Wall Modular Block Gravity Landscape, Pavement Marking, Structures B-67-256, 374, 375, R-67-152 - 154	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

## Effective with August 2015 Letting

### BID PREPARATION

#### Preparing the Proposal Schedule of Items

##### A General

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  1. Electronic bid on the internet.
  2. Electronic bid on a printout with accompanying diskette or CD ROM.
  3. Paper bid under a waiver of the electronic submittal requirements.

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

- (3) The department will provide bidding information through the department's web site at:  
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM 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 PM 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:  
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4<sup>th</sup> floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.

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

##### B Submitting Electronic Bids

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

- (1) Do the following before submitting the bid:
  1. Have a properly executed annual bid bond on file with the department.

2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
  1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
  2. Use 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:  
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>  
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)

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

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

**NOTARY FOR PRINCIPAL**

**NOTARY FOR SURETY**

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

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

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

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

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

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

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

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

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

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

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

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

**Notary Seal**

**Notary Seal**

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





# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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)





**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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

## Special Provisions

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## STSP'S Revised June 18, 2019

### SPECIAL PROVISIONS

#### 1. General.

Perform the work under this construction contract for Project 2759-03-70, North Avenue, N. Calhoun Road to East County Line, CTH M, Waukesha 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, 2020 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 (20190618)

#### 2. Scope of Work.

The work under this contract shall consist of excavation common, marsh excavation, aggregate base, HMA pavement, structures, retaining walls, traffic signals, monotubes, curb and gutter, sidewalk, storm sewer, pavement marking, permanent signing, landscaping, restoration. and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

#### 3. Prosecution and Progress.

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

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

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

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment.

There will be no adverse weather delay or additional compensation for cold weather construction, unless otherwise provided for in the contract.

##### **Schedule of Operations**

Traffic shifts shown in a given stage may occur at different times during that stage depending on the controlling elements for a given traffic movement. The department anticipates that the schedule for each stage shall be as follows:

Anticipated schedule:

Do not move to the next stage until all work in the current stage is completed or as approved by the engineer.

##### **Stage 1 Construction:**

- Temporary widening along WB North Avenue/CTH M
- Temporary Pavement in North Avenue/CTH M median
- Median work on Calhoun Road
- Median work on Pilgrim Road

**Stage 2 Construction:**

- EB North Avenue/CTH M from Calhoun Road to Marilyn Drive
- EB North Avenue/CTH M temporary transition near Kevenauer Drive
- Entire railroad crossing of North Avenue/CTH M and Pilgrim Road
- Calhoun Road south of North Avenue/CTH M
- Pilgrim Road south of North Avenue/CTH M
- Sideroads N. 166<sup>th</sup> Street, Glencove Lane, W. Pilgrim Parkway, and Marilyn Drive
- Pond SE of North Avenue/CTH M and Pilgrim Road intersection

**Stage 2B Construction:**

- Median work near Pilgrim Road intersection

**Stage 3 Construction:**

- WB North Avenue/CTH M from Calhoun Road to Marilyn Drive
- WB North Avenue/CTH M temporary transition near Kevenauer Drive
- Calhoun Road north of North Avenue/CTH M
- Pilgrim Road north of North Avenue/CTH M
- Sideroads Brook Springs Drive, W. Hillsdale Drive, E. Hillsdale Drive, and Pilgrim Square Drive
- Pond NE of North Avenue/CTH M and Pilgrim Road intersection

**Stage 4 Construction:**

- Median work on North Avenue/CTH M from Calhoun Road to Marilyn Drive
- Final restoration from Calhoun Road to Marilyn Drive

**Stage 5 Construction:**

- Storm sewer near Highland Drive, Lilly Road, and Tru Lane to Mayfair Drive
- Pond at Hollyhock Lane

**Stage 5B Construction:**

- Temporary widening along EB and WB North Avenue/CTH M
- Temporary pavement in North Avenue/CTH M median

**Stage 6 Construction:**

- EB North Avenue/CTH M pavement from Marilyn Drive to E. Rockaway Lane
- EB North Avenue/CTH M pavement from Tru Lane to 124<sup>th</sup> Street
- WB North Avenue/CTH M pavement from E. Rockaway Lane to Tru Lane

- Sideroads E. Rockaway Lane, N. 147<sup>th</sup> Street, Mount Zion Woods Court, Walnut Grove Court, N. Lilly Road, Tru Lane, S. Hollyhock Lane, Arrowhead Court, Fairhaven Boulevard, and Cloverhill Road
- Construct bridge B-67-375

#### **Stage 7 Construction:**

- WB North Avenue/CTH M pavement from Marilyn Drive to E. Rockaway Lane
- WB North Avenue/CTH M pavement from Tru Lane to 124<sup>th</sup> Street
- EB North Avenue/CTH M pavement from E. Rockaway Lane to Tru Lane
- Sideroads Kevenauer Drive, W. Rockaway Lane, Highland Drive, Mt. Kisco Drive, Underwood Parkway, Lilly Road, San Fernando Drive, Holyhock Lane, N. 131<sup>st</sup> Street, N. 130<sup>th</sup> Street, Mayfair Drive, and N. 128<sup>th</sup> Street
- Construct bridge B-67-374

#### **Stage 8 Construction:**

- Median work on North Avenue/CTH M from Marilyn Drive to 124<sup>th</sup> Street

#### **Contractor Coordination**

Provide an individual to serve as the contractor's sole point of contact for field utility coordination and communication for the duration of the project.

#### **Portable Changeable Message Signs**

Obtain acceptance from the engineer regarding the wording of all messages on portable changeable message signs prior to placing the message.

#### **Closure Restrictions**

Do not close local street traffic lanes or intersections and ensure that the local street traffic lanes are entirely clear for traffic except as shown in the traffic control plans.

Follow plan details for closures. Lane restrictions beyond that shown on the traffic control plans must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer for approval.

Do not, at any time, conduct construction operations in the median area and adjacent outside shoulder area of the local street at the same time without obtaining prior permission of the engineer, beyond that shown on the traffic control plans.

Do not close Pilgrim Road when North Avenue/CTH M is closed.

Do not close Pilgrim Road south of North Avenue/CTH M when Pilgrim Road north of North Avenue/CTH M is closed.

#### **General**

Comply with all local ordinances that apply to local street work operations, including those pertaining to working during night time hours. Furnish any ordinance variance issued by the municipality or required permits to the engineer in writing 3 business days prior to performing such work.

Keep sidewalks open unless otherwise shown on the plans, or to facilitate the removal of structures and erection of girders or as approved by the engineer. Maintain pedestrian access to adjacent properties, businesses, schools, and at bus stops or provide where necessary, as directed by the engineer. Protect pedestrians from falling debris at all times when sidewalks are open.

Inform engineer, property owners and tenants at least 48 hours prior to removing a driveway approach that serves that property. Schedule sidewalk and driveway approach removal and replacement so that the time lapse between removal and replacement is minimal.

Do not close residential approaches or remove from service without giving sufficient notice to the occupants of the premises to remove their vehicles prior to driveway removal or closing of the driveway approach access. Obtain approval from the engineer prior to alternating construction sequencing.

Excavation material and cleared and grubbed material should be stockpiled on upland areas an adequate distance away from wetlands, storm sewer inlets, floodplains, and the waterways as determined by engineer.

Place topsoil, fertilizer, seed, mulch, and erosion mat immediately after final grading of ponds to promote establishment of vegetation prior to discharging storm water into ponds.

Work at the north end of B-67-256 is permitted by the DNR to extend the culvert pipes, construct concrete apron, grading, restoration. This work and all other disturbance adjacent to the waterway shall be limited to 45 continuous calendar days.

Work at the south end of B-67-256 is permitted by the DNR to extend the culvert pipes, construct concrete apron, grading, restoration. This work and all other disturbance adjacent to the waterway shall be limited to 45 continuous calendar days.

### **Winter Shutdown**

Winter shutdown will commence with the Completion of Stage 4 in the fall of 2020. Do not resume work until March, 15, 2021 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned start of construction in 2021. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date.

### **Interim and Final Completion of Work**

During Stage 2 operations, close Pilgrim Road south of North Avenue/CTH M for a maximum of 30 consecutive calendar days. Do not reopen until completing the following work: storm sewer, concrete curb and gutter, base aggregate dense, HMA Pavement, signing and marking.

If the contractor fails to complete the work necessary to open Pilgrim Road to traffic within 30 consecutive calendar days, the department will assess the contractor \$1875 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 30 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

During Stage 2 operations, close North Avenue/CTH M east of Pilgrim Road and west of Pilgrim Square Drive for a maximum of 5 consecutive calendar days. Do not reopen until completing the following work: railroad crossing concrete panels, and HMA Pavement.

If the contractor fails to complete the work necessary to open North Avenue/CTH M to traffic within 5 consecutive calendar days, the department will assess the contractor \$1875 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 5 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

During Stage 2B operations, close the center of the Pilgrim Road intersection at North Avenue/CTH M for NB and SB movements for a maximum of 5 consecutive calendar days. Do not reopen until completing the following work: base aggregate dense and HMA Pavement.

If the contractor fails to complete the work necessary to open center of the Pilgrim Road intersection at North Avenue/CTH M for NB and SB traffic movements traffic within 5 consecutive calendar days, the department will assess the contractor \$1875 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 5 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

During Stage 3 operations, close Pilgrim Road north of North Avenue/CTH M for a maximum of 30 consecutive calendar days. Do not reopen until completing the following work: storm sewer, concrete curb and gutter, base aggregate dense, HMA Pavement, railroad crossing concrete panels, railroad signals and gates, signing and marking.

If the contractor fails to complete the work necessary to open Pilgrim Road to traffic within 30 consecutive calendar days, the department will assess the contractor \$1875 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 30 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

At the completion of Stage 4 operations, all work shall be completed to open all lanes of North Avenue/CTH M from Calhoun Road to Marilyn Drive, Calhoun Road, and Pilgrim Road to traffic by November 21, 2020. Do not reopen North Avenue/CTH M from Calhoun Road to Marilyn Drive, Calhoun Road, and Pilgrim Road until completing the following work: storm sewer, concrete curb and gutter, base aggregate dense, HMA Pavement, sidewalk, railroad signals and gates, traffic signals, signing, marking and final restoration.

If the contractor fails to complete the work necessary to reopen N North Avenue/CTH M from Calhoun Road to Marilyn Drive, Calhoun Road, and Pilgrim Road by November 21, 2020, the department will assess the contractor \$1875 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM, November 22, 2020. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

*Supplement standard spec 108.10 with the following:*

The department will not grant time extensions for the following:

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

### **Fish Spawning**

There shall be no instream disturbance of Underwood Creek or the Dousman Ditch as a result of construction activity under or for this contract, from March 15 to June 1 both dates inclusive, in order to avoid adverse impacts upon fish spawning.

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

0036 (20090901)

### **Migratory Birds**

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

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

0074 (20090901)

### **Northern Long-eared Bat (*Myotis septentrionalis*)**

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual

bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

In accordance to the final 4(d) rule issued for the NLEB, the department has determined that the proposed activity may affect, but will not result in prohibited take of the NLEB. The activity involves tree removal but will not occur within 0.25 miles of a known hibernacula, nor will the activity remove a known maternity roost tree or any other tree within 150 feet of a known maternity roost tree.

If additional trees need to be removed, no Clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional Clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Submit a schedule and description of Clearing operations with the ECIP 14 days prior to any Clearing operations. The department will determine, based on schedule and scope of work, what additional erosion control measures shall be implemented prior to the start of Clearing operations, and list those additional measures in the ECIP.

#### **4. Traffic.**

##### **Residential and Business Property Access**

Maintain and keep open the access to all driveways and parking lots where alternative access is not available at all times by closing one driveway at a time, building half the driveway at a time and/or plating concrete work. Plating of concrete work, as directed by the engineer, is included in the item that is being plated. In parking lots that are being reconstructed, stage operations so that parking and access is maintained on existing or proposed base aggregate or pavement.

##### **Pedestrian Access**

Maintain sidewalk at all times except under direction of the engineer.

Maintain pedestrian movements crossing the construction zone at all intersections at all times, unless otherwise directed by the engineer.

##### **Schedule of Operations**

Traffic shifts shown in a given stage may occur at different times during that stage depending on the controlling elements for a given traffic movement as approved by the engineer. The department anticipates that the schedule of major traffic shifts and roadway openings and closings for each stage shall be as follows, unless approved by the engineer:

##### **Stage 1:**

- Maintain one lane minimum in each direction on existing North Avenue/CTH M
- Maintain one lane in each direction on existing Calhoun Road and Pilgrim Road
- All sideroads remain open to traffic

##### **Stage 2:**

- Maintain one lane WB and EB on existing North Avenue/CTH M WB pavement and temporary widening
- Maintain one lane SB and NB on existing Calhoun Road pavement and temporary widening
- Maintain one lane SB and NB on existing Pilgrim Road pavement north of the North Avenue/CTH M intersection
- Maintain one lane SB and NB on existing Pilgrim Road pavement south of the North Avenue/CTH M intersection until full closure Short term closure of Pilgrim Road south of North Avenue/CTH M to construct roadway

- Short term closure of North Avenue/CTH M to construct railroad crossing
- Close 166<sup>th</sup> Street, Glencove Lane, and Marilyn Drive
- Do not close 166<sup>th</sup> Street and Glencove Lane concurrently
- Do not close Pilgrim Road when North Avenue/CTH M is closed

**Stage 2B:**

- WB North Avenue/CTH M traffic remains in Stage 2 location
- EB North Avenue/CTH M traffic moves to Stage 3 location

**Stage 3:**

- Maintain one lane WB and EB on new North Avenue/CTH M EB pavement
- Maintain one lane SB and NB on new Calhoun Road pavement
- Maintain one lane SB and NB on new Pilgrim Road pavement south of the North Avenue/CTH M intersection
- Maintain one lane SB and NB on existing Pilgrim Road pavement north of the North Avenue/CTH M intersection until full closure. Short term closure of Pilgrim Road north of North Avenue/CTH M to construct railroad crossing and roadway
- Close Brook Springs Drive, W. Hillsdale Drive, E. Hillsdale Drive, and Pilgrim Square Drive
- Do not close W. Hillsdale Drive and E. Hillsdale Drive concurrently
- Do not close Pilgrim Road and Pilgrim Square Drive concurrently

**Stage 4:**

- Maintain one lane in each direction on North Avenue/CTH M new outside lanes
- All sideroads are open

**Stage 5:**

- All lanes of North Avenue/CTH M from Calhoun Road to Marilyn Drive are open
- Maintain one lane in each direction on existing North Avenue/CTH M from Marilyn Drive to 124<sup>th</sup> Street
- All sideroads remain open

**Stage 5B:**

- All lanes of North Avenue/CTH M from Calhoun Road to Marilyn Drive are open
- Maintain one lane in each direction on existing North Avenue/CTH M from Marilyn Drive to 124<sup>th</sup> Street
- All sideroads remain open



**Stage 6:**

- Maintain one lane WB and EB on existing North Avenue/CTH M WB pavement and temporary widening from Marilyn Drive to E. Rockaway Lane
- Maintain one lane WB and EB on existing North Avenue/CTH M WB pavement and temporary widening from Tru Lane to 124<sup>th</sup> Street
- Maintain one lane WB and EB on existing North Avenue/CTH M EB pavement and temporary widening from E. Rockaway Lane to Tru Lane
- Close E. Rockaway Lane, N. Lilly Road, Tru Lane, S. Hollyhock Lane, Arrowhead Court, Fairhaven Boulevard, and Cloverhill Road
- Maintain access to 147<sup>th</sup> Street, Mound Zion Woods Court, Walnut Grove Court
- Do not close S. Hollyhock Lane and Arrowhead Court concurrently
- Do not close Fairhaven Boulevard when S. Hollyhock Lane or Arrowhead Court are closed

**Stage 7:**

- Maintain one lane WB and EB on new North Avenue/CTH M EB pavement and temporary widening from Marilyn Drive to E. Rockaway Lane
- Maintain one lane WB and EB on new North Avenue/CTH M EB pavement and temporary widening from Tru Lane to 124<sup>th</sup> Street
- Maintain one lane WB and EB on new North Avenue/CTH M WB pavement and temporary widening from E. Rockaway Lane to Tru Lane
- Close Kevenauer Drive, W. Rockaway Lane, Mt. Kisco Drive, Underwood Parkway, Lilly Road, San Fernando Drive, Hollyhock Lane, N. 131<sup>st</sup> Street, N. 130<sup>th</sup> Street, Mayfair Drive, and N. 128<sup>th</sup> Street
- Do not close Kevenauer Drive and W. Rockaway Lane concurrently
- Do not close Mt. Kisco Drive and Underwood Parkway concurrently
- Do not close Lilly Road and San Fernando Drive concurrently
- Do not close 131<sup>st</sup> Street and 130<sup>th</sup> Street concurrently
- Do not close Mayfair Drive and N. 128<sup>th</sup> Street concurrently
- Maintain access to Highland Drive

**Stage 8:**

- Maintain one lane in each direction on North Avenue/CTH M new outside EB and WB lanes
- All sideroads are open

**5. Holiday Work Restrictions.**

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

- From noon Friday, May 22, 2020 to 6:00 AM Tuesday, May 26, 2020 for Memorial Day;
- From noon Thursday, July 2, 2020 to 6:00 AM Monday, July 6, 2020 for Independence Day;
- From noon Friday, September 4, 2020 to 6:00 AM Tuesday, September 8, 2020 for Labor Day;
- From noon Wednesday, November 25, 2020 to 6:00 AM Monday, November 30, 2020 for Thanksgiving;
- From noon Friday, May 28, 2021 to 6:00 AM Tuesday, June 1, 2021 for Memorial Day;
- From noon Friday, July 2, 2021 to 6:00 AM Tuesday, July 6, 2021 for Independence Day;
- From noon Friday, September 3, 2021 to 6:00 AM Tuesday, September 7, 2021 for Labor Day.

stp-107-005 (20181119)

## 6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

stp-107-066 (20080501)

There are underground and overhead utilities located within the project limits and there are known utility adjustments required for this construction project. Coordinate construction activities with a call to Digger's Hotline or a direct call to the utilities which have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearance from overhead facilities at all times.

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

If a conflict with discontinued utility facilities is encountered contact the appropriate utility owner/representative for instructions on proper removal and disposal of said facility.

### AT&T

AT&T owns and operates facilities in the project limits; some of which conflict with the proposed improvements.

Existing AT&T facilities will need to be relocated due to proposed storm sewer installations, proposed grade changes, and proposed roadway widening. The following utility work is planned by AT&T in the project corridor prior to construction:

#### North Avenue

- Replace existing AT&T underground facilities from AT&T Manhole S1023 at Station -03+30, 52' RT to AT&T MH S1022 at Station 06+45, 56' RT. Jog at Station 4+45.9, 59' RT to 4+83, 72' RT, and 6+15, 72' RT to 6+36, 56' RT
- Place lateral from Station 2+14, 59' RT to 2+09, 92' RT, to 3+18, 100' RT
- Place new AT&T pedestal at Station 3+18, 100' RT
- Place new 48"x30"x36" AT&T Handhole S2255 at Station 3+14, 68' RT
- Place lateral from Station 3+19, 59' RT to 3+14, 68' RT
- Place lateral from Station 4+19, 69' RT to 4+12, 63' LT to 4+75, 65' LT to 4+65, 385' LT
- Place lateral from Station 4+86, 356' LT to Station 4+85, 367' LT
- Place lateral from Station 4+87, 72' RT to 4+81, 579' RT to 4+13, 580' RT
- Expose and adjust existing cable from Station 5+98, 64' RT to 5+98, 117' RT.
- Replace existing AT&T underground facilities from AT&T MH S1022 at Station 06+45, 56' RT to AT&T MH 1021 at Station 06+45, 56' RT.
- Place lateral from Station 12+09, 56' RT to Station 12+05, 68' RT
- Expose and adjust existing AT&T pedestal to PR AT&T Pedestal at Station 12+05, 68' RT
- Replace existing AT&T underground facilities from AT&T MH 1021 at Station 06+45, 56' RT to AT&T MH 1020 at Station 20+44, 57' RT.

- Place lateral from Station 16+83, 50' RT to Station 16+83, 60' LT
- Place lateral from AT&T MH 120 at Station 20+37, 56' RT to Station 20+24, 59 LT.
- Place new AT&T pedestal at Station 20+24, 59 LT
- Replace existing AT&T underground facilities from AT&T MH 1020 at Station 20+44, 57' RT to AT&T MH 1019 at Station 29+82, 49' RT
- Place lateral from Station 21+67, 52' RT to Station 21+63 182' LT
- Place lateral from Station 24+55, 54' RT to Station 24+55, 66' LT
- Place lateral from Station 27+23, 54' RT to 27+14, 82' LT
- Replace existing AT&T underground facilities from AT&T MH 1019 at Station 29+82, 49' RT to AT&T MH 1018 at Station 34+48, 54' RT
- Place lateral from Station 31+87, 50' RT to 31+90, 76' LT
- Replace existing AT&T underground facilities from AT&T MH 1018 at Station 34+48, 54' RT to AT&T MH 1017 at Station 43+92, 62' RT
- Replace existing AT&T underground facilities from AT&T MH 1017 at Station 43+92, 62' RT to AT&T MH 1016 at Station 51+77, 67' RT. Jog at Station 48+31, 66' RT to 48+38, 95' RT and 50+74, 89' RT to 51+17, 67' RT
- Expose and adjust 110 LF of existing duct package at Station 56+30, 45' RT
- Expose and adjust 52 LF of existing duct package from Station 57+58, 7' LT to 58+10, 8' LT
- Replace existing AT&T underground facilities from AT&T MH 1015 at Station 58+67, 11' LT to proposed AT&T MH 1014 at Station 66+62, 61' LT. Jog at Station 58+95, 13' RT to Station 58+96, 62' LT
- Place lateral from Station 60+33, 64' LT to Station 60+35, 143' RT
- Place lateral from Station 60+14, 64' LT to Station 60+14, 97' RT
- Place lateral from Station 64+12, 59' LT to Station 64+5, 137' RT
- Place new AT&T pedestal at Station 64+6, 137' RT
- Place new 6'x12'x7' AT&T MH 1014 @ Station 66+62, 61' LT
- Replace existing AT&T underground facilities from PR AT&T MH 1014 at Station 66+62, 61' LT to PR AT&T MH 1013 at Station 74+85, 59' LT
- Place lateral from Station 66+65, 57' RT to Station 67+64, 74' RT
- Replace existing AT&T pedestal with new AT&T pedestal at Station 67+64.3, 74.6' RT
- Place lateral from Station 67+64, 74' RT to 68+40, 57' RT
- Place new AT&T pedestal at Station 68+40, 57' RT
- Expose and adjust 10 LF of existing duct package from Station 68+40, 57' RT to 68+40, 67' RT
- Place lateral from Station 71+89, 59' LT to 71+85, 134' LT
- Place lateral from Station 74+60, 59' LT to Station 74+54 , 328' RT
- Place new 6'x12'x7' AT&T MH 1013 @ Station 74+85, 59' LT
- Replace existing AT&T underground facilities from PR AT&T MH 1013 at Station 74+85, 59' LT to EX AT&T MH 1012 at Station 84+55, 11' LT. 90-degree bend at Station 84+54, 59' LT to tie into MH 1012 from the north.
- Place lateral from Station 78+44, 59' LT to Station 78+44, 72' LT
- Place lateral from Station 78+44, 59' LT to Station 78+47, 78' RT
- Expose and adjust 50 LF of existing duct package at Station 86+77, 5' LT

- Replace existing AT&T underground facilities bore from AT&T MH 1A01 at Station 94+77, 11' LT to proposed AT&T MH 1A02 at Station 104+65, 52' LT. Facilities to run north from MH 1A01 to Station 94+78, 50' LT, and bend 90 to run east to MH 1A02
- Place lateral from Station 102+69, 44' LT to Station 102+51, 188' RT
- Place lateral from Station 103+70, 52' LT to Station 103+70, 70' LT
- Place new AT&T pedestal at Station 103+70, 70' LT
- Expose and adjust 10 LF existing duct package at Station 103+70, 70' LT
- Place new 6'x12'x7' AT&T MH 1A02 at Station 104+65, 52' LT
- Replace existing AT&T underground facilities from PR AT&T MH 1A02 at Station 104+65, 52' LT to PR AT&T MH 1A03 at Station 111+52, 59' LT
- Place lateral from Station 107+14, 55' LT to Station 107+19, 67' RT
- Place new AT&T pedestal at Station 107+19, 67'
- Place new 6'x12'x7' AT&T MH 1A03 at Station 111+52, 59' LT
- Place lateral from PR AT&T MH 1A03 at Station 111+52, 59' LT to Station 111+84, 335' RT, and jog West to Station 111+05, 338' RT.
- Expose 100 LF of existing transite duct (may contain asbestos) package from Station 111+55, 34' LT to 111+49, 134' LT. Remove all transite duct package. Adjust existing facilities and incorporate into PR MH 1A03.
- Replace existing AT&T underground facilities from PR AT&T MH 1A03 at Station 111+52, 59' LT to AT&T MH 1A04 at Station 120+46, 64' RT. Jog south at Station 117+65, 58' LT, and jog east at Station 117+72, 62' RT.
- Place lateral from Station 117+72 , 62' RT to Station 117+74, 200' RT
- Replace existing AT&T underground facilities from AT&T MH 1A06 at Station 134+48, 59' RT to AT&T MH 1A07 at Station 143+60, 57' RT.
- Place lateral from Station 134+73, 58' RT to Station 134+73, 76' LT
- Place lateral from Station 137+30, 54' RT to 137+40, 159' LT, with jogs at Station 137+31, 49' LT to 137+41, 60' LT.
- Place new AT&T pedestal at Station 137+38, 158' LT
- Place new 48"x30"x36" AT&T handhole 13120 at Station 137+44, 59' LT.
- Place lateral from Station 137+38, 55' LT to 137+44, 59' LT
- Place lateral from Station 141+59, 54' RT to Station 141+52, 81' LT.
- Replace existing AT&T underground facilities from existing AT&T VRAD at Station 145+67, 280' LT to jog @ Station 145+88, 52' RT to existing AT&T MH 1A08 at Station 150+95, 53' RT.
- Expose and adjust 52 LF of existing AT&T duct package from 145+71, 57' RT to 146+23, 57' RT
- Reconstruct existing AT&T MH 1A08, to extend existing MH 2.0' West. Relocate from and lid 2.0' West out of proposed curb line at Station 150+95, 53' RT
- Replace existing AT&T underground facilities from existing AT&T MH 1A08 Station 150+95, 53' RT to PR AT&T equipment at Station 153+49, 58' RT. Running line to come north out of MH 1A08 to Station 150+96, 38' RT, jogs east to Station 153+48, 38' RT, and jogs south to proposed equipment.
- Place lateral from Station 152+81, 37' RT to Station 152+81, 55' LT.
- Place lateral from Station 153+59, 56' RT to jog at Station 152+78, 60' RT to Station 152+87, 152' RT
- Place new AT&T ped at Station 152+87, 152' RT
- Place new AT&T VRAD and Crossbox at Station 153+48, 58' RT

- Replace existing AT&T underground facilities from existing AT&T MH 1A09 at Station 158+17, 54' RT to jog at Station 157+56, 58' RT. Jog north to existing AT&T handhole at Station 157+50, 141' LT.
- Replace existing AT&T underground facilities from existing AT&T MH 1A09 at Station 158+17, 54' to jog at Station 58+30, 1' LT to existing AT&T MH 4E48 at Station 163+98, 12' LT

The work scheduled prior to construction is anticipated to begin January 2020 and is estimated to take 120 working days to complete.

The following work will be performed by AT&T during construction. Provide AT&T five working days' notice the site is available for manhole replacement and adjustment work.

Five existing AT&T manholes need to be removed and replaced during construction at the following locations:

- AT&T MH S 2255 – Station 03+12, 52' RT (Remove and replace with handhole at Station 68' RT)
- AT&T MH 1014 – Station 66+53, 11' LT (Remove and replace at 66+62, 61' LT)
- AT&T MH 1013 – Station 75+22, 11' LT (Remove and replace at 74+85, 59' LT)
- AT&T MH 1A02 – Station 104+77, 10' LT (Remove and replace at 104+65, 52' LT)
- AT&T MH 1A03 – Station 111+60, 11' LT (Remove and replace at 111+52, 59' LT)

Two manholes will need to be partially reconstructed in place.

- AT&T MH 1018 – Station 34+48, 54' RT (Reconstruct roof)
- AT&T MH 1A08 – Station 150+95, 53' RT (Reconstruct MH)

Fifteen manholes will be adjusted to the proposed finished grade.

- AT&T MH S 1022 – Station 06+45, 56' RT (Adjust F&C)
- AT&T MH 1021 – Station 14+58, 55' RT (Adjust F&C)
- AT&T MH 1020 – Station 20+44, 57' RT (Adjust F&C)
- AT&T MH 1019 – Station 29+82, 49' RT (Adjust F&C)
- AT&T MH 1016 – Station 51+77, 67' RT (Adjust F&C)
- AT&T MH 1016A – Station 58+20, 9' LT (Adjust F&C and slot west wall)
- AT&T MH 1015 – Station 58+67, 11' LT (Adjust F&C)
- AT&T MH 1012 – Station 84+55, 11' LT (Adjust F&C)
- AT&T MH 1011 – Station 84+92, 10' LT (Adjust F&C)
- AT&T MH 1A01 – Station 94+77, 11' LT (Adjust F&C)
- AT&T MH 1A04 – Station 120+46, 64' RT (Adjust F&C)
- AT&T MH 1A05 – Station 127+46, 59' RT (Adjust F&C)
- AT&T MH 1A06 – Station 134+48, 59' RT (Adjust F&C)
- AT&T MH 1A07 – Station 143+60, 57' RT (Adjust F&C)
- AT&T MH 1A09 – Station 158+17, 54' RT (Adjust F&C)

Work to excavate and remove asbestos wrapped transite ducts at the locations identified below will be required to be coordinated with the contractor during construction. Provide AT&T 5 days' notice that the site is available to perform asbestos removals by contacting David A. Pinkowski at (414) 257-0202.

<b>Asbestos Wrapped Duct Removal</b>	
Station 59+58 to Station 59+65, 11' LT	Station 79+98 to Station 80+05, 9.6' LT
Station 61+30 to Station 61+37, 12' LT	Station 82+16 to Station 82+23, 10' LT
Station 61+47 to Station 61+54, 12' LT	Station 84+36 to Station 84+43, 11' LT
Station 62+75 to Station 62+82, 12' LT	Station 99+53 to Station 99+60, 9' LT
Station 66+90 to Station 66+97, 12' LT	Station 99+75 to Station 103+75, 9' LT
Station 68+44 to Station 68+84, 12' LT	Station 106+60 to Station 106+67, 7.5' LT
Station 69+68 to Station 69+75, 12' LT	Station 108+59 to Station 106+99, 9' LT
Station 70+37 to Station 70+44, 12' LT	Station 110+43 to Station 110+50, 11.5' LT
Station 72+85 to Station 72+92, 11' LT	Station 110+54 to Station 110+64, 11.5' LT
Station 74+68 to Station 74+75, 11' LT	Station 111+13 to Station 111+20, 10.5' LT
Station 78+19, 9.8' LT to Station 78+39, 9.2' LT	Station 111+39, 7.4' LT to Station 111+05, 97' RT
Station 78+34, 9.2' LT to Station 78+47, 60.5' RT	Station 111+20, 10.6' LT to Station 111+20, 35.6' LT
Station 78+24, 9.2 LT to Station 78+41, 35' LT	

The timing of work performed during construction will be based on the roadway contractor's schedule and will take an estimated 25 working days to complete.

AT&T will be discontinuing existing facilities at the following locations:

- Station 1+00 to 52+00, South side of North Ave
- Station 59+00 to 84+00, North side of North Ave (removal at conflicts planned due to asbestos)
- Station 95+00 to 111+50, North side of North Ave (removal at conflicts planned due to asbestos)
- Station 111+50 to 117+00, North side of North Ave
- Station 117+00 to 120+50, South side of North Ave
- Station 134+00 to 143+50, South side of North Ave
- Station 145+50 to 153+50, South side of North Ave
- Station 158+00 to 164+00, South side of North Ave

The highway contractor must contact AT&T before removing or adjusting fiber optic facility to verify that the facility has been discontinued. The contractor must not assume that an unmarked facility has been discontinued.

The field construction contact for AT&T is Thomas Crowley at (262) 896-7427 or (262) 501-3499 Mobile.

### **Charter Communications**

Charter Communications owns and operates facilities in the project limits; some of which conflict with the proposed improvements. Charter will be relocating their facilities in two phases. In many locations, Charter facilities will be joint trenched with relocations being performed by We Energies Electric.

Phase 1 relocations, located between the west project limit and Marilyn Drive, is scheduled to be performed prior to construction. This work is anticipated to begin in November 2019 and is estimated to take 166 working days to complete. Phase 1 relocation work includes:

### North Avenue

- Install new line from Station 12+09 to Station 48+14, 54' to 65' RT
- Install new line from Station 48+14, 63' RT to Station 3004+57, 182' LT to Station 3002+67, 176' LT to Station 3002+99, 150' RT to Station 51+61, 77' RT to Station 52+86, 77' RT to Station 53+34, 94' RT
- Install new line from Station 16+41, 56' LT to Station 16+57, 64' LT to Station 20+30, 64' LT to Station 20+30, 49' LT to Station 24+45, 50' LT to Station 24+49, 64' LT.
- Install new line from Station 14+20, 65' RT to Station 14+28, 85' LT to Station 14+24, 379' LT
- Install new line from Station 16+65, 61' RT to Station 16+65, 54' LT
- Install new line from Station 27+35, 57' RT to Station 27+34, 53' LT to Station 27+16, 92' LT
- Install new line from Station 31+89, 57' RT to Station 31+91, 74' LT
- Install new line from Station 59+91, 89' RT to Station 60+22, 90' RT to Station 60+30, 67' RT to Station 67+58, 70' RT
- Install new line from Station 61+71, 73' RT to Station 61+68, 63' LT
- Install new line from Station 63+66, 73' LT to Station 63+91, 37' LT
- Install new line from Station 58+85, 200' LT to Station 58+85, 64' LT to Station 66+83, 70' LT

### Calhoun Road

- Install new line from Station 207+81, 53' RT to Station 210+04, 50' RT to Station 211+12, 79' RT to Station 212+62, 76' RT to Station 213+07, 48' RT to Station 215-26, 47' RT
- Install new TV cable line from Station 214+07, 56' RT to Station 215-26, 47' RT

Phase 2 work by Charter Communications is anticipated to begin in July 2020 and is estimated to take 140 working days to complete. Phase 2 relocation work includes:

### North Avenue

- Install new Line from Station 66+83, 70' LT to Station 73+48, 65' LT to Station 76+45, 62' RT to Station 82+22, 66' RT
- Install new line from Station 78+84, 73' LT to Station 78+57, 66' LT to Station 90+98, 58' LT
- Install new line from Station 85+48, 466' RT to Station 85+55, 68' RT to Station 88+62, 68' RT to Station 88+76, 63' RT to Station 88+77, 58' LT
- Install new line from Station 93+49, 66' LT to Station 93+80, 59' LT to Station 93+80, 52' LT to Station 99+60, 45' LT to Station 99+60, 63' LT to Station 104+42, 66' LT to Station 110+72, 66' LT to Station 110+89, 84' LT to Station 110+89, 312' LT
- Install new line from Station 102+61, 68' RT to Station 104+41, 68' RT to Station 104+42, 66' LT
- Install new line from Station 110+35, 66' LT to Station 110+35, 78' RT to Station 110+68, 78' RT to Station 110+90, 102' RT to Station 110+91, 324' RT to Station 111+06, 335' RT
- Install new line crossing Lilly Road from Station 608+06, 47' LT to Station 608+06, 48' RT
- Install new line from Station 121+15, 68' RT to Station 137+70, 68' RT.
- Install new line from Station 137+26, 306' LT to Station 137+35, 74' LT to Station 138+01, 76' LT to Station 138+02, 63' LT to Station 139+50, 63' LT
- Install new line from Station 148+54, 261' LT to Station 148+55, 77' LT to Station 149+24, 79' LT to Station 149+50, 59' LT to Station 150+87, 62' LT

The highway contractor must contact Charter Communications before removing or adjusting any coax or fiber optic facility to verify that the facility has been discontinued. The contractor must not assume that an unmarked facility has been discontinued.

The field construction contact for Charter Communications is Beau Abuya at (414) 758-9241.

### **City of Brookfield – Lighting**

The City of Brookfield owns and maintains street lighting along Calhoun Road at the intersection of North Avenue. Portions of the existing street lighting facilities will be moved or removed by the contractor as part of the proposed project improvements.

The field construction contact for the City of Brookfield – Lighting is Dennis Fredrich with the Highway Department at (262) 787-3688.

### **City of Brookfield – Water**

The City of Brookfield owns water facilities in the project limits. Work to install new hydrants, water main, water main offsets, water service offsets, and adjustments to hydrants, valve boxes, curb stops and manholes is included in the contract documents to be performed as part of the project improvements.

Any facilities not explicitly identified as being relocated have been deemed to be not in conflict and will remain in place as is. It is expected that contractors will work safely around any facilities left within the work zone.

The highway contractor shall contact the City of Brookfield before removing any water main facilities to verify that they have been discontinued. The contractor shall not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut, or drill an unmarked facility without explicit consent from the City of Brookfield. The contractor shall call the City of Brookfield Engineering Department at (262) 787-3919 to arrange this verification.

The field construction contact for City of Brookfield – Water is Daniel Erickson with the Engineering Department at (262) 787-3539.

The inspection contact for the City of Brookfield – Water is Jason Herzog with the Engineering Department at (262) 787-3542. The City of Brookfield Engineering Department shall be contacted at least 3 days ahead of any utility work to schedule inspection.

### **City of Brookfield - Sewer**

The City of Brookfield owns sanitary sewer facilities in the project limits. Work to reconstruct, rebuild and adjust sanitary manholes is included in the contract documents to be performed as part of the project improvements.

The field construction contact for City of Brookfield –Sanitary is Daniel Erickson with the Engineering Department at (262) 787-3539.

The inspection contact for the City of Brookfield – Sewer is Jason Herzog with the Engineering Department at (262) 787-3542. The City of Brookfield Engineering Department shall be contacted at least 3 days ahead of any utility work to schedule inspection.

### **City of Wauwatosa – Traffic Signal**

The City of Wauwatosa owns and operates the traffic signal equipment at the intersection of North Avenue and N. 124<sup>th</sup> Street in the project limits. Traffic signal work at this intersection is included as part of the proposed roadway improvements to be performed by the contractor.

Notify the City of Wauwatosa 3 working days prior to performing any work on the traffic signal equipment at this location. The field construction contact for City of Wauwatosa is Bill Wehrley at (414) 479-8929.

### **Midwest Fiber Network**

Midwest Fiber Network owns a communication facility that crosses North Avenue at approximately Station 50+63. This communication line will be adjusted prior to construction to eliminate conflicts with the proposed roadway improvements. The relocation is scheduled to be performed in March 2020 and is expected to take 10 working days to complete.

The field construction contact for Midwest Fiber Network is Nathan Wright at (414) 459-3546 or (414) 349-3656 mobile.



## **Milwaukee Metropolitan Sewerage District**

The Milwaukee Metropolitan Sewerage District (MMSD) owns a monitoring site at approximately Station 105-40 RT. The monitoring box will be removed prior to construction and a new pedestal will be placed after the roadway construction is complete. Remove of the monitoring site is scheduled to take place approximately February 4, 2020 and take 2 working days to complete.

The field construction contact for MMSD is Micki Klappa-Sullivan at (414) 225-2178 or (414) 416-5389 mobile.

## **Rogers Telcom**

Rogers Telcom owns a communication facility that crosses the project limits near Station 92+25 adjacent to the railroad overpass. No conflict is anticipated with this facility.

The field construction contact for the Rogers Telcom is Vickie Moran at (920) 395-7125.

## **Village of Elm Grove**

The Village of Elm Grove owns sanitary sewer facilities within the project limits. Sanitary sewer manhole adjustments and seal replacements will be performed by the contractor as part of the contract work at the following locations:

Fairhaven Blvd – Station 801+54, 1' LT

Underwood Parkway - Station 0+65, 3' RT

Provide the Village of Elm Grove 3 working days' notice prior to making adjustments to Village owned facilities. The field construction contact for the Village of Elm Grove is Richard Paul, Jr. at (262) 782-6700.

## **We Energies (Electric)**

We Energies Electric owns and operates facilities in the project limits some of which conflict with the proposed improvements. We Energies will be relocating their facilities in two phases. Existing overhead facilities will be buried in the project corridor.

Phase 1 relocations, located between the west project limit and Marilyn Drive, will be performed prior to construction. Phase 1 work is anticipated to begin in November 2019 and is estimated to take 120 working days to complete. Phase 1 relocation work includes:

### North Avenue

- Install new line from approximately Station 2+15, 62' RT; to Station 2+70, 70' RT; to Station 4+75, 107' RT behind the proposed sidewalk.
- Install new line crossing North Avenue at Station 4+38, 72' RT to 55' LT
- Install new line from Station 6+25 to Station 6+90, 58' Ft to 59' RT
- Install new line from Station 12+09 to Station 14+27, 65' RT
- Install new line from Station 16+65 to Station 24+58, 65' LT to 47' LT
- Install new lines from Station 14+20 to Station 40+94, 54' to 70' RT
- Install new lines from Station 32+06 to Station 48.26, 67' LT to 57' LT
- Install new line from Station 51+61 to Station 53+20, 77' RT to 90' RT
- Install new line from Station 55+52, 92' RT to Station 59+96, 345' RT
- Install new line from Station 55+52 to Station 57+64, 27' LT to 32' LT
- Install new lines from Station 58+85 to Station 61+81, 51' LT to 58' LT
- Install new line from Station 59+95, 83' RT to Station 60+22 83' RT to Station 60+30, 67'RT to Station 64+05, 67' RT to Station 64+05, 120' RT
- Install new line from Station 59+96, 345' RT to Station 59+95, 83' RT

- Install new crossings of North Avenue at approximately Station 14+20, Station 16+65, Station 21+58, Station 27+35, Station 31+92, Station 32+08, Station 48+26, Station 55+00, Station 58+94, Station 59+00 and Station 61+61.
- Install new electric pole 57+55, 27' LT

#### Calhoun Road

- Install new line from Station 212+40, 99' LT; to Station 214+63, 63' LT; to Station 215+53, 44' LT.
- Install new line from Station 214+06 to Station 215-42, 61' RT
- Install 2 electric lines crossing Calhoun Rd at Station 209+84 and Station 209+87, 62' LT to 153' RT
- Install new line from Station 209+91 to 211+25, 153' RT
- Install transformer at Station 209+83, 65' RT

#### West Hillsdale Drive

- Install new line from Station 100+84, 62' LT to Station 103+76, 49' LT

#### Pilgrim Parkway

- Install new line from Station 100+84, 62' LT to Station 103+76, 49' LT

We Energies Electric Phase 2 relocation work is scheduled to begin in July 2020 and be completed by March 31, 2021 in advance of the roadway work schedule for the 2021 construction season. Phase 2 relocations being performed between Marilyn Drive and the eastern project limit consist of the following items:

#### North Avenue

- Install new line from approximately Station 61+57 to Station 84+89, 67' LT to 72' LT
- Install new line from Station 64+07 to Station 67+58, 75' RT to 70' RT
- Install new line from Station 73+48, 63' LT to Station 73+48 to Station 82+49, 68' RT
- Install new line from Station 85+55 to Station 88+55, 68' RT
- Install new line from Station 87+06 to Station 87+78, 80' LT
- Install new line from Station 93+80, 52' LT to Station 99+60, 45' LT
- Install new line from Station 99+60, 63' LT to Station 110+72, 66' LT
- Install new line from Station 101+93, 80' RT to Station 102+61, 80' RT to Station 102+61, 68' RT to Station 104+41, 68' RT to Station 104+42, 62' LT.
- Install new line from Station 110+35, 63' LT to Station 110+35, 78' RT to Station 110+68, 78' RT to Station 110+90, 102' RT.
- Install new pole at Station 117+75, 135' RT
- Install overhead line Station 117+75, 135' RT to Station 117+74, 200' RT
- Install new line Station 119+04, 61' LT to Station 119+54, 63' LT to Station 119+54, 68' RT.
- Install new line Station 119+54, 68' RT to Station 137+70, 68' RT
- Install new line Station 137+35, 74' LT to Station 138+01, 76' LT to Station 168+02, 63' LT to Station 140+94, 63' LT to Station 140+94, 74' LT to Station 141+60, 76' LT to Station 141+60, 63' LT to Station 145+21, 63' LT to Station 145+21, 72' LT to Station 145+87, 74' LT to Station 145+88, 68' LT to Station 148+56, 69' LT to Station 148+55, 77' LT to Station 149+24, 79' LT to Station 149+53, 56' LT

- Install new line Station 146+10, 68' LT to Station 146+10, 78' RT to Station 145+86, 78' RT to Station 145+90, 260' RT.
- Install electric poles at Station 163+32, 78' LT, Station 163+36, 86' RT and Station 164+51, 227' RT
- Install overhead electric Station 163+32, 78' LT to Station 163+36, 86' RT to Station 164+51, 227' RT.

#### Lilly Road

- Install new line from Station 608+06, 47' LT to Station 609+04, 48' LT
- Install new line from Station 608+06, 47' LT to Station 608+06, 48' RT
- Install new line from Station 608+06, 48' RT to Station 609+39, 51' RT

#### Tru Lane

- Install new line Station 640+62, 33' RT to Station 642+90, 33' RT

#### Hollyhock Lane

- Install new line Station 651+54 to Station 653+80, 26' LT

#### N. 131<sup>st</sup> Street

- Install new line Station 700+62 to Station 703+07, 33' LT

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24-hour Dispatch lines to arrange for this verification.

We Energies Electric Dispatch #1 (800) 662-4797

We Energies Gas Dispatch #1 (800) 261-5325

The field construction contact for We Energies (Electric) is Steve King at (262) 968-5768.

### **We Energies (Gas)**

We Energies Gas owns and operates facilities in the project limits some of which conflict with the proposed improvements.

Prior to construction in the fall of 2019, work will be completed by We Energies forces at the following approximate locations:

#### North Avenue

- Install 4" PE gas main from Station 1+53, 46' RT to Station 1+51, 58' LT to Station 4+48, 58' LT
- Install gas main from Station 4+18, 58' LT to Station 4+18, 54' RT to Station 4+89, 119' RT
- Install gas main from Station 6+04, 52' RT to Station 6+60, 50' RT to Station 6+61, 65' LT
- Install gas main from Station 5+90, 90' LT to Station 6+61, 65' LT to Station 9+83, 57' LT to Station 15+02, 58' LT to Station 19+40, 43' LT to Station 20+39, 29' LT to Station 24+56, 32' LT to Station 24+69, 58' LT to Station 29+82, 54' LT to Station 30+87, 54' LT to Station 38+98, 55' LT to Station 44+50, 55' LT to Station 58+01, 21' LT to Station 58+22, 59' LT to Station 59+05, 59' LT to Station 59+25, 40' LT to Station 61+34, 41' LT to Station 61+33, 63' RT
- Install gas main from Station 22+45, 47' RT to Station 30+87, 44' RT to Station 30+87, 54' RT
- Install gas main from Station 38+98, 55' LT to Station 38+90, 65' RT
- Install gas main from Station 44+50, 55' LT to Station 44+51, 44' RT to Station 48+18, 60' RT to Station 48+22, 99' RT

- Install gas main from Station 58+17, 63' RT to Station 61+33 63' RT to Station 61+71, 63' RT to Station 69+72, 65' RT to Station 70+91, 56' RT to Station 75+38, 55' RT to Station 84+55. 59' RT to Station 84+54, 72' RT to Station 85+47, 71' RT to Station 85+47, 60' RT to Station 88+86, 61' RT to Station 88+87, 46' LT
- Install gas main from Station 67+96, 64' LT to Station 69+72, 64' LT to Station 69+72, 65' RT
- Install gas main from 75+38, 55' RT to Station 75+37, 54' LT to Station 84+16, 54' LT
- Install gas main from Station 82+97, 54' LT to Station 82+97, 97' LT
- Install gas main from Station 87+22, 115' LT to Station 87+22, 98' LT to Station 87+68, 97' LT to Station 87+67, 46' LT to Station 99+55, 35' LT to Station 99+55, 59' LT to Station 104+43, 58' LT.
- Install gas main from Station 100+33, 59' LT to 100+59, 198' RT (Mt Kisco Drive)
- Install gas main from Station 109+70, 59' LT to Station 100+79, 56' LT to Station 110+96, 64' LT to Station 113+96, 66' LT to Station 114+98, 55' LT to Station 135+34, 58' LT
- Install gas main from Station 115+65, 53' RT to Station 117+73, 54' RT to Station 117+71 56' LT
- Install gas main from Station 128+04, 55' LT to Station 128+06, 64' RT to Station 128+27, 63' RT
- Install gas main from Station 132+72, 55' LT to Station 132+72, 48' RT to Station 163+26, 64' RT
- Install gas main from Station 145+29, 48' RT to Station 145+25, 68' LT to Station 145+39, 92' LT (Mayfair Drive)
- Install gas main from Station 155+11, 110' LT to Station 155+13, 49' RT
- Install gas main from Station 163+25, 61' LT to Station 163+51, 52' LT to Station 164+55, 55' LT to Station 164+68, 63' LT

#### Calhoun Road

- Install gas main from Station 212+46, 88 LT to Station 214+60, 59' LT to Station 216+45, 17' LT
- Install gas main from Station 212+73, 55 RT to Station 217+10, 39' RT
- Install gas main from Station 210+54, 50' RT to Station 210+36, 41' RT to Station 211+03, 42' RT to Station 211+32, 67' RT

#### Glencove Lane

- Install gas main from Station 275+74, 20' LT to Station 275+94, 20' LT to Station 275+94, 27' RT to Station 276+59, 27' RT

#### Pilgrim Square Drive

- Install gas main from Station 400+60, 31' LT to Station 403+21, 31' LT to Station 403+35, 18' LT to Station 403+58, 18' LT

#### Marilyn Drive

- Install gas main from Station 426+74, 14' LT to Station 426+76, 32' LT to Station 428+56, 30' LT

#### Kevenauer Drive

- Install gas main from Station 440+64, 28' LT to Station 441+87. 28' LT to Station 441+87, 11' LT to Station 442+06, 12' LT

#### W. Rockaway Lane

- Install gas main from Station 450+54, 28' RT to Station 452+10, 29' RT to Station 452+10, 12' LT to Station 452+21 13' LT

#### Highland Drive

- Install gas main from Station 505+65, 47' LT to Station 507+64, 48' LT

Mount Zion Woods Ct

- Install gas main from Station 530+64, 45' LT to Station 531+39, 24' LT

Lilly Road

- Install gas main from Station 610+70, 43' LT to Station 612+67, 43' LT to Station 612+69, 13' LT to Station 612+90, 13' LT

San Fernando Drive

- Install gas main from Station 631+84, 20' LT to Station 632+90, 26' LT

Tru Lane

- Install gas main from Station 640+56, 28' RT to Station 641+90. 28' RT

Hollyhock Lane

- Install gas main from Station 649+86, 19' LT to Station 650+28, 26' LT
- Install gas main from Station 651+47, 16' LT to Station 651+99, 19' LT

Arrowhead Court

- Install gas main from Station 678+82, 20' LT to Station 679+58, 42' LT

N. 131<sup>st</sup> Street

- Install gas main from Station 137+41, 48' RT (North Avenue) to Station 701+28, 29' LT to Station 701+74, 12' LT

N. 130<sup>th</sup> Street

- Install gas main from Station 141+02, 48' RT (North Avenue) to Station 723+52, 30' LT to Station 723+55, 15' RT

N. 128<sup>th</sup> Street

- Install gas main from Station 148+64, 47' RT (North Avenue) to Station 777+38, 35' LT to Station 777+52, 27' LT

Fairhaven Blvd

- Install gas main from Station 802+01, 21' RT to Station 802+14, 28' RT to Station 803+22, 28' RT

N. 124<sup>th</sup> Street

- Install gas main from Station 907+74, 38' LT to Station 907+99, 38' LT to Station 908+19, 59' LT to Station 910+52, 59' LT

Work prior to construction is anticipated to begin in November 2019 and estimated to take 120 working days to complete.

The following work will be performed by We Energies during construction:

- All gas valves within the roadway grading limits will be adjusted to finished grade.

The timing of adjustment work performed during construction will be dependent on the roadway contractor's schedule. Provide We Energies 5 working days' notice to coordinate valve adjustments during construction. Gas valve adjustments are anticipated to take 5 working days to complete.

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24-hour Dispatch lines to arrange for this verification.

We Energies Electric Dispatch #1 (800) 662-4797

We Energies Gas Dispatch #1 (800) 261-5325

The field construction contact for We Energies (Gas) is Jacob Spencer at (262) 968-7009.

### West Shore Pipeline Company

West Shore Pipeline Company owns and operates a high-pressure gas main along N. 124<sup>th</sup> Street at the east end of the project limits.

Prior to construction in the fall of 2019, the following work will be completed by West Shore Pipeline Company forces:

- Move test station from Station 163+81, 66' RT to the south of the existing traffic signal pole at Station 163+80, 74' RT

Work to move the test station is scheduled to be performed in November of 2019 and is anticipated to take 1 working day to complete.

West Shore is a High-Pressure Petroleum Pipeline that is patrolled daily. If someone is found working within 25' of our pipeline without a current locate they will stop all work in area of the pipeline. West Shore Pipeline will meet with all contractors working within 25' their pipeline, before their work begins, to review their safety checklist. Contact West Shore Pipeline prior to performing any work within 25 feet of their facility.

The field construction contact for West Shore Pipeline is Aric Aufdermauer at (414) 391-8102.

## 7. Railroad Insurance and Coordination - Soo Line Railroad Company (CP).

### A. Description

Comply with standard spec 107.17 for all work affecting Soo Line Railroad Company (CP) 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 Soo Line Railroad Company d/b/a Canadian Pacific.

Notify evidence of the required coverage, and duration to Brian Osborne, Manager Public Works; Canadian Pacific Plaza, 120 South 6th Street, Suite 700, Minneapolis, MN 55402; Telephone (612) 330-4555; E-mail: [brian\\_osborne@cpr.ca](mailto:brian_osborne@cpr.ca)

Also send a copy to the following: Paul Derksen, SE Region Railroad Coordinator; 141 N. W. Barstow Street, Waukesha, WI 53188; Telephone (262) 548-8770; E-mail: [paul.derksen@dot.wi.gov](mailto:paul.derksen@dot.wi.gov).

Include the following information on the insurance document:

- Project: 2759-03-70
- Work Performed: Roadway project to grade and pave approaches leading up to the tracks

#	Route Name	City/County	Crossing ID	RR Subdivision	RR Milepost
1	CTH M/North Ave	Brookfield/Waukesha	390 516T	Watertown	97.04
2	CTH YY/Pilgrim, Rd	Brookfield/Waukesha	695498T	Watertown	97.10

### A.2 Train Operation

Approximately 2 passenger trains and 21 through freight trains operate daily through the construction site. Passenger trains operate at up to 60 mph. Through freight trains operate at up to 45 mph. In addition to through movements, there are switching movements at slower speeds.

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

#### **Construction Contact**

Brian Osborne, Manager Public Works; Canadian Pacific Plaza, 120 South 6<sup>th</sup> Street, Suite 700, Minneapolis, MN 55402; Telephone (612) 330-4555; E-mail [brian\\_osborne@cpr.ca](mailto:brian_osborne@cpr.ca) for consultation on railroad requirements during construction.

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

#### **Flagging Contact**

Dave LeClaire, Supervisor of Public Works; Canadian Pacific Plaza, 120 South 6<sup>th</sup> Street, Suite 700, Minneapolis, MN 55402; Telephone (612) 330-4556; E-mail [dave.leclaire@cpr.ca](mailto:dave.leclaire@cpr.ca) Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

\* Contact Soo Line (CP) prior to letting for flagman work hour availability.

#### **Cable Locate Contact**

In addition to contacting Diggers Hotline, contact CP Call Before You Dig line at (866) 291-0741, five working days before the locate is needed. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Soo Line (CP) will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

### **A.4 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. Upgrade existing warning devices, install temporary warning devices, and renew crossing surfaces.

### **A.5 Temporary Grade Crossing**

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days 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.

## **B Railroad Flagging**

Arrange with the railroad for the flagging of trains and safety of railroad operations if clearances specified in standard spec 107.17.1 are not maintained during construction operations.

The following conditions may also warrant flagging:

1. Cranes swinging (including length of boom/outriggers and /or appurtenances) or handling materials or equipment within 25 feet of the centerline of any track.
2. Construction operations that are in proximity of power lines or railroad signal and communication lines, underground cables, fuel oil facilities or pipe lines and which might result in fire or damage to such facilities, danger to railroad operations or danger to the public in the transaction of business on railroad premises.
3. Excavation, tunneling, blasting, pile driving, placing, or removing cofferdams or sheeting, or similar activities that might cause the railroad's tracks or buildings to be undermined, heaved out of normal level, shifted out of alignment, or otherwise impaired.
4. Bridge painting activities including rigging of falsework, scaffolding or similar activities over railroad tracks.
5. Deck removal activities over railroad tracks.
6. Pouring of bridge decks in spans over an operated track.
7. At any other time in railroad representative's judgment, the contractor's work or operations constitute an intrusion into the track zone and create an extraordinary hazard to railroad traffic, and at any other time when flagging protection is necessary for safety to comply with the operating rules of the railroad.

Projects with concurrent activity may require more than one flagger.

Projects with heavy contractor activity within 25 feet of the centerline of any track or unusual or heavy impact on railroad facilities will normally require a full-time flagger.

The department and railroad will monitor operations for compliance with the above flagging requirements. Violations may result in removal from railroad property until arrangements to adhere to the flagging requirements are satisfied. If the railroad imposes additional flagging requirements beyond the above

flagging requirements due to the previous violations, the contractor shall bear all costs of the additional flagging requirements.

## **C Flagging by Railroad– Railroad Does Not Pay Flagging Costs**

### **C.1 General**

*Replace paragraph (4) of standard spec 107.17.1 with the following:*

Comply with the railroad’s rules and regulations regarding operations on railroad right-of-way. If the railroad’s chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Bear the cost of these services and make payment directly to the railroad. Notify the appropriate railroad representative as listed in section A.3 above, in writing, at least 40 business days before starting work near a track. Provide the specific time planned to start the operations.

Work that requires railroad flaggers to occupy the work zone for longer duration or longer than the normal work day will require 40 day written notice to the railroad.

### **C.2 Rates - Soo Line Railroad Company (CP)**

The following rates, reimbursement provisions, and excluded conditions will be used to determine the contractor’s cost of flagging:

- \$1,000 daily rate for an eight-hour day (including wages, labor surcharges, meals, lodging, vehicle and mileage expenses),
- \$1,200 daily rate for an eight-hour day on Saturdays, Sundays or holidays (including wages, labor surcharges, meals, lodging, vehicle and mileage expenses),
- \$150 per hour overtime rate for all time worked before or after the regular assigned eight hours on any day, or for a minimum three hour call on Saturdays, Sundays, or Holidays.

If a flagger must be relieved due to hours of service requirements, arrangements will be made for a relief flagger.

The flagger is required to set flags each day in advance of the contractor commencing work that will require flagging. The flagger must also remove the flags each day after the completion of work that required flagging. Any time worked before or after the minimum eight-hour flagging day to set or remove flags will be billed at the overtime rate. The contractor is responsible for knowing the requirements of the railroad for arranging and terminating flagging services and for the associated costs of those services.

### **C.3 Reimbursement Provisions**

The actual cost for flagging will be billed by the railroad. After the completion of the work requiring flagging protection as provided in section B above, the department will reimburse 50% of the cost of such services up to the rates provided above based on paid railroad invoices, except for the excluded conditions enumerated below. In the event actual flagging rates exceed the rates stated above, the department will reimburse 100% of the portion of the rate that is greater than the rates stated above.

### **C.4 Excluded Conditions**

The department will not reimburse any of the cost for additional flagging attributable to the following:

1. 1. Additional flagging requirements imposed by the railroad beyond the flagging requirements provided in subsection B above due to violations by the contractor.
2. 2. Temporary construction crossings arranged for by the contractor.

The contractor shall bear all costs of the additional flagging requirements for the excluded conditions.

### **C.5 Payment for Flagging**

The department will pay for the department’s portion of flagging reimbursement as specified in section C of this provision under the following item:

ITEM NUMBER	DESCRIPTION	UNIT
801.0117	Railroad Flagging Reimbursement	DOL

The reimbursement payment, as shown on the Schedule of Items, is solely for department accounting purposes. Actual flagging costs will vary based on the contractor’s means and methods.

Railroads may issue progressive invoices. Notify the railroad when the work is completed and request a final invoice from the railroad. Promptly pay railroad-flagging invoices, less any charges that may be in dispute. The department will withhold flagging reimbursement until any disputed charges are resolved



and the final invoice is paid. No reimbursement for flagging will be made by the department if a violation of subsection B is documented.

stp-107-034 (20190717)

## **8. Hauling Restrictions.**

At all times, conduct operations in a manner that will cause a minimum of inconvenience to the free flow of vehicles on roadways carrying North Avenue (CTH M) and side road traffic. No equipment shall travel on residential side roads outside of the project limits without approval from the engineer.

When hauling across any public roads, provide the necessary flagging and signing to control the construction equipment movements. The flagging operations shall not impede traffic flow on the public roads.

## **9. Erosion Control.**

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

Provide the ECIP 14 calendar days prior to the pre-construction conference. Provide 1 copy of the ECIP to Management Consultant and 1 copy of the ECIP to the WDNR Liaison, Craig Webster, at [Craig.Webster@wisconsin.gov](mailto:Craig.Webster@wisconsin.gov), 141 NW Barstow Street, Room 180, Waukesha, WI 53188, (262) 574-2141. Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

All disturbed stream bank and wetland areas must be adequately protected and/or restored or temporary protected/restored within 24 hours of any disturbance.

Re-topsoil of graded areas, as designated by the engineer, immediately after grading is completed within those areas. Sod or seed, fertilize, and mulch or erosion mat top-soiled areas, as designated by the engineer, within three (3) calendar days after placement of topsoil. If graded areas are left exposed for more than seven (7) calendar days, seed those areas with temporary seed and mulch.

The contractor should restrict the removal of vegetative cover and exposure of bare ground to the minimum amounts necessary to complete construction. Restoration of disturbed soils should take place as soon as conditions permit. If sufficient permanent vegetative cover will not be achieved within 14 days of disturbance, temporary BMP measures must occur within 7 or less days of any disturbances. If sufficient vegetative cover will not be achieved because of late season construction, the site must be properly winterized.

This project involves work that may involve cutting or wounding of oak trees. To prevent the spread of oak wilt disease, avoid cutting or pruning of oaks from April through September.

When performing roadway cleaning or sweeping operations, the contractor shall use equipment having a vacuum mechanism to eliminate the dispersion of dust. Vacuum equipment employed shall have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere. Roadway cleaning or sweeping operations using vacuum equipment is considered incidental to the project.

Develop a sawcut slurry management plan and submit to the engineer for approval. Sawcut slurry shall be squeegeed off of the pavement onto adjacent aggregate, or collected for proper disposal, as needed.

If dewatering is required for any reason, the water must be pumped into a properly selected and sized dewatering basin and sediment bags before the clean/filtered water is allowed to enter any waterway or wetland. The basin and sediment bag must remove suspended solids and contaminants to the maximum extent practicable. A properly designed and constructed dewatering basin must take into consideration maximum pumping volume (gpm or cfs) and the sedimentation rate for soils to be encountered and meet all other requirements of WDNR Technical Standard 1061. Do not house any dewatering technique in a wetland.

If a temporary channel is needed for bridge construction, line the channel with reinforced plastic or other non-erodible material and weighted down with clean stone. A temporary channel or culvert must be capable of carrying all stream flows during the construction period and must maintain a suitable depth and velocity to allow the passage of migrating fish and aquatic species. Capture and return fish that become stranded in dewatered areas or temporary channels to the active channel immediately. Include these requirements in the ECIP for the project.

All temporary stock piles must be in an upland location and protected with erosion control measures (e.g. silt fence, rock filter-bag berm, etc.). Do not stockpile fill or other construction materials in wetlands, waterways, or floodplains. Stockpiled soil shall be protected against erosion. Temporary seed and mulch all temporary stockpiles or windrows within 72 hours of placement.

Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1 (800) 943-0003.

#### **10. Erosion Control Structures.**

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

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

stp-107-070 (20030820)

#### **11. Public Convenience and Safety.**

*Revise standard spec 107.8(6) as follows:*

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

stp-107-001 (20060512)

#### **12. Municipality Acceptance of Sanitary Sewer and Water Main Construction.**

Both the department and City of Brookfield personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by the City of Brookfield.

stp-105-001 (20140630)

#### **13. Referenced Construction Specifications.**

Construct the work enumerated below conforming to the Standard Specifications for Sewer and Water Construction in Wisconsin, Latest edition. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

Water main offsets; hydrant relocations, hydrant adjustments, water main valve extension removal, water main insulation and sanitary sewer adjustments.

stp-105-002 (20130615)

**14. Information to Bidders, WPDES General Construction Storm Water Discharge Permit.**

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Phil Ciha at (414) 750-1951. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

**15. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.**

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Kathy Kramer at (262) 548-8772.

stp-107-054 (20080901)

**16. Environmental Protection, Aquatic Exotic Species Control.**

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

<http://dnr.wi.gov/topic/invasives/disinfection.html>

Use the following inspection and removal procedures:

1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
  - 4.1. Washing with ~212 F water (steam clean), or
  - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
  - 4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore, this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

## 17. Construction Over or Adjacent to Navigable Waters.

The Dousman Ditch and Underwood *Creek* are classified as a state navigable waterway under standard spec 107.19.

stp-107-060 (20171130)

## 18. Health and Safety Requirements for Workers Remediating Petroleum Contamination.

*Add the following to standard spec 107.1(2):*

Soil contamination with gasoline, diesel fuel, fuel oil, or other petroleum related products may be encountered during excavation activities. Prepare a site specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Before the start of remediation work, submit to the engineer a site specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusions zones for each contaminated site location pursuant to 29 CFR 1910.120.

stp-107-115 (20150630)

## 19. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed a review of environmental documents and databases for soil contamination at locations within this project where excavation is required. The review indicated that petroleum-contaminated soil and groundwater may be present beyond the project limits at the following locations:

1. Station 2+50 to 5+00, beyond project limits left (Former Mobil Station, 17220 W. North Ave., WDNR BRRS No. 03-68-003569, Closed LUST Site).
2. Station 5+80 to 8+00, beyond project limits left (W. North Ave. Right-of-Way and Northeast Corner of W. North Ave. and N. Calhoun Rd., WDNR BRRS No. 03-68-004171, Closed LUST Site).
3. Station 118+10 to 121+20, beyond project limits right (Former Simoneau's Service, 13785 W. North Ave., Closed LUST Site).
4. Station 160+30 to 163+44, beyond project limits right (NAPA Car Care Center (Former MOBIL #05-PE2 (SHELL)), 12425 W. North Ave., WDNR BRRS No. 03-68-002-38, Closed LUST Site).

Contaminated soil and groundwater at the above sites, if present, is expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations near these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soil and/or groundwater is encountered near 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:

Andrew Malsom  
WisDOT SE Region  
141 NW Barstow St.  
Waukesha, WI 53187  
(262) 548-6705

107-100 (20050901)

**20. Notice to Contractor – Underground Storage Tank Beyond Construction Limits.**

A review of WDNR files indicated a 550-gallon steel underground storage tank (UST) was abandoned in place near the northeast corner of the intersection of North Ave. and N. Calhoun Rd. The UST was abandoned in place in 1994 because it was located close to a natural gas main and a water main. The UST was filled with a concrete slurry.

The location of the UST is approximately Station 5+79 to 5+85 from 26 feet to 30 feet left of reference line.

The UST is expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations near this location to ensure that they do not extend beyond the excavation limits indicated in the plans. If an UST is encountered near this location or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

Information regarding the department's hazardous materials assessment is available by contacting:

Andrew Malsom  
WisDOT SE Region  
141 NW Barstow St.  
Waukesha, WI 53187  
262-548-6705

107-110 (20030820)

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

John Roelke, License Number All-119523, inspected Structures B-67-0256 and B-67-0214 for asbestos on August 1, 2016. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Kathy Kramer, (262) 548-8772.

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 before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Kathy Kramer, (262) 548-8772 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-67-0256, CTH M (North Avenue) over Underwood Creek
- Site Address: 0.1 M W JCT CTH YY
- Ownership Information: 1320 Pewaukee Road, Waukesha, WI 53188-7511
- Contact: Phil Ciha
- Phone: (414) 750-1951
- Age: 25 years old. This structure was constructed in 1995.
- Area: 4182 SF of deck
  
- Site Name: Structure B-67-0214, CTH M (North Avenue) over Underwood Creek
- Site Address: 0.1 M W JCT LILLY ROAD
- Ownership Information: 1320 Pewaukee Road, Waukesha, WI 53188-7511
- Contact: Phil Ciha
- Phone: (414) 750-1951
- Age: 34 years old. This structure was constructed in 1986.
- Area: 2033 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 as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

stp-107-125 (20120615)

## **22. Notice to Contractor – Archaeological Sites.**

A qualified archaeologist must be present during construction activities and topsoil stripping that occur within the project limits adjacent to the Pioneer Cemetery and Mound Zion Cemetery to inspect for graves. Provide a minimum two week notice prior to commencement of construction activities. Contact WisDOT Cultural Resources representative Lynn Cloud at (608) 266-0099 to arrange for the qualified archaeologist monitoring and coordinate the proposed progress/work schedule with the qualified archaeologist.

Potential delays to the construction activities may occur if graves, archaeological discoveries or burials are encountered. If archaeological resources are discovered, cease work activities immediately contact the construction supervisor and WisDOT Cultural Resources representative Lynn Cloud.

## **23. Notice to Contractor – Coordination with Adjacent Projects.**

During the work for this Contract, the contractor will need to coordinate construction activities and traffic control requirements with the following scheduled projects:

- The Village of Elm Grove currently has a paving project planned for Gerhardt Road between CTH YY and Highland Drive during the 2021 construction season. Gerhardt Road is an east-west local road and is not anticipated to have traffic impacts effecting North Avenue.
- Waukesha County DPW proposed to replace the Underwood Creek Structure on CTH YY located approximately 0.3 Miles north of North Avenue in the Summer of 2020. The construction of the structure will need to be complete prior to the North Avenue detour from the Soo rail crossing closure.
- The City of Brookfield is planning to reconstruct Calhoun Road from North Avenue to Capitol Drive in 2021. Insignificant traffic is anticipated from this project since the western portion of North Avenue is planned to be completed in advance of the Calhoun Road project.

## **24. Notice to Contractor – Haul Road Restrictions.**

Hauling of materials to and from the construction site of this project shall be restricted to County and State Highways. No hauling will be allowed on City of Brookfield local streets without prior written approval from the City of Brookfield Department of Public Works.

Written requests for the use of city streets shall be submitted to Tom Grisa, Public Works Director, City of Brookfield at 2000 N. Calhoun Road, Brookfield, WI 53005. Requests shall be made two weeks in advance of proposed use for consideration by the city.

## **25. Notice to Contractor – Traffic Signal Lead Time.**

Lead time for traffic signal equipment specified for this project has been ranging from 16-weeks to 36-weeks. To assure the equipment is procured in a timely fashion the contractor shall submit shop drawings within 4 calendar days of contract notice to proceed. The contractor shall order the signal equipment within 5 calendar days of approved shop drawings.

## **26. Traffic Signals General.**

Work under this item shall consist of furnishing and installing all materials for traffic signals at the following intersections in Waukesha County, WI, according to the plans and the State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, 2020 Edition, and these special provisions.

The contractor will furnish all materials, which include but are not limited to, the traffic signal cabinet and controller, and traffic signal control equipment as listed in the plans (such as, pedestal bases, transformer bases, traffic signal standards, poles, monotube poles and arms, traffic signal faces, backplates, pedestrian signal faces, pedestrian push buttons, traffic signal mounting hardware, video detection system, emergency vehicle preemption system, concrete foundations, etc.). Certain materials may be removed and reinstalled; if such items are included in this project, these items are identified as "SALVAGED" in the Miscellaneous Quantities tables in the plans.

Furnish the engineer with material lists and specifications of all traffic control equipment for approval prior to installation.

The contractor is responsible for requesting the electrical service installation or relocation from the power company and the county shall pay the installation costs. The contractor shall coordinate with the county to verify a county contact person and address to be listed in the electrical service application.

The contractor shall stake the proposed locations of traffic signal items 10 days prior to starting work so that the locations of the proposed facilities can be approved by the county. Any field changes regarding the location of the signal poles, pull boxes, etc. shall be approved either by the county or by the county's on-site construction management representative.

The contractor shall request an inspection of the underground wiring upon completion of its installation and a full inspection of the completed signal installation prior to, or at the time of, signal start up testing. This request shall be made to the county at least three working days prior to the time of the requested inspection.

All electrical wiring as part of standard spec 655 and otherwise denoted in the special provisions of the contract shall be housed internally inside poles, standards, arms, mounting brackets, and signal heads, as directed by the engineer in the field. No external wiring shall be permitted unless otherwise directed by the engineer.

## **27. Coordination with Businesses and Residents.**

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

## **28. Geotechnical Investigation Information.**

*Replace standard spec 102.5(3) 2 with the following:*

Available information relative to subsurface exploration, borings, soundings, water levels, elevations or profiles are available from Waukesha County by calling Ed Hinrichs, (262) 548-7740.

North Avenue (CTH M) Reconstruction  
Calhoun Road to 124th Street  
Roadway Soils Report  
Project 2766-00-01/71  
February 24, 2016

North Avenue (CTH M) Reconstruction  
Calhoun Road to 124th Street  
Roadway Soils Report Addendum #1  
Projects 2759-03-00, 2766-00-01  
September 16, 2016

Review the available information to determine if it is of use. The use or not of the geotechnical information does not relieve performing the work according to the plans and specifications.

**29. Removing Old Structure Over Waterway With Minimal Debris Station 105+50 LT, Item 203.0600.S.02; Removing Old Structure Over Waterway With Minimal Debris Station 105+50 RT, Item 203.0600.S.06.**

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

*Add the following to standard spec 203:*

**203.3.6 Removals Over Waterways and Wetlands**

**203.3.6.2 Removing Old Structure Over Waterway with Minimal Debris**

- (1) Remove the existing Structure B-67-214 over the Underwood Creek in large sections and conforming to the contractor's approved structure removal and clean-up plan. During superstructure removal, prevent all large pieces and minimize the number of small pieces from entering the waterway or wetland. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. The contractor may leave limited amounts of small concrete pieces scattered over the waterway floor or wetland only if the engineer allows.
- (2) Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal and clean-up plan without the department's written approval of the plan. Include the following information in the structure removal and clean-up plan:
  - Methods and schedule to remove the structure.
  - Methods to control potentially harmful environmental impacts.
  - Methods for superstructure removal that prevent all large pieces and minimize the number of small pieces from entering the waterway or wetlands.
  - Methods to control dust and contain slurry.
  - Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
  - Methods for cleaning the waterway or wetlands.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

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

ITEM NUMBER	DESCRIPTION	UNIT
203.0600.S.02	Removing Old Structure Over Waterway With Minimal Debris Station 105-50 LT	LS
203.0600.S.06	Removing Old Structure Over Waterway With Minimal Debris Station 105-50 RT	LS

stp-203-020 (20190618)

**30. Removing 24-Inch Concrete Piling, Item 204.9060.S.01.**

**A Description**

This special provision describes removing 24" concrete piling conforming to standard spec 204.

**B (Vacant)**

**C Construction**

Remove concrete pilings according to the pertinent provisions of standard spec 204 and as hereinafter provided. Remove pilings to a minimum depth of 4 feet below finished grade.

**D Measurement**

The department will measure Removing 24" Concrete Piling in each piling removed, acceptably completed.



## E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing 24-Inch Concrete Piling	EACH
stp-204-025 (20150630)		

- 31. Removing Traffic Signals CTH M (North Avenue) & Calhoun Road, Item 204.9105.S.01; Removing Traffic Signals CTH M (North Avenue) & CTH YY (Pilgrim Road), Item 204.9105.S.02; Removing Traffic Signals CTH M (North Avenue) & Lilly Road, Item 204.9105.S.03; Removing Traffic Signals CTH M (North Avenue) & N 124<sup>th</sup> St, Item 204.9105.S.04.**

### A Description

This special provision describes the removing, salvaging, and reinstallation of above and underground existing traffic signal equipment at the according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### B (Vacant)

### C Construction

Arrange for the removal of the traffic signal equipment after receiving approval from the engineer that the existing equipment can be removed.

#### CTH M (North Ave) & Calhoun Road

The existing lighting at the intersection is a sperate system owned by the City of Brookfield. The existing black decorative aluminum street lighting poles and decorative concrete street light poles at the intersection shall be removed and returned to the City of Brookfield. It shall be the contractor's responsibility to ensure safe removal and storage of equipment up to and including delivery of all salvaged items. All light poles removed shall be returned to the City of Brookfield public works storage facility located at 19700 Riverview Drive, Brookfield, WI 53005. Contact Mike Hughes from the City of Brookfield Highway Department at (262) 787-3590 at least three working days prior to delivery to make arrangements.

The existing cabinets and contents, LED Luminaires and Bulldog Pedestrian push buttons shall be removed and returned to the Waukesha County public works storage facility located at 1801 Woodburn Rd, Waukesha, WI 53188. Contact George Leinen in the Counties Electrical Unit at (262) 424-9129 at least three working days prior to delivery to make arrangements.

Signal and lighting poles, signal standards, trombone arms, signal faces, HPS luminaries, pull box lids and rims, corrugated pull box bodies, concrete bases, loop detector wire, and all conductors and wires (including loop detector lead in cable) shall be removed and properly disposed of. Conduit shall be removed or abandoned in place. Conduit may be abandoned in place only if it does not interfere with new construction or present a risk of damage to newly constructed items.

Existing EVP System Systems shall be salvaged and reinstalled as designated in separate pay items.

#### CTH M (North Ave) & CTH YY (Pilgrim Rd)

The existing cabinets and contents, LED Luminaires and Bulldog Pedestrian push buttons shall be removed and returned to the Waukesha County public works storage facility located at 1801 Woodburn Rd, Waukesha, WI 53188. Contact George Leinen in the Counties Electrical Unit at (262) 424-9129 at least three working days prior to delivery to make arrangements.

Signal and lighting poles, signal standards, trombone arms, signal faces, HPS luminaries, pull box lids and rims, corrugated pull box bodies, concrete bases, loop detector wire, and all conductors and wires (including loop detector lead in cable) shall be removed and properly disposed of. Conduit shall be removed or abandoned in place. Conduit may be abandoned in place only if it does not interfere with new construction or present a risk of damage to newly constructed items.

Existing EVP System Systems shall be salvaged and reinstalled as designated in separate pay items.

CTH M (North Ave) & Lilly Road

The existing cabinets and contents, LED Luminaires and Bulldog Pedestrian push buttons shall be removed and returned to the Waukesha County public works storage facility located at 1801 Woodburn Rd, Waukesha, WI 53188. Contact George Leinen in the Counties Electrical Unit at (262) 424-9129 at least three working days prior to delivery to make arrangements.

Signal and lighting poles, signal standards, trombone arms, signal faces, HPS luminaries, pull box lids and rims, corrugated pull box bodies, concrete bases, loop detector wire, and all conductors and wires (including loop detector lead in cable) shall be removed and properly disposed of. Conduit shall be removed or abandoned in place. Conduit may be abandoned in place only if it does not interfere with new construction or present a risk of damage to newly constructed items.

Existing EVP System Systems shall be salvaged and reinstalled as designated in separate pay items.

CTH M (North Ave) & N 124<sup>th</sup> Street

The existing sign is owned by the City of Wauwatosa. The existing monotube, luminaire arm, signal poles, signal faces shall be removed and returned to the City of Wauwatosa. Deliver the indicated materials to the City of Wauwatosa City Yard, 11100 W. Walnut Road. Notify Randy Michelz, Traffic & Electrical Superintendent, at the City of Wauwatosa at (414) 471-8422 Ext. 5913 at least three working days prior to the removal of the traffic signals.

Existing traffic signal to remain in operation during construction. Signal work at intersection must be phased to not remove more than one head at a time for any given movement.

The pull box lids and rims, corrugated pull box bodies, concrete bases, and all conductors and wires indicated for removal shall be removed and properly disposed of. Conduit shall be removed or abandoned in place. Conduit may be abandoned in place only if it does not interfere with new construction or present a risk of damage to newly constructed items.

Existing EVP System and Non-Intrusive Detection Systems shall be salvaged and reinstalled as designated in separate pay items.

**D Measurement**

The department will measure Remove Traffic Signals (Intersection) as a single lump sum unit of work for each intersection, 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
204.9405.S.01	Remove Traffic Signals CTH M (North Avenue) & Calhoun Road	LS
204.9405.S.02	Remove Traffic Signals CTH M (North Avenue) & CTH YY (Pilgrim Road)	LS
204.9405.S.03	Remove Traffic Signals CTH M (North Avenue) & Lilly Road	LS
204.9405.S.04	Remove Traffic Signals CTH M (North Avenue) & N 124 <sup>th</sup> St	LS

Payment is full compensation for removing and disassembling traffic signals, scrapping of some materials, storing salvaged items on site, disposing of scrap material, reinstalling some materials, and for delivering the indicated materials to the City of Brookfield, City of Wauwatosa and Waukesha County.

**32. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.**

**A Description**

**A.1 General**

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a WDNR-approved bioremediation facility. The closest WDNR-approved bioremediation facilities are:

Advanced Disposal Emerald Park Landfill  
W124 S10629 S. 124<sup>th</sup> St.

Muskego, WI 53150  
(414) 529-1360

Waste Management Orchard Ridge Landfill  
W124 N9355 Boundary Road  
Menomonee Falls, WI 53051  
(866) 909-4458

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

## **A.2 Notice to the Contractor – Contaminated Soil Locations**

The department completed testing for soil and groundwater contamination at locations within this project where excavation is required.

Testing indicated that petroleum-contaminated soil is present at the following locations as shown on the plans:

North Ave., Station 162+90 to 163+44, from reference line to project limits right, from 1 to 4+ feet bgs. The estimated volume of contaminated soil to be excavated at this location is 492 CY (approximately 836 tons using a conversion factor of 1.7 tons per cubic yard).

N. Calhoun Rd., Station 214+00 to 215+00, from reference line to project limits left, from 6 to 10+ feet bgs. The estimated volume of contaminated soil to be excavated at this location is 20 CY (approximately 34 tons using a conversion factor of 1.7 tons per cubic yard).

N. Calhoun Rd., Station 214+00 to 215+00, from reference line to project limits right, from 1 to 6 feet bgs. The estimated volume of contaminated soil to be excavated at this location is 165 CY (approximately 280 tons using a conversion factor of 1.7 tons per cubic yard).

Directly load soil excavated by the project at the above location into trucks that will transport the soil to a WDNR-licensed bioremediation facility.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify the engineer and protect them to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do no conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

## **A.3 Excavation Management Plan**

The excavation management plan for this project has been designed to minimize the offsite disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigations, remediation activities and waste characterization within the project limits, contact:

Name: Andrew Malsom  
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [andrew.malsom@dot.wi.gov](mailto:andrew.malsom@dot.wi.gov)

#### **A.4 Coordination**

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation  
Address: 150 N. Patrick Blvd., Ste. 180, Brookfield, WI 53045  
Contact: Bryan Bergmann  
Phone: (262) 901-2126 office / (262) 227-9210 cell  
Fax: (262) 879-1220  
E-mail: [bbergmann@trccompanies.com](mailto:bbergmann@trccompanies.com)

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in the contaminated area.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated area. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

#### **A.5 Health and Safety Requirements**

*Add the following to standard spec 107.1:*

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products and metals. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

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

#### **C Construction**

*Add the following to standard spec 205.3:*

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from

previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

If dewatering is required in an area of known contamination, water generated from dewatering activities may contain contaminants and require testing, special handling, temporary storage, and disposal. Contaminated groundwater may be discharged to the sanitary sewer with prior approval from the City of Brookfield and the Milwaukee Metropolitan Sewerage District.

Contractor shall ensure continuous dewatering and excavation safety at all times. Provide, install, operate, maintain adequate pumping equipment, disassemble, and remove pumping equipment.

Costs associated with excavation and dewatering in the contaminated area are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from the construction project.

Limit excavation in the location described in A.2 to minimize the handling of groundwater. Notify the engineer of any dewatering activities and obtain any permits necessary to discharge or dispose of contaminated water. Provide copies of such Permit to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

#### **D Measurement**

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

### **33. Excavation Below Subgrade.**

Organic soils have been identified within the project limits and excavation below subgrade is anticipated. The actual limits to be excavated shall be determined in the field by the engineer based upon the observed presence of unsuitable soils or on the basis of the results of proof rolling the earth subgrade. The depth of excavation may be adjusted depending on the conditions found in the field and the proof rolling results.

To gain acceptance of the subgrade, the contractor, in the presence of the engineer, shall proof roll all roadways in accordance to standard spec 211.3.3.

Excavation below subgrade found necessary and required after the completion of the rough grading operations shall be according to the pertinent requirements of standard spec 205.3.4 and 205.5.5.

*Paragraph 2 of standard spec 205.5.2 shall be changed to read as follows:*

“Excavation Below Subgrade performed either before or after rough grading operations are complete will be paid for at the Contract unit price for Excavation Common.”

### 34. Base Aggregate Dense 1¼-Inch.

Replace standard spec 305.2.2.1(2) with the following:

1. Use 1¼-inch base throughout the full base depth.
2. Use ¾-inch base in the top 3 inches of the unpaved portion of shoulders. Use 1¼-inch base elsewhere in shoulders unless approved by engineer.

### 35. QMP Base Aggregate Dense 1 1/4-Inch Compaction, Item 371.1000.S.

#### A Description

- (1) This special provision describes modifying the compaction and density testing and documentation requirements of work done under the Base Aggregate Dense 1 1/4-Inch bid items. Conform to standard spec 305 as modified in this special provision and to the contract QMP Base Aggregate article.
- (2) Provide and maintain a quality management program. A quality management program is defined as all activities, including process control, inspection, sampling and testing, and necessary adjustments in the process related to construction of dense graded base which meets all the requirements of this provision.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures.

<http://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf>

- (4) This special provision applies to Base Aggregate Dense 1 1/4-Inch material placed: above at least 16 inches of subgrade improvement, 12 inches of subgrade improvement and geogrid or QMP subgrade provisions, between shoulder hinge points and lower than mainline pavement. Unless otherwise specified by the contract, all Base Aggregate Dense 1 1/4-Inch material placed on side roads, private and public entrances, individual ramps less than 1500 feet, passing lanes less than 1500 feet, tapers, turn lanes, and other undefined locations are exempt from the compaction and density requirement modifications and testing contained within this special provision.

#### B (Vacant)

#### C Construction

##### C.1 General

- (1) The engineer shall approve the grade before placement of the base. Approval of the grade shall be in accordance with applicable provisions of the standard specifications.

Add the following to standard spec 305.3.2.2:

- (3) For 1 1/4-Inch dense graded base composed of ≤20% reclaimed asphaltic pavement (RAP) or crushed concrete (RCA), as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve, the contractor must determine the material target density in accordance with:
  - Method 1: Maximum dry density in accordance with AASHTO T-180, Method D, with correction for coarse particles and modified to require determination of Bulk Specific Gravity ( $G_m$ ) in accordance with AASHTO T 85. Bulk Specific Gravities determined in accordance with standard spec 106.3.4.2.2 for aggregate source approval may be utilized.
- (4) For 1 1/4-Inch dense graded base composed of >20% RAP or RCA, as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve, the contractor may choose from the following options to determine the material target density:
  - Method 2: Maximum dry density as determined by AASHTO T-180, Method D, with correction for coarse particles, and modified to require determination of Bulk Specific Gravity ( $G_m$ ) in accordance with AASHTO T 85.
  - Method 3: Maximum wet density as determined by AASHTO T-180, Method D, modified to define *Maximum Density* as the wet density in pounds per cubic foot of soil at optimum moisture content using Method D specified compaction, with correction for coarse particles, and modified to require determination of Bulk Specific Gravity ( $G_m$ ) in accordance with AASHTO T 85.
  - Method 4: Average of 10 random control strip wet density measurements as described in section C.2.5.1.

- (5) Compact the 1 1/4-Inch dense graded base to a minimum of 93.0% of the material target density for methods 1, 2 and 3. Compact 1 1/4-inch dense graded base to a minimum of 96% of the material target density for method 4. Ensure that adequate moisture is present during placement and compaction operations to prevent segregation and to help achieve compaction.
- (6) Base Aggregate Dense 1 1/4-Inch will be accepted for compaction on a lot basis.
- (7) Field density tests on materials using contractor elected target density methods 3 or 4 will not be considered for lot acceptance on the basis of compaction under the requirements of this provision until the moisture content of the in-place material is less than 2.0 percentage points above the maximum wet density optimum moisture or 2.0 percentage points of the average moisture content of the 10 density tests representing a control strip, respectively. Determine moisture content using AASHTO T255 as modified in CMM chapter 8 or a nuclear density gauge. If conducting AASHTO T255, sample materials after watering but before compaction.

## **C.2 Quality Management Program**

### **C.2.1 Quality Control Plan**

- (1) Submit a comprehensive written quality control plan to the engineer no later than 10 business days before placement of material. Do not place any dense graded base before the engineer reviews and accepts the plan. Construct the project as the plan provides.
- (2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory 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 process that will be used, and action time frames.
  3. A list of source locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
  4. Descriptions of stockpiling and hauling methods.
  5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
  6. Location of the QC laboratory, retained sample storage, and other documentation.
  7. Lot layout and random test location plan.
  8. A description of placement methods and operations. Including, but not limited to: staging, construction of an initial working platform, lift thicknesses, and equipment.

### **C.2.1 Pre-Placement Meeting**

A minimum of two weeks before placement of Base Aggregate Dense 1 1/4-Inch material, hold a pre-placement meeting at a mutually agreed upon time and location. Present the Quality Control Plan at the meeting. Attendance at the pre-placement meeting is mandatory for the project superintendent, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

### **C.2.2 Personnel**

- (1) Perform the quality control sampling, testing, and documentation required under this provision using technicians certified by the Department's Highway Technician Certification Program (HTCP). Have a HTCP Nuclear Density Technician I, or ACT certified technician, perform field density and field moisture content testing. Adhere to the minimum required certifications for aggregate testing per part 7 of the standard specification. AASHTO T180 proctor testing requires a minimum certification level of AGGTEC-1.
- (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.

### **C.2.3 Equipment**

- (1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods.

The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

- (2) Furnish nuclear gauges from the department's approved product list at:

<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/default.aspx>

- (3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.
- (4) For all target density methods, conform to AASHTO T310 and CMM 8-15 for wet density testing and gauge monitoring methods.
- (5) For the specified target density determined using method 1 in section C.1, compute the dry densities for the compacted dense graded base, composed of  $\leq 20\%$  RAP or RCA, according to AASHTO T310.
- (6) For contractor elected target density method 2 in section C.1, compute dry densities of dense graded base composed of  $>20\%$  RAP or RCA using a moisture correction factor and the nuclear wet density value. Determine the moisture correction value, for each Proctor produced under the requirements of C.2.5, using the moisture bias as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required. Conduct a moisture bias test for every 7500 feet of Base Aggregate Dense 1 1/4-Inch placed. Determine natural moistures in the laboratory.
- (7) Perform nuclear gauge measurements using gamma radiation in the backscatter or direct transmission position. Backscatter may be used only if the material being tested cannot reliably maintain an undistorted direct transmission test hole. Direct transmission tests must be performed at the greatest possible probe depth of 2 inches, 4 inches, or 6 inches, but not to exceed the depth of the compacted layer being tested. Perform each test for at least one minute of nuclear gauge count time.

### **C.2.5 Contractor Testing**

- (1) Perform compaction testing on the mainline dense graded base material, as defined by A.(4). Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians as required in C.2.3. Conform to CMM 8-15 for testing and gauge monitoring methods.
- (2) Select test sites randomly using ASTM Method D3665. Random numbers may be determined using an electronic random number generator. Guidance for determining test locations can be found in section 8-30.9 of the Construction and Materials Manual (CMM). Test locations must be kept a minimum of 3 feet from the unsupported edge of dense graded base layers.
- (3) When a density target is determined in accordance methods 3 or 4 in section C.1, conduct density testing on same date of final compaction.

#### **C.2.5.1 Contractor Required Quality Control (QC) Testing**

- (1) Conduct testing at a minimum frequency of one test per lot. A lot is 1500 feet for each layer with a maximum width of 18 feet and minimum lift thickness of 2" of Base Aggregate Dense 1 1/4-Inch material placed. Layer widths exceeding 18 feet are divided into equal lots. Each lot of compacted Base Aggregate Dense 1 1/4-Inch material, as defined by A.(4), will be accepted when the lot field density meets the required minimum density. Lots that don't achieve density requirements must be addressed and approved in accordance with C.2.7.
- (2) Add separate lots for passing lanes and individual ramps greater than 1500 feet.
- (3) Combine partial lots less than 750 feet with the previous lot. Partial lots greater than or equal to 750 feet are standalone lots.
- (4) Notify the engineer, if a lot field density test falls below the required minimum value. Document and perform corrective actions in accordance with C.2.7. Deliver documentation of all compaction testing results to the engineer at the time of testing.

#### **C.2.5.1.1 Target Density Determination**

##### **C.2.4.1.1.1 Maximum Wet and/or Dry Density Methods**

- (1) For contractor elected target density methods 2 and 3 in section C.1, and contractually specified target density method 1 in section C.1; perform one gradation and 5-point Proctor test before placement of 1 1/4-Inch dense graded base. Perform additional gradations every 3000 tons in accordance with standard spec 305 and 730. If sampling requirements are identical, samples/testing performed for the QMP Base Aggregate specification may be used to fulfill the gradation testing requirements of this specification.



- (2) Perform additional 5-point Proctor tests, at a minimum, when:
  1. The four point moving average gradation on any one sieve differs from the original gradation test result for that sieve, by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to create a 5-point Proctor. Each 5-point Proctor test will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
  2. The source of base aggregate changes.
  3. Percent target density exceeds 103.0% on two consecutive density tests.
- (3) Provide Proctor test results to the engineer within two business days of sampling. Provide gradation test results to the engineer within one business day of sampling.
- (4) Split each contractor QC Proctor sample and identify it according to CMM 8-30. Deliver the split to the engineer within one business day for department QV Proctor testing.
- (5) Split each non-Proctor 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.

#### **C.2.5.1.1.2 Density Control Strip Method**

- (1) For contractor elected target density method 4 in section C.1, construct a control strip for each layer of placement to identify the target wet density for the base aggregate dense material. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel. For blended material, reprocessed material and crushed concrete, perform additional gradations every 3000 tons in accordance with standard spec 305 and 730. If sampling frequencies are identical, samples/testing performed for the QMP Base Aggregate specification may be used to fulfill the gradation testing requirements of this specification.
- (2) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 300 feet long and one full lane width.
- (3) Completed control strips may remain in-place to be incorporated into the final roadway cross-section.
- (4) Construct additional control strips, at a minimum, when:
  1. The source of base aggregate changes.
  2. The four point moving average percentage of blended recycled materials, from classification of material retained on the No. 4 sieve in the original gradation test, differs by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip.
  3. The layer thickness changes more than 2.0 inches.
  4. The percent target density exceeds 103.0% on two consecutive density measurements.
- (5) Construct control strips using equipment and methods representative of the operations to be used to place and compact the remaining 1 1/4-Inch Base Aggregate Dense material. Wet the base, as mutually agreed upon by the contractor and engineer, to obtain and/or maintain adequate moisture content to ensure proper compaction. Discontinue water placement if the base begins to exhibit signs of saturation or instability.
- (6) After compacting the control strip with a minimum of 2 passes, mark and take density measurements at 3 random locations. Subsequent density measurements will be taken at the same 3 locations. Test locations must be kept a minimum of 3 feet from the unsupported edge of dense graded base layers.
- (7) After each subsequent pass of compaction equipment over the entirety of the control strip, take wet density measurements at the 3 marked locations. Continue compacting and testing until the increase in wet density measurements are less than 2.0 lb/ft<sup>3</sup>, or the density measurements begin to decrease.
- (8) Upon completion of control strip compaction, take 10 randomly located wet density measurements within the limits of the control strip. The final measurements recorded at the 3 locations under article C.2.4.1.1.2 may be included as 3 of the 10 measurements. Average the ten measurements to obtain the control strip target density and target moisture for use in contractor elected method 4 in section C.1. Test locations must be kept a minimum of 3 feet from the unsupported edge of dense graded base layers.

#### **C.2.6 Department Testing**

##### **C.2.6.1 General**

- (1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a

listing of names and telephone numbers of all QV and IA personnel for the project and provide test results to the contractor within two business days after the department obtains the sample.

- (2) When a density target is determined in accordance methods 3 and 4 in section C.1, conduct density testing on same date of final compaction.

#### **C.2.6.2 Quality Verification (QV) Testing**

- (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 C.2.3 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 at the minimum frequency of 20% of the required gradation, density and Proctor contractor tests.
- (3) The department will utilize contractor's QC Proctor results for determination of the material target density. The department will verify QC Proctor values by testing QC Proctor split sample. The department will use QC Proctor value as a target density if the QC and QV Proctor test results meet the tolerance requirements specified in section C.2.6.2(7).
- (4) The department will locate gradation and nuclear density test samples, at locations independent of the contractor's QC work, collecting one sample at each QV location. Sampling for gradation may be done independently of nuclear density tests, before watering and before compacting. The department will split each QV sample, test half for QV, and retain the remaining half for 10 calendar days.
- (5) 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.
- (6) The department will utilize control strip target density testing results in lieu of QV Proctor sampling and testing when the contractor elected target density method 4 in section C.1 is used.
- (7) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, take corrective actions in accordance with C.2.7 until the requirements of this special provision are met. Differing QC and QV nuclear density values of more than 2.0 pcf will be investigated and resolved. Differing QC and QV Proctor values of more than 3.0 pcf will be investigated and resolved.

#### **C.2.6.3 Independent Assurance (IA)**

- (1) Independent 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. 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 C.2.6.4.

#### **C.2.6.4 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 shall review the data, examine data reduction and analysis methods, evaluate sampling and testing methods/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 project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product or work, 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.2.7 Corrective Action**

- (1) Lots not achieving the minimum density requirements may be addressed and accepted for compaction in accordance with the requirements of this section. Unless directed by the engineer, corrective actions taken to address an unacceptable lot must be applied to the entire lot corresponding to the non-conforming test.
- (2) Investigate the moisture content of material in an unacceptable lot. Moisture content testing/samples collected under the QC and/or QV testing articles of this specification may be used to complete this investigation. Obtain moisture content readings in accordance with ASTM D 6938. For material composed of >20% RAP or RCA, correct the moisture content with the moisture correction value using the moisture bias, as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required.
- (3) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods 1, 2 and 3 in section C.1, or within 2.0 percentage points of the target moisture content for target density method 4 in section C.1, and exhibiting no signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, shall be compacted a minimum of one more pass using equipment and methods representative of the operations used to place and compact the Base Aggregate Dense 1 1/4-Inch, and density tested at the same location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft<sup>3</sup> continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft<sup>3</sup>, the lot is accepted as satisfying the compaction requirements of this provision.
- (4) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods 1, 2, or 3 in section C.1, or within 2.0 percentage points of the target moisture content for target density method 4 in section C.1, and exhibiting signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, will be reviewed by the engineer. The engineer may request subgrade improvement methods, such as excavation below subgrade (EBS), installation of geotextile fabrics, installation of breaker run material, or others to be completed, or may request an additional pass of compactive effort using equipment and methods representative of the operations used to place and compact the base aggregate dense and density test.
  1. If, after an additional pass, the change in density at the same location (station and offset) as the failing QC and/or QV density tests exceeds 2.0 lb/ft<sup>3</sup> in a lot continue subsequent compactive efforts and density testing on that lot. If the change in density at the same location (station and offset) as the failing QC and/or QV density tests is less than or equal to 2.0 lb/ft<sup>3</sup>, and subgrade improvement methods are not requested by the engineer, the lot is accepted as satisfying the compaction requirements of this provision.
  2. If subgrade improvement methods are requested by the engineer, upon completion, including compaction of the restored base material, conduct a density test within the improved subgrade limits. This density test result will replace the prior field density value. If the lot field density equals or exceeds the minimum density requirement defined in section C.1, the lot is accepted as satisfying the compaction requirements of this provision. If the lot field density fails to achieve the minimum density requirement defined in section C.1, compact the lot a minimum of one more pass using equipment and methods representative of the operations used to place and compact the base aggregate dense; and density test at the same location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft<sup>3</sup> continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft<sup>3</sup>, the lot is accepted as satisfying the compaction requirements of this provision.
- (5) Unacceptable lots, with moisture contents in excess of 2.0 percentage points above or below optimum moisture for target density methods 1, 2 or 3 in section C.1 ; or in excess of 2.0 percentage points above or below the target moisture content for target density method 4 in section C.1; shall receive contractor performed and documented corrective action; including additional density testing.
- (6) Density tests completed subsequent to any corrective action will replace previous field density test results for that lot. Continue corrective actions until the minimum density requirement is achieved or an alternate compaction acceptance criteria is met in accordance with this section.

- (7) Field moisture contents of materials tested using contractor elected target density methods 3 or 4 in section C.1 cannot exceed 2.0 percentage points of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively. Density tests on materials using contractor elected target density methods 3 or 4 in section C.1 will not be considered for lot compaction acceptance until the moisture content of the corresponding density test of the in-place material is less than 2.0 percentage points above of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively.

**D Measurement**

- (1) The department will measure the QMP Base Aggregate Dense 1 1/4-Inch Compaction bid item by each lot, acceptably completed per C.2.5.1.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
371.1000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	EACH

- (2) Payment is full compensation for performing compaction testing; for sampling and laboratory testing; and for developing, completing, and documenting the compaction quality management program. The department will pay separately for providing aggregate under the Base Aggregate Dense 1 1/4-Inch bid item.
- (3) The department will pay for additional tests directed by the engineer. One engineer directed test is equal to one acceptably completed lot of the QMP Base Aggregate Dense 1 1/4 -Inch Compaction bid item. The department will not pay for additional corrective action tests required due to unacceptable material.

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**36. HMA Percent Within Limits (PWL) Test Strip Volumetrics, Item 460.0105.S;  
HMA Percent Within Limits (PWL) Test Strip Density Item 460.0110.S.**

**A Description**

This special provision describes the Hot Mix Asphalt (HMA) density and volumetric testing tolerances required for an HMA test strip. An HMA test strip is required for contracts constructed under HMA Percent Within Limits (PWL) QMP. A density test strip is required for each pavement layer placed over a specific, uniform underlying material, unless specified otherwise in the plans. Each contract is restricted to a single mix design per mix type per layer (e.g., upper layer and lower layer may have different mix type specified or may have the same mix type with different mix designs). Each mix design requires a separate test strip. Density and volumetrics testing will be conducted on the same test strip whenever possible.

Perform work according to standard spec 460 and as follows.

**B Materials**

Use materials conforming to HMA Pavement Percent Within Limits (PWL) QMP special provision.

**C Construction**

**C.1 Test Strip**

Submit the test strip start time and date to the department in writing at least 5 calendar days in advance of construction of the test strip. If the contractor fails to begin paving within 2 hours of the submitted start time, the test strip is delayed, and the department will assess the contractor \$2,000 for each instance according to Section E of this document. Alterations to the start time and date must be submitted to the department in writing a minimum of 24 hours prior to the start time. The contractor will not be liable for changes in start time related to adverse weather days as defined by standard spec 101.3 or equipment breakdown verified by the department.

On the first day of production for a test strip, produce approximately 750 tons of HMA. (Note: adjust tonnage to accommodate natural break points in the project.) Locate test strips in a section of the roadway to allow a representative rolling pattern (i.e. not a ramp or shoulder, etc.).

## C.1.1 Sampling and Testing Intervals

### C.1.1.1 Volumetrics

Laboratory testing will be conducted from a split sample yielding three components, with portions designated for QC (quality control), QV (quality verification), and retained.

During production for the test strip, obtain sufficient HMA mixture for three-part split samples from trucks prior to departure from the plant. Collect three split samples during the production of test strip material. Perform sampling from the truck box and three-part splitting of HMA according to CMM 8-36. These three samples will be randomly selected by the engineer from each *third* of the test strip tonnage (T), excluding the first 50 tons:

<u>Sample Number</u>	<u>Production Interval (tons)</u>
<u>1</u>	50 to $\frac{T}{3}$
<u>2</u>	$\frac{T}{3}$ to $\frac{2T}{3}$
<u>3</u>	$\frac{2T}{3}$ to T

### C.1.1.2 Density

Required field tests include contractor QC and department QV nuclear density gauge tests and pavement coring at ten individual locations (five in each half of the test strip length) according to Appendix A: *Test Methods and Sampling for HMA PWL QMP Projects*. Both QV and QC teams shall have two nuclear density gauges present for correlation at the time the test strip is constructed. QC and QV teams may wish to scan with additional gauges at the locations detailed in Appendix A, as only gauges used during the test strip correlation phase will be allowed.

## C.1.2 Field Tests

### C.1.2.1 Density

A gauge comparison according to CMM 8-15.7 shall be completed prior to the day of test strip construction. Daily standardization of gauges on reference blocks and a project reference site shall be performed according to CMM 8-15.8. A standard count shall be performed for each gauge on the material placed for the test strip, prior to any additional data collection. Nuclear gauge readings and pavement cores shall be used to determine nuclear gauge correlation according to Appendix A. The two to three readings for the five locations across the mat for each of two zones shall be provided to the engineer. The engineer will analyze the readings of each gauge relative to the densities of the cores taken at each location. The engineer will determine the average difference between the nuclear gauge density readings and the measured core densities to be used as a constant offset value. This offset will be used to adjust raw density readings of the specific gauge and shall appear on the density data sheet along with gauge and project identification. An offset is specific to the mix and layer; therefore, a separate value shall be determined for each layer of each mix placed over a differing underlying material for the contract. This constitutes correlation of that individual gauge for the given layer. Two gauges per team are not required to be onsite daily after completion of the test strip. Any data collected without a correlated gauge will not be accepted.

The contractor is responsible for coring the pavement from the footprint of the density tests and filling core holes according to Appendix A. Coring and filling of pavement core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Testing of cores shall be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following laboratory testing and will be responsible for any verification testing at the discretion of the engineer.

The target maximum density to be used in determining core density is the average of the three volumetric/mix Gmm values from the test strip multiplied by 62.24 lb/ft<sup>3</sup>. In the event mix and density portions of the test strip procedure are separated, or if an additional density test strip is required, the mix portion must be conducted prior to density determination. The target maximum density to determine core densities shall then be the Gmm four-test running average (or three-test average from a PWL volumetric-only test strip) from the end of the previous day's production multiplied by 62.24 lb/ft<sup>3</sup>. If no PWL production volumetric test is to be taken in a density-only test strip, a non-random three-part split mix sample will be taken and tested for Gmm by the department representative. The department Gmm

test results from this non-random test will be entered in the HMA PWL Test Strip Spreadsheet and must conform to the Acceptance Limits presented in C.2.1.

Exclusions such as shoulders and appurtenances shall be tested and reported according to CMM 8-15. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3. No density incentive or disincentive will be applied to shoulders or appurtenances. However, unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 8-15.11.

### C.1.3 Laboratory Tests

#### C.1.3.1 Volumetrics

Obtain random samples according to C.1.1.1 and Appendix A. Perform tests the same day as taking the sample.

Theoretical maximum specific gravities of each mixture sample will be obtained according to AASHTO T 209. Bulk specific gravities of both gyratory compacted samples and field cores shall be determined according to AASHTO T 166. The bulk specific gravity values determined from field cores shall be used to calculate a correction factor (i.e., offset) for each QC and QV nuclear density gauge. The correction factor will be used throughout the remainder of the layer.

### C.2 Acceptance

#### C.2.1 Volumetrics

Produce mix conforming to the following limits based on individual QC and QV test results (tolerances based on most recent JMF):

ITEM	ACCEPTANCE LIMITS
Percent passing given sieve:	
37.5-mm	+/- 8.0
25.0-mm	+/- 8.0
19.0-mm	+/- 7.5
12.5-mm	+/- 7.5
9.5-mm	+/- 7.5
2.36-mm	+/- 7.0
75-µm	+/- 3.0
Asphaltic content in percent <sup>[1]</sup>	- 0.5
Air Voids	-1.5 & +2.0
VMA in percent <sup>[2]</sup>	- 1.0
Maximum specific gravity	+/- 0.024

<sup>[1]</sup> Asphalt content more than -0.5% below the JMF will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction according to WisDOT Modified ASTM D8159.

<sup>[2]</sup> VMA limits based on minimum requirement for mix design nominal maximum aggregate size in [table 460-1](#).

QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

Calculation of air voids shall use either the QC, QV, or retained split sample test results, as identified by conducting the paired t-test with the WisDOT PWL Test Strip Spreadsheet.

If QC and QV test results do not correlate as determined by the split sample comparison, the retained split sample will be tested by the department's AASHTO accredited laboratory and HTCP certified personnel as a referee test. Additional investigation shall be conducted to identify the source of the difference between QC and QV data. Referee data will be used to determine material conformance and pay.

### C.2.2 Density

Compact all layers of test strip HMA mixture to the applicable density shown in the following table:

TABLE 460-3 MINIMUM REQUIRED DENSITY<sup>[1]</sup>

LAYER	MIXTURE TYPE	
	LT & MT	HT
LOWER	93.0 <sup>[2]</sup>	93.0 <sup>[3]</sup>
UPPER	93.0	93.0

<sup>[1]</sup> If any individual core density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer will investigate the acceptability of that material per CMM 8-15.11.

<sup>[2]</sup> Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

<sup>[3]</sup> Minimum reduced by 1.0 percent for lower layer constructed directly on crushed aggregate or recycled base courses.

Nuclear density gauges are acceptable for use on the project only if correlation is completed for that gauge during the time of the test strip and the department issues documentation of acceptance stating the correlation offset value specific to the gauge and mix design. The offset is not to be entered into any nuclear density gauge as it will be applied by the department-furnished Field Density Worksheet.

### C.2.3 Test Strip Approval and Material Conformance

All applicable laboratory and field testing associated with a test strip shall be completed prior to any additional mainline placement of the mix. All test reports shall be submitted to the department upon completion and approved before paving resumes. The department will notify the contractor within 24 hours from start of test strip regarding approval to proceed with paving, unless an alternate time frame is agreed upon in writing with the department. The 24-hour approval time includes only working days as defined in standard spec 101.3.

The department will evaluate material conformance and make pay adjustments based on the PWL value of air voids and density for the test strip. The QC core densities and QC and QV mix results will be used to determine the PWL values as calculated according to Appendix A.

The PWL values for air voids and density shall be calculated after determining core densities. An approved test strip is defined as the individual PWL values for air voids and density both being equal to or greater than 75, mixture volumetric properties conforming to the limits specified in C.2.1, and an acceptable gauge-to-core correlation. Further clarification on PWL test strip approval and appropriate post-test strip actions are shown in the following table:

PWL Test Strip Approval and Material Conformance Criteria

PWL Value for Air Voids and Density	Test Strip Approval	Material Conformance	Post-Test Strip Action
Both PWL $\geq$ 75	Approved <sup>1</sup>	Material paid for according to Section E.	Proceed with Production
50 $\leq$ Either PWL < 75	Not Approved	Material paid for according to Section E.	Consult BTS to determine need for additional test strip.
Either PWL < 50	Not Approved	Unacceptable material removed and replaced or paid for at 50% of the contract unit price according to Section E.	Construct additional Volumetrics or Density test strip as necessary.

<sup>1</sup> In addition to these PWL criteria, mixture volumetric properties must conform to the limits specified in C.2.1, split sample comparison must have a passing result and an acceptable gauge-to-core correlation must be completed.

A maximum of two test strips will be allowed to remain in place per pavement layer per contract. If material is removed, a new test strip shall replace the previous one at no additional cost to the department. If the contractor changes the mix design for a given mix type during a contract, no additional compensation will be paid by the department for the required additional test strip and the department will assess the contractor \$2,000 for the additional test strip according to Section E of this special provision. For simultaneously conducted density and volumetric test strip components, the following must be achieved:

- i. Passing/Resolution of Split Sample Comparison
- ii. Volumetrics/mix PWL value  $\geq 75$
- iii. Density PWL value  $\geq 75$
- iv. Acceptable correlation

If not conducted simultaneously, the mix portion of a test strip must accomplish (i) & (ii), while density must accomplish (iii) & (iv). If any applicable criteria are not achieved for a given test strip, the engineer, with authorization from the department's Bureau of Technical Services, will direct an additional test strip (or alternate plan approved by the department) be conducted to prove the criteria can be met prior to additional paving of that mix. For a density-only test strip, determination of mix conformance will be according to main production, i.e., HMA Pavement Percent Within Limits (PWL) QMP special provision.

#### **D Measurement**

The department will measure HMA Percent Within Limits (PWL) Test Strip as each unit of work, acceptably completed as passing the required air void, VMA, asphalt content, gradation, and density correlation for a Test Strip. Material quantities shall be determined according to standard spec 450.4 and detailed here within.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH
460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH

These items are intended to compensate the contractor for the construction of the test strip for contracts paved under the HMA Pavement Percent Within Limits QMP article.

Payment for HMA Percent Within Limits (PWL) Test Strip Volumetrics is full compensation for volumetric sampling, splitting, and testing; for proper labeling, handling, and retention of split samples.

Payment for HMA Percent Within Limits (PWL) Test Strip Density is full compensation for collecting and measuring of pavement cores, acceptably filling core holes, providing of nuclear gauges and operator(s), and all other work associated with completion of a core-to-gauge correlation, as directed by the engineer.

Acceptable HMA mixture placed on the project as part of a volumetric or density test strip will be compensated by the appropriate HMA Pavement bid item with any applicable pay adjustments. If a test strip is delayed as defined in C.1 of this document, the department will assess the contractor \$2,000 for each instance, under the HMA Delayed Test Strip administrative item. If an additional test strip is required because the initial test strip is not approved by the department or the mix design is changed by the contractor, the department will assess the contractor \$2,000 for each additional test strip (i.e. \$2,000 for each individual volumetrics or density test strip) under the HMA Additional Test Strip administrative item.

Pay adjustment will be calculated using 65 dollars per ton of HMA pavement. The department will pay for measured quantities of mix based on \$65/ton multiplied by the following pay adjustment:



**PAY ADJUSTMENT FOR HMA PAVEMENT AIR VOIDS & DENSITY**

*PERCENT WITHIN LIMITS  
(PWL)*

≥ 90 to 100

≥ 50 to < 90

<50

*PAYMENT FACTOR, PF  
(percent of \$65/ton)*

PF = ((PWL – 90) \* 0.4) + 100

(PWL \* 0.5) + 55

50%<sup>[1]</sup>

where, PF is calculated per air voids and density, denoted PF<sub>air voids</sub> & PF<sub>density</sub>

<sup>[1]</sup> Material resulting in PWL value less than 50 shall be removed and replaced, unless the engineer allows for such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density will be according to Table 460-3 as modified herein. Pay adjustment will be determined for an acceptably completed test strip and will be computed as shown in the following equation:

$$\text{Pay Adjustment} = (\text{PF}-100)/100 \times (\text{WP}) \times (\text{tonnage}) \times (\$65/\text{ton})^*$$

\*Note: If Pay Factor <50, the contract unit price will be used in lieu of \$65/ton

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids (PF<sub>air voids</sub>) and density (PF<sub>density</sub>) will be determined. PF<sub>air voids</sub> will be multiplied by the total tonnage produced (i.e., from truck tickets), and PF<sub>density</sub> will be multiplied by the calculated tonnage used to pave the mainline only (i.e., traffic lane excluding shoulder) as determined according to Appendix A.

The department will pay incentive for air voids under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

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**37. HMA Pavement Percent Within Limits (PWL) QMP.**

**A Description**

This special provision describes percent within limits (PWL) pay determination, providing and maintaining a contractor Quality Control (QC) Program, department Quality Verification (QV) Program, required sampling and testing, dispute resolution, corrective action, pavement density, and payment for HMA pavements. Pay is determined by statistical analysis performed on contractor and department test results conducted according to the Quality Management Program (QMP) as specified in standard spec 460, except as modified below.

## **B Materials**

Conform to the requirements of standard spec 450, 455, and 460 except where superseded by this special provision. The department will allow only one mix design for each HMA mixture type per layer required for the contract, unless approved by the engineer. The use of more than one mix design for each HMA pavement layer will require the contractor to construct a new test strip according to HMA Pavement Percent Within Limits (PWL) QMP Test Strip Volumetrics and HMA Pavement Percent Within Limits (PWL) QMP Test Strip Density articles at no additional cost to the department.

*Replace standard spec 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater with the following:*

### **460.2.8.2.1.3.1 Contracts under Percent within Limits**

(1) Furnish and maintain a laboratory at the plant site fully equipped for performing contractor QC testing. Have the laboratory on-site and operational before beginning mixture production.

(2) Obtain random samples and perform tests according to this special provision and further defined in Appendix A: *Test Methods & Sampling for HMA PWL QMP Projects*. Obtain HMA mixture samples from trucks at the plant. For the subplot in which a QV sample is collected, discard the QC sample and test a split of the QV sample.

(3) Perform sampling from the truck box and three-part splitting of HMA samples according to CMM 8-36. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per subplot. All QC samples shall provide the following: QC, QV, and Retained. The contractor shall take possession and test the QC portions. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. Additional sampling details are found in Appendix A. Label samples according to CMM 8-36. Additional handling instructions for retained samples are found in CMM 8-36.

(4) Use the test methods identified below to perform the following tests at a frequency greater than or equal to that indicated:

- Blended aggregate gradations according to AASHTO T 30
- Asphalt content (AC) in percent determined by ignition oven method according to AASHTO T 308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.
- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166.
- Maximum specific gravity (Gmm) according to AASHTO T 209.
- Air voids ( $V_a$ ) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R35.

(5) Lot size shall consist of 3750 tons with sublots of 750 tons. Test each design mixture at a frequency of 1 test per 750 tons of mixture type produced and placed as part of the contract. Add a random sample for any fraction of 750 tons at the end of production for a specific mixture design. Partial lots with less than three subplot tests will be included into the previous lot for data analysis and pay adjustment. Volumetric lots will include all tonnage of mixture type under specified bid item unless otherwise specified in the plan.

(6) Conduct field tensile strength ratio tests according to AASHTO T283, without freeze-thaw conditioning cycles, on each qualifying mixture according to CMM 8-36.6.14. Test each full 50,000 ton production increment, or fraction of an increment, after the first 5,000 tons of production. Perform required increment testing in the first week of production of that increment. If field tensile strength ratio values are below the spec limit, notify the engineer. The engineer and contractor will jointly determine a corrective action.

*Delete standard spec 460.2.8.2.1.5 and 460.2.8.2.1.6.*

*Replace standard spec 460.2.8.2.1.7 Corrective Action with the following:*

### **460.2.8.2.1.7 Corrective Action**

(1) Material must conform to the following action and acceptance limits based on individual QC and QV test results (tolerances relative to the JMF used on the PWL Test Strip):

ITEM	ACTION LIMITS	ACCEPTANCE LIMITS
Percent passing given sieve:		
37.5-mm	+/- 8.0	
25.0-mm	+/- 8.0	
19.0-mm	+/- 7.5	
12.5-mm	+/- 7.5	
9.5-mm	+/- 7.5	
2.36-mm	+/- 7.0	
75- $\mu$ m	+/- 3.0	
AC in percent <sup>[1]</sup>	-0.3	-0.5
Va		- 1.5 & +2.0
VMA in percent <sup>[2]</sup>	- 0.5	-1.0

<sup>[1]</sup> The department will not adjust pay based on QC AC in percent test results; however corrective action will be applied to nonconforming material according to 460.2.8.2.1.7(3) as modified herein.

<sup>[2]</sup> VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

(2) QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

(3) Notify the engineer if any individual test result falls outside the action limits, investigate the cause and take corrective action to return to within action limits. If two consecutive test results fall outside the action limits, stop production. Production may not resume until approved by the engineer. Additional QV samples may be collected upon resuming production, at the discretion of the engineer.

(4) For any additional tests outside the random number testing conducted for volumetrics, the data collected will not be entered into PWL calculations. Additional QV tests must meet acceptance limits or be subject to production stop and/or remove and replace.

(5) Remove and replace unacceptable material at no additional expense to the department. Unacceptable material is defined as any individual QC or QV tests results outside the acceptance limits or a PWL value < 50. The engineer may allow such material to remain in place with a price reduction. The department will pay for such HMA Pavement allowed to remain in place at 50 percent of the contract unit price.

*Replace standard spec 460.2.8.3.1.2 Personnel Requirements with the following:*

#### **460.2.8.3.1.2 Personnel Requirements**

(1) The department will provide at least one HTCP-certified Transportation Materials Sampling (TMS) Technician, to observe QV sampling of HMA mixtures.

(2) Under departmental observation, a contractor TMS technician shall collect and split samples.

(3) A department HTCP-certified Hot Mix Asphalt, Technician I, Production Tester (HMA-IPT) technician will ensure that all sampling is performed correctly and conduct testing, analyze test results, and report resulting data.

(4) The department will make an organizational chart available to the contractor before mixture production begins. The organizational chart will include names, telephone numbers, and current certifications of all QV testing personnel. The department will update the chart with appropriate changes, as they become effective.

*Replace standard spec 460.2.8.3.1.4 Department Verification Testing Requirements with the following:*

#### **460.2.8.3.1.4 Department Verification Testing Requirements**

(1) HTCP-certified department personnel will obtain QV random samples by directly supervising HTCP-certified contractor personnel sampling from trucks at the plant. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per subplot. All QV samples shall furnish the following: QC, QV, and Retained. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion

from each sample) and the Retained portions. The department will take possession of retained samples accumulated to date each day QV samples are collected. The department will retain samples until surpassing the analysis window of up to 5 lots, as defined in 460.2.8.3.1.7(2) of this special provision. Additional sampling details are found in Appendix A.

(2) The department will verify product quality using the test methods specified here in 460.2.8.3.1.4(3). The department will identify test methods before construction starts and use only those methods during production of that material unless the engineer and contractor mutually agree otherwise.

(3) The department will perform all testing conforming to the following standards:

- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166.
- Maximum specific gravity (Gmm) according to AASHTO T 209.
- Air voids (Va) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R 35.
- Asphalt Content (AC) in percent determined by ignition oven method according to AASHTO T 308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.

(4) The department will randomly test each design mixture at the minimum frequency of one test for each lot.

*Delete standard spec 460.2.8.3.1.6.*

*Replace standard spec 460.2.8.3.1.7 Dispute Resolution with the following:*

#### **460.2.8.3.1.7 Data Analysis for Volumetrics**

(1) Analysis of test data for pay determination will be contingent upon QC and QV test results. Statistical analysis will be conducted on Gmm and Gmb test results for calculation of Va. If either Gmm or Gmb analysis results in non-comparable data as described in 460.2.8.3.1.7(2), subsequent testing will be performed for both parameters as detailed in the following paragraph.

(2) The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Additional comparisons incorporating the first 3 lots of data will be performed following completion of the 4<sup>th</sup> and 5<sup>th</sup> lots (i.e., lots 1-3, 1-4, and 1-5). A rolling window of 5 lots will be used to conduct F & t comparison for the remainder of the contract (i.e., lots 2-6, then lots 3-7, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025. If the F- and t-tests report comparable data, the QC and QV data sets are determined to be statistically similar and QC data will be used to calculate the Va used in PWL and pay adjustment calculations. If the F- and t-tests result in non-comparable data, proceed to the *dispute resolution* steps found below. Note: if both QC and QV Va PWL result in a pay adjustment of 102% or greater, dispute resolution testing will not be conducted. Dispute resolution via further investigation is as follows:

<sup>[1]</sup> The Retained portion of the split from the most recent lot in the analysis window (specifically the subplot identifying that variances or means do not compare) will be referee tested by the bureau's AASHTO accredited laboratory and certified personnel. If the non-comparison occurs following Lot 3, 4, or 5, all previous lots are subject to referee testing. Referee test results will replace the QV data of the subplot(s).

<sup>[2]</sup> Statistical analysis will be conducted with referee test results replacing QV results.

- i. If the F- and t-tests indicate variances and means compare, no further testing is required for the lot and QC data will be used for PWL and pay factor/adjustment calculations.
- ii. If the F- and t-tests indicate non-comparable variances or means, the Retained portion of the random QC sample will be tested by the department's regional lab for the remaining 4 sublots of the lot which the F- and t- tests indicate non-comparable datasets. The department's regional lab and the referee test results will be used for PWL and pay factor/adjustment calculations. Upon the second instance of non-comparable variance or means and for every instance thereafter, the department will assess a pay reduction for the additional testing of the remaining 4 sublots at \$2,000/lot under the HMA Regional Lab Testing administrative item.

<sup>[3]</sup>The contractor may choose to dispute the regional test results on a lot basis. In this event, the retained portion of each subplot will be referee tested by the department's AASHTO accredited laboratory and certified personnel. The referee Gmm and Gmb test results will supersede the regional lab results for the disputed lot.

- i. If referee testing results in an increased calculated pay factor, the department will pay for the cost of the additional referee testing.
- ii. If referee testing of a disputed lot results in an equal or lower calculated pay factor, the department will assess a pay reduction for the additional referee testing at \$2,000/lot under the Referee Testing administrative item.

<sup>(3)</sup>The department will notify the contractor of the referee test results within 3 working days after receipt of the samples by the department's AASHTO accredited laboratory. The intent is to provide referee test results within 7 calendar days from completion of the lot.

<sup>(4)</sup>The department will determine mixture conformance and acceptability by analyzing referee test results, reviewing mixture data, and inspecting the completed pavement according to the standard spec, this special provision, and accompanying Appendix A.

<sup>(5)</sup> Unacceptable material (i.e., resulting in a PWL value less than 50 or individual QC or QV test results not meeting the Acceptance Requirements of 460.2.8.2.1.7 as modified herein) will be referee tested by the bureau's AASHTO accredited laboratory and certified personnel. Such material may be subject to remove and replace, at the discretion of the engineer. If the engineer allows the material to remain in place, it will be paid at 50% of the HMA Pavement contract unit price. Replacement or pay adjustment will be conducted on a subplot basis. If an entire PWL subplot is removed and replaced, the test results of the newly placed material will replace the original data for the subplot. Any remove and replace shall be performed at no additional cost to the department. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test will be conducted and under such circumstances will be entered into the HMA PWL Production Spreadsheet for data analysis and pay determination.] The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

*Delete standard spec 460.2.8.3.1.8 Corrective Action.*

## **C Construction**

*Replace standard spec 460.3.3.2 Pavement Density Determination with the following:*

### **460.3.3.2 Pavement Density Determination**

<sup>(1)</sup> The engineer will determine the target maximum density using department procedures described in CMM 8-15. The engineer will determine density as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.

<sup>(2)</sup> Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.

<sup>(3)</sup> A lot is defined as 7500 lane feet with sublots of 1500 lane feet (excluding shoulder, even if paved integrally) and placed within a single layer for each location and target maximum density category indicated in table 460-3. The contractor is required to complete three tests randomly per subplot and the department will randomly conduct one QV test per subplot. A partial quantity less than 750 lane feet will be included with the previous subplot. Partial lots with less than three sublots will be included in the previous lot for data analysis/acceptance and pay, by the engineer. If density lots/sublots are determined prior to construction of the test strip, any random locations within the test strip shall be omitted. Exclusions such as shoulders and appurtenances shall be tested and recorded according to CMM 8-15. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3. No density incentive or disincentive will be applied to shoulders or appurtenances. Offsets will not be applied to nuclear density gauge readings for shoulders or appurtenances. Unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 8-15.11.

(4) The three QC locations per subplot represent the outside, middle, and inside of the paving lane. The QC density testing procedures are detailed in Appendix A.

(5) QV nuclear testing will consist of one randomly selected location per subplot. The QV density testing procedures will be the same as the QC procedure at each testing location and are also detailed in Appendix A.

(6) An HTCP-certified nuclear density technician (NUCDENSITYTEC-I) shall identify random locations and perform the testing for both the contractor and department. The responsible certified technician shall ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly, or at the completion of each lot.

(7) For any additional tests outside the random number testing conducted for density, the data collected will not be entered into PWL calculations. However, additional QV testing must meet the tolerances for material conformance as specified in the standard specification and this special provision. If additional density data identifies unacceptable material, proceed as specified in CMM 8-15.11.

*Replace standard spec 460.3.3.3 Waiving Density Testing with Acceptance of Density Data with the following:*

#### **460.3.3.3 Analysis of Density Data**

(1) Analysis of test data for pay determination will be contingent upon test results from both the contractor (QC) and the department (QV).

(2) As random density locations are paved, the data will be recorded in the HMA PWL Production Spreadsheet for analysis in chronological order. The engineer, upon completion of the analysis lot, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Analysis will use a set alpha value of 0.025.

- i. If the F- and t-tests indicate variances and means compare, the QC and QV data sets are determined to be statistically similar and QC data will be used for PWL and pay adjustment calculations.
- ii. If the F- and t-tests indicate variances or means do not compare, the QV data will be used for subsequent calculations.

(3) The department will determine mixture density conformance and acceptability by analyzing test results, reviewing mixture data, and inspecting the completed pavement according to standard spec, this special provision, and accompanying Appendix A.

(4) Density resulting in a PWL value less than 50 or not meeting the requirements of 460.3.3.1 (any individual density test result falling more than 3.0 percent below the minimum required target maximum density as specified in standard spec Table 460-3) is unacceptable and may be subject to remove and replace at no additional cost to the department, at the discretion of the engineer.

- i. Replacement may be conducted on a subplot basis. If an entire PWL subplot is removed and replaced, the test results of the newly placed material will replace the original data for the subplot.
- ii. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test must be conducted and under such circumstances will be entered into the data analysis and pay determination.]
- iii. If the engineer allows such material to remain in place, it will be paid for at 50% of the HMA Pavement contract unit price. The extent of unacceptable material will be addressed as specified in CMM 8-15.11. The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

#### **D Measurement**

The department will measure the HMA Pavement bid items acceptably completed by the ton as specified in standard spec 450.4 and as follows in standard spec 460.5 as modified in this special provision.

## E Payment

Replace standard spec 460.5.2 HMA Pavement with the following:

### 460.5.2 HMA Pavement

#### 460.5.2.1 General

(1) Payment for HMA Pavement Type LT, MT, and HT mixes is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for HMA PWL QMP testing and aggregate source testing; for warm mix asphalt additives or processes; for stabilizer, hydrated lime and liquid antistripping agent, if required; and for all materials including asphaltic materials.

(2) If provided for in the plan quantities, the department will pay for a leveling layer, placed to correct irregularities in an existing paved surface before overlaying, under the pertinent paving bid item. Absent a plan quantity, the department will pay for a leveling layer as extra work.

#### 460.5.2.2 Calculation of Pay Adjustment for HMA Pavement using PWL

(1) Pay adjustments will be calculated using 65 dollars per ton of HMA pavement. The HMA PWL Production Spreadsheet, including data, will be made available to the contractor by the department as soon as practicable upon completion of each lot. The department will pay for measured quantities of mix based on this price multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

#### PAY FACTOR FOR HMA PAVEMENT AIR VOIDS & DENSITY

<i>PERCENT WITHIN LIMITS (PWL)</i>	<i>PAYMENT FACTOR, PF (percent of \$65/ton)</i>
$\geq 90$ to 100	$PF = ((PWL - 90) * 0.4) + 100$
$\geq 50$ to < 90	$(PWL * 0.5) + 55$
<50	50% <sup>[1]</sup>

where PF is calculated per air voids and density, denoted PF<sub>air voids</sub> & PF<sub>density</sub>

<sup>[1]</sup> Any material resulting in PWL value less than 50 shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density shall be according to standard spec Table 460-3. Pay adjustment will be determined on a lot basis and will be computed as shown in the following equation.

$$\text{Pay Adjustment} = (PF-100)/100 \times (WP) \times (\text{tonnage}) \times (\$65/\text{ton})^*$$

\*Note: If Pay Factor <50, the contract unit price will be used in lieu of \$65/ton

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids ( $PF_{\text{air voids}}$ ) and density ( $PF_{\text{density}}$ ) will be determined.  $PF_{\text{air voids}}$  will be multiplied by the total tonnage placed (i.e., from truck tickets), and  $PF_{\text{density}}$  will be multiplied by the calculated tonnage used to pave the mainline only (i.e., travel lane excluding shoulder) as determined according to Appendix A.

The department will pay incentive for air voids and density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

The department will administer a disincentive under the Disincentive HMA Binder Content administrative item for each individual QV test result indicating asphalt binder content below the Action Limit in 460.2.8.2.1.7 presented herein. The department will adjust pay per subplot of mix at 65 dollars per ton of HMA pavement multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

<u>AC Binder</u> <u>Relative to JMF</u>	<u>Pay Adjustment /</u> <u>Sublot</u>
-0.4% to -0.5%	75%
More than -0.5%	50% <sup>[1]</sup>

<sup>[1]</sup> Any material resulting in an asphalt binder content more than 0.5% below the JMF AC content shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement. Such material will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction according to automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.

Note: PWL value determination is further detailed in the *Calculations* worksheet of the HMA PWL Production Spreadsheet.

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## 38. Appendix A.

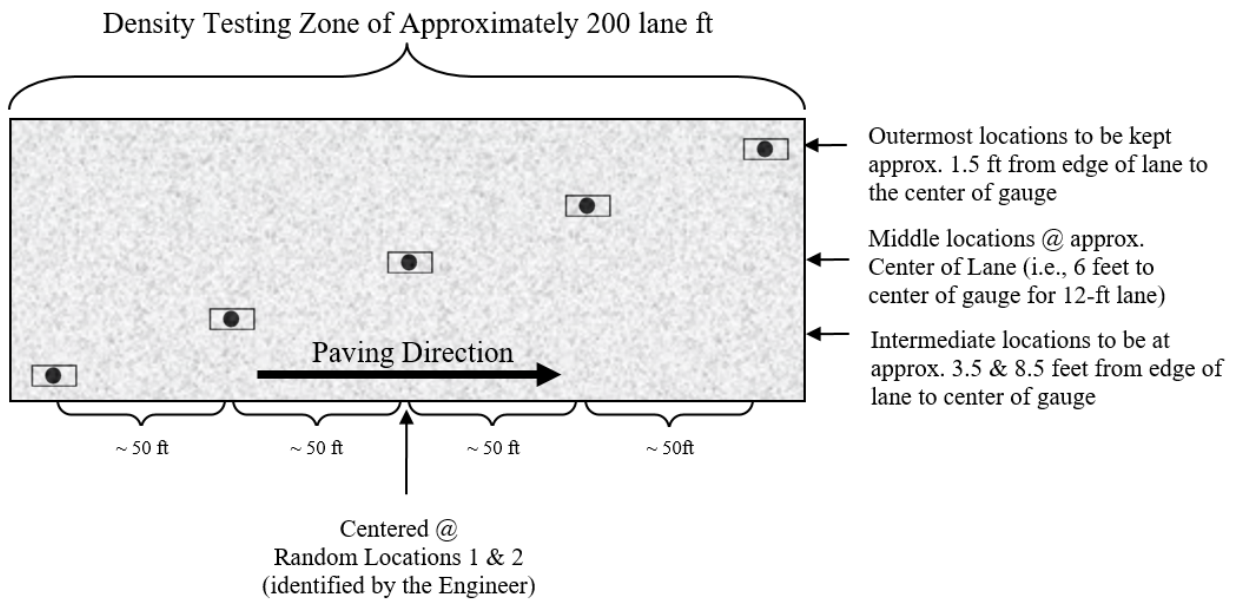
### Test Methods & Sampling for HMA PWL QMP Projects.

The following procedures are included with the HMA Pavement Percent Within Limits (PWL) Quality Management Program (QMP) special provision:

- WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip
- WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production
- Sampling for WisDOT HMA PWL QMP
- Calculation of PWL Mainline Tonnage Example



## WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip




**Figure 1: Nuclear/Core Correlation Location Layout**

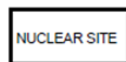
The engineer will identify two zones in which gauge/core correlation is to be performed. These two zones will be randomly selected within each *half* of the test strip length. (Note: Density zones shall not overlap and must have a minimum of 100 feet between the two zones; therefore, random numbers may be shifted (evenly) in order to meet these criteria.) Each zone shall consist of five locations across the mat as identified in Figure 1. The following shall be determined at each of the five locations within both zones:

- two one-minute nuclear density gauge readings for QC team\*
- two one-minute nuclear density gauge readings for QV team\*
- pavement core sample

\*If the two readings exceed 1.0 pcf of one another, a third reading is conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge.

The zones are supposed to be undisclosed to the contractor/roller operators. The engineer will not lay out density/core test sites until rolling is completed and the cold/finish roller is beyond the entirety of the zone. Sites are staggered across the 12-foot travel lane, and do not include shoulders. The outermost locations should be 1.5-feet from the center of the gauge to the edge of lane. [NOTE: This staggered layout is only applicable to the test strip. All mainline density locations after test strip should have a longitudinal- as well as transverse-random number to determine location as detailed in the *WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production* section of this document.]

Individual locations are represented by the  symbol as seen in Figure 1 above. The symbol is two-part, comprised of the nuclear test locations and the location for coring the pavement, as distinguished here:



NUCLEAR SITE



CORE

The nuclear site is the same for QC and QV readings for the test strip, i.e., the QC and QV teams are to take nuclear density gauge readings in the same footprint. Each of the QC and QV teams are to take a minimum of two one-minute readings per nuclear site, with the gauge rotated 180 degrees between readings, as seen here:



**Figure 2: Nuclear gauge orientation for (a) 1<sup>st</sup> one-minute reading and (b) 2<sup>nd</sup> one-minute reading**

Photos should be taken of each of the 10 core/gauge locations of the test strip. This should include gauge readings (pcf) and a labelled core within the gauge footprint. If a third reading is needed, all three readings should be recorded and documented. Only raw readings in pcf should be written on the pavement during the test strip, with a corresponding gauge ID/SN (generalized as QC-1 through QV-2 in the following Figure) in the following format:



**Figure 3: Layout of raw gauge readings as recorded on pavement**

Each core will then be taken from the center of the gauge footprint and will be used to correlate each gauge with laboratory-measured bulk specific gravities of the pavement cores. One core in good condition must be obtained from each of the 10 locations. If a core is damaged at the time of extracting from the pavement, a replacement core should be taken immediately adjacent to the damaged core, i.e., from the same footprint. If a core is damaged during transport, it should be recorded as damaged and excluded from the correlation. Coring after traffic is on the pavement should be avoided. The contractor is responsible for coring of the pavement. Coring and filling of core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Core density testing will be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following initial testing and is responsible for any verification testing.

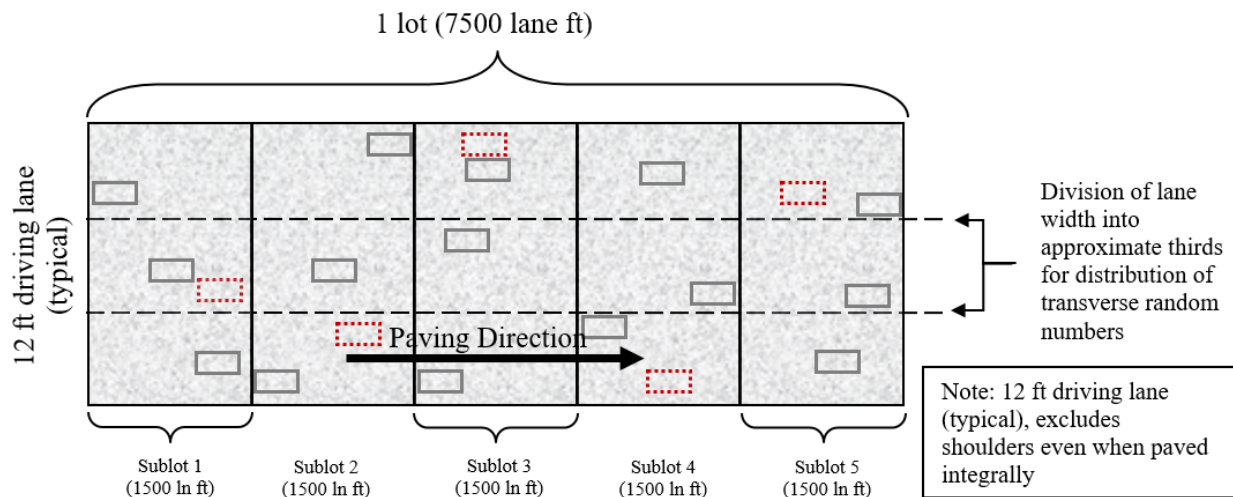
Each core 150 mm (6 inches) in diameter will be taken at locations as identified in Figure 1. Each random core will be full thickness of the layer being placed. The contractor is responsible for thoroughly drying cores obtained from the mat according to ASTM D 7227 prior to using specimens for in-place density determination according to AASHTO T 166.

Cores must be taken before the pavement is open to traffic. Cores are cut under department/project staff observation. Relabel each core immediately after extruding or ensure that labels applied to pavement prior to cutting remain legible. The layer interface should also be marked immediately following extrusion. Cores should be cut at this interface, using a wet saw, to allow for density measurement of only the most recently placed layer. Cores should be protected from excessive temperatures such as direct sunlight. Also, there should be department custody (both in transport and storage) for the cores until they are tested, whether that be immediately after the test strip or subsequent day if agreed upon between department and contractor. Use of concrete cylinder molds works well to transport cores. Cores should be placed upside down (flat surface to bottom of cylinder mold) in the molds, one core per mold, cylinder molds stored upright, and ideally transported in a cooler. Avoid any stacking of pavement cores.

Fill all core holes with non-shrink rapid-hardening grout, mortar or concrete, or with HMA. When using grout, mortar or concrete, remove all water from the core holes prior to filling. Mix the mortar or concrete in a separate container prior to placement in the hole. If HMA is used, fill all core holes with hot-mix matching the same day's production mix type at same day compaction temperature +/- 20 F. The core holes shall be dry and coated with tack before filling, filled with a top layer no thicker than 2.25 inches, lower layers not to exceed 4 inches, and compacted with a Marshall hammer or similar tamping device using approximately 50 blows per layer. The finished surface shall be flush with the pavement surface. Any deviation in the surface of the filled core holes greater than 1/4 inch at the time of final inspection will require removal of the fill material to the depth of the layer thickness and replacement.

### **WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production**

For nuclear density testing of the pavement beyond the test strip, QC tests will be completed at three locations per subplot, with a subplot defined as 1500 lane feet. The three locations will represent the outside, middle, and inside of the paving lane (i.e., the lane width will be divided into thirds as shown by the dashed longitudinal lines in Figure 3 and random numbers will be used to identify the specific transverse location within each third according to CMM 8-15). Longitudinal locations within each subplot shall be determined with 3 independent random numbers. The PWL Density measurements do not include the shoulder and other appurtenances. Such areas are tested by the department and are not eligible for density incentive or disincentive. Each location will be measured with two one-minute gauge readings oriented 180 degrees from one another, in the same footprint as detailed in Figure 2 above. Each location requires a minimum of two readings per gauge. The density gauge orientation for the first test will be with the source rod towards the direction of paving. QV nuclear testing will consist of one randomly selected location per subplot. The QV is also comprised of two one-minute readings oriented 180 degrees from one another. For both QC and QV test locations, if the two readings exceed 1.0 pcf of one another, a third reading is conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge. The subplot density testing layout is depicted in Figure 4, with QC test locations shown as solid lines and QV as dashed.



**Figure 4: Locations of main lane HMA density testing (QC=solid lines, QV=dashed)**

QC and QV nuclear density gauge readings will be statistically analyzed according to Section 460.3.3.3 of the HMA PWL QMP SPV. (Note: For density data, if F- and t-tests compare, QC data will be used for the subsequent calculations of PWL value and pay determination. However, if an F- or t-test does not compare, the QV data will be used in subsequent calculations.)

## **Sampling for WisDOT HMA PWL QMP Production**

Sampling of HMA mix for QC, QV and Retained samples shall conform to CMM 8-36 except as modified here.

*Delete CMM 8-36.4 Sampling Hot Mix Asphalt and replace with the following to update subplot tonnages:*

### **Sampling Hot Mix Asphalt**

At the beginning of the contract, the contractor determines the anticipated tonnage to be produced. The frequency of sampling is 1 per 750 tons (subplot) for QC and Retained Samples and 1 per 3750 tons (lot or 5 sublots) for QV as defined by the HMA PWL QMP SPV. A test sample is obtained randomly from each subplot. Each random sample shall be collected at the plant according to CMM 8-36.4.1 and 8-36.4.2. The contractor must submit the random numbers for all mix sampling to the department before production begins.

#### *Example 1*

Expected production for a contract is 12,400 tons. The number of required samples is determined based on this expected production (per HMA PWL QMP SPV) and is determined by the random sample calculation.

Sample 1 – from 50 to 750 tons  
Sample 2 – from 751 to 1500 tons  
Sample 3 – from 1501 to 2250 tons  
Sample 4 – from 2251 to 3000 tons  
Sample X – .....  
Sample 16 – from 11,251 to 12,000 tons  
Sample 17 – from 12,001 to 12,400 tons

The approximate location of each sample within the prescribed sublots is determined by selecting random numbers using ASTM Method D-3665 or by using a calculator or computerized spreadsheet that has a random number generator. The random numbers selected are used in determining when a sample is to be taken and will be multiplied by the subplot tonnage. This number will then be added to the final tonnage of the previous subplot to yield the approximate cumulative tonnage of when each sample is to be taken.

To allow for plant start-up variability, the procedure calls for the first random sample to be taken at 50 tons or greater per production day (not intended to be taken in the first two truckloads). Random samples calculated for 0-50 ton should be taken in the next truck (51-75 ton).

This procedure is to be used for any number of samples per contract.

If the production is less than the final randomly generated sample tonnage, then the random sample is to be collected from the remaining portion of that subplot of production. If the randomly generated sample is calculated to be within the first 0-50 tons of the subsequent day of production, it should be taken in the next truck. Add a random sample for any fraction of 750 tons at the end of the contract. Lot size will consist of 3750 tons with sublots of 750 tons. Partial lots with less than three subplot tests will be included into the previous lot, by the engineer.

It's intended that the plant operator not be advised ahead of time when samples are to be taken. If the plant operator is involved in recording a Pb (%AC) to match up with the mix sample tonnage, then notification need not be earlier than 60 minutes before the mix sample being taken.

If belt samples are used during troubleshooting, the blended aggregate will be obtained when the mixture production tonnage reaches approximately the sample tonnage. For plants with storage silos, this could be up to 60 minutes in advance of the mixture sample that's taken when the required tonnage is shipped from the plant.

QC, QV and retained samples shall be collected for all test strip and production mixture testing using a three-part splitting procedure according to CMM 8-36.5.2.

### **Calculation of PWL Mainline Tonnage Example**

A mill and overlay project is being constructed with a 12-foot travel lane and an integrally paved 3-foot shoulder. The layer thickness is 2 inches for the full width of paving. Calculate the tonnage in each subplot eligible for density incentive or disincentive.

#### **Solution:**

$$\frac{1500 \text{ ft} \times 12 \text{ ft}}{9 \text{ sf/sy}} \times \frac{2 \text{ in} \times 112 \text{ lb/sy/in}}{2000 \text{ lb/ton}} = 224 \text{ tons}$$

stp-460-055 (20181119)

### **39. Concrete Staining B-67-374, Item 517.1010.S.01; Concrete Staining B-67-375, Item 517.1010.S.02.**

#### **A Description**

This special provision describes providing a two-coat concrete stain on the exposed concrete surfaces of structures as the plans show.

#### **B Materials**

##### **B.1 Mortar**

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

Preblended, Packaged Type II Cement:	Tri-Mix by TK Products
	ThoroSeal Pearl Gray by Thoro Products

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

Acrylic Bonding Admixture:	TK-225 by TK Products
	Achro 60 by Thoro Products
	Achro Set by Master Builders

##### **B.2 Concrete Stain**

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

Tri-Sheen Concrete Surfacer, Smooth by TK Products
Tri-Sheen Acrylic by TK Products
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
Safe-Cure & Seal EPX by Chem Masters
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

## **C Construction**

### **C.1 General**

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

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

### **C.2 Preparation of Concrete Surfaces**

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

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### **C.3 Staining Concrete Surfaces**

Apply the concrete stain according to the manufacturer's recommendations.

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

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

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

### **C.4 Test Areas**

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

### **C.5 Surfaces to be Coated.**

Apply concrete stain to the surfaces according to the plan.

## **D Measurement**

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

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1010.S.01	Concrete Staining B-67-374	SF
517.1010.S.02	Concrete Staining B-67-375	SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels.

stp-517-110 (20140630)

40. **Concrete Staining Multi-Color B-67-374, Item 517.1015.S.01;**  
**Concrete Staining Multi-Color B-67-375, Item 517.1015.S.02;**  
**Concrete Staining Multi-Color R-67-152, Item 517.1015.S.03;**  
**Concrete Staining Multi-Color R-67-153, Item 517.1015.S.04;**  
**Concrete Staining Multi-Color R-67-154, Item 517.1015.S.05.**

#### **A Description**

This special provision describes providing a multi-color concrete stain on the exposed concrete surfaces of the structure as the plan details show.

#### **B Materials**

##### **B.1 Mortar**

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

Preblended, Packaged Type II Cement:	Tri-Mix by TK Products
	ThoroSeal Pearl Gray by Thoro Products

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

Acrylic Bonding Admixture:	TK-225 by TK Products
	Achro 60 by Thoro Products
	Achro Set by Master Builders

##### **B.2 Concrete Stain**

Use concrete stain manufactured for use on exterior concrete surfaces. Use the following products, or equal as approved by the department:

Tri-Sheen Concrete Surfacer, Smooth by TK Products
Tri-Sheen Acrylic by TK Products
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
Safe-Cure & Seal EPX by Chem Masters
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

#### **C Construction**

##### **C.1 General**

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

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

##### **C.2 Preparation of Concrete Surfaces**

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

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### C.3 Staining Concrete Surfaces

Apply the concrete stain according to the manufacturer's recommendations.

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

The color of the staining shall produce a multi-color effect that consists of multiple colors replicating varying natural stone coloration. Stain the joints between stones produced by the form liner to create the appearance of grouted joints.

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

### C.4 Test Areas

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

### C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces according to the plan.

### D Measurement

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

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1015.S.01	Concrete Staining Multi-Color B-67-374	SF
517.1015.S.02	Concrete Staining Multi-Color B-67-375	SF
517.1015.S.03	Concrete Staining Multi-Color R-67-152	SF
517.1015.S.04	Concrete Staining Multi-Color R-67-153	SF
517.1015.S.05	Concrete Staining Multi-Color R-67-154	SF

Payment is full compensation for furnishing and applying the coloring system; for preparing the concrete surface; and for constructing and staining the sample panels.

stp-517-115 (20140630)

- 41. Architectural Surface Treatment B-67-374, Item 517.1050.S.01;  
Architectural Surface Treatment B-67-375, Item 517.1050.S.02;  
Architectural Surface Treatment R-67-152, Item 517.1050.S.03;  
Architectural Surface Treatment R-67-153, Item 517.1050.S.04;  
Architectural Surface Treatment R-67-154, Item 517.1050.S.05.**

#### A Description

This special provision describes providing a concrete masonry architectural surface treatment on the exposed concrete surfaces of structures as the plan details show.

#### B Materials

Use form liners that attach easily to the forming system, and do not compress more than 1/4 inch when poured at a rate of 10 vertical feet/hour.



Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set "break-backs" at a minimum of 3/4 inches from the finished concrete surface.

## **C Construction**

### **C.1 Equipment**

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

### **C.2 Form Liner Preparation**

Clean the form liner before each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

### **C.3 Form Liner Attachment**

Place adjacent liners less than 1/4 inch from each other, attach liner securely to forms according to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

### **C.4 Surface Finishing**

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

## **D Measurement**

The department will measure Architectural Surface Treatment (Structure) in area by the square foot of architectural surface acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1050.S.01	Architectural Surface Treatment B-67-374	SF
517.1050.S.02	Architectural Surface Treatment B-67-375	SF
517.1050.S.03	Architectural Surface Treatment R-67-152	SF
517.1050.S.04	Architectural Surface Treatment R-67-153	SF
517.1050.S.05	Architectural Surface Treatment R-67-154	SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

stp-517-150 (20110615)

## **42. Adjusting Manhole Covers.**

This special provision describes adjusting manhole covers conforming to standard spec 611 as modified in this special provision.

Adjust manhole covers located in pavement areas in two separate operations. Initially, remove designated manhole covers along with sufficient pavement to permit installation of temporary cover plate over the opening. Fill the excavated area with asphaltic pavement mixture, which shall remain in place until contract milling and paving operations permit setting the manhole frames to grade. During the second phase, remove the asphaltic pavement mixture surrounding the manhole plus the temporary cover plate, and set the manhole cover to final grade. The department will measure and pay for the items of asphaltic pavement mixture, temporary cover plate, milling, and paving separately.

*Revise standard spec 611.3.7 by deleting the last paragraph.*

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

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

stp-611-005 (20030820)

#### **43. Cover Plates Temporary, Item 611.8120.S.**

##### **A Description**

This special provision describes providing and removing steel plates to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

##### **B Materials**

Provide a 0.25-inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

##### **C (Vacant)**

##### **D Measurement**

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

Payment is full compensation for furnishing, installing, and removing the cover plates.

The steel plates shall become the property of the contractor when no longer needed in the contract work.

stp-611-006 (20151210)

#### **44. Fence Safety, Item 616.0700.S.**

##### **A Description**

This special provision describes providing plastic fence at locations the plans show.

##### **B Materials**

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements.

<b>Color:</b>	International orange (UV stabilized)
<b>Roll Height:</b>	4 feet
<b>Mesh Opening:</b>	1 inch min to 3 inch max
<b>Resin/Construction:</b>	High density polyethylene mesh
<b>Tensile Yield:</b>	Avg. 2000 lb per 4 ft. width (ASTM D638)
<b>Ultimate Tensile Strength:</b>	Avg. 3000 lb per 4 ft. width (ASTM D638)
<b>Elongation at Break (%):</b>	Greater than 100% (ASTM D638)
<b>Chemical Resistance:</b>	Inert to most chemicals and acids

### **C Construction**

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap two rolls at a post and secure with wire ties.

### **D Measurement**

The department will measure Fence Safety by the linear foot along the base of the fence, center-to-center of posts, 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
616.0700.S	Fence Safety	LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion.

stp-616-030 (20160607)

## **45. Pond Liner Clay, Item 640.1303.S.**

### **A Description**

This special provision describes providing low permeable clay in areas the plans show.

### **B Materials**

For each source, before excavating and hauling the low permeable clay to the project, submit the results of the laboratory tests described in Table 1. The laboratory testing shall document that the clay from the source meets or exceeds the requirements.

The sample for the hydraulic conductivity test shall be remolded clay at a minimum dry density of 95% of the maximum dry density as determined by the Standard Proctor test AASHTO T-99 and at a moisture content required to achieve the required hydraulic conductivity, but with a minimum moisture content at or above the optimum moisture content as determined in the Standard Proctor test AASHTO T-99. Conduct the laboratory source testing at the frequency listed in Table 1. Submit the test results to the engineer for review, two weeks before construction.

### **C Construction**

#### **C.1 Low Permeable Clay Placement**

##### **C.1.1 Subgrade**

Compact the subgrade to a minimum density as defined in standard spec 207.3.6.2, Standard Compaction, or as otherwise specified in the contract requirements.

##### **C.1.2 Erosion Protection**

Do not place the low permeable clay until after all adjacent site grading has been completed and only after silt fence has been installed completely around the area of low permeable clay placement.

##### **C.1.3 Low Permeable Clay Placement**

After the fine grading is complete, place and compact low permeable clay in completed 6-inch lifts. Place each lift of low permeable clay in one continuous lift. See plans for low permeable clay construction limits. Measure the thickness of the low permeable clay the plans show perpendicular to the surface.

Notify the engineer at least three days before starting construction of low permeable clay.

**Table 1**

Reference	Number	Test Title	Requirements	Testing Frequency	
				Screening	QA/QC <sup>12</sup>
AASHTO <sup>1</sup>	T99-01	Moisture –Density Relationships of Soils Using a 2.5-kg (5.5 lb) Rammer a 305 mm (12-in.) Drop (Standard Proctor)	NA <sup>11</sup>	1/source	NA
AASHTO	T-88-00	Particle Size Analysis of Soils	$P_{200}^3 \geq 50\%$	2/source	1/lift
AASHTO	T-89-02	Determining the Liquid Limit of Soils	$LL^4 \geq 22\%$	2/source	1/lift
AASHTO	T-90-00	Determining the Plastic Limit and Plasticity Index of Soils	$PI^5 \geq 12\%$	2/source	1/lift
AASHTO	T310-03	In-Place Density and Moisture Content of Soils and Soil-Aggregates by nuclear Methods (Shallow Depth)	$DD^6 \geq 95\%$ of the MDD <sup>7</sup>	NA	100'x100' Grid/lift
ASTM <sup>2</sup>	D5084-03	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter	$K^8 \leq 1 \times 10^{-7}$ cm/sec	1/source <sup>9</sup>	1/site <sup>10</sup>

Notes:

1. AASHTO = American Association of State Highway and Transportation Officials
2. ASTM = American Society of Testing and Materials
3. P200 = Percent by weight passing the #200 sieve (%)
4. LL = Liquid Limit (%)
5. PI = Plasticity Index (%)
6. DD = Dry Density (pcf)
7. MDD = Maximum Dry Density (pcf) as determined by the Standard Proctor Test
8. K = Hydraulic Conductivity (cm/sec)
9. The sample for the test shall be remolded at a minimum dry density of 95% of the maximum dry density as determined by the Standard Proctor test and at a moisture content required to achieve the required hydraulic conductivity, but with a minimum moisture content at or above the optimum moisture content as determined in the Standard Proctor test.
10. An undisturbed sample from a thinned walled sampler (Shelby tube)
11. NA = Not applicable
12. QA/QC = Quality Assurance / Quality Control

Compact the low permeable clay to a minimum of 95% Standard Proctor AASHTO T-99 Maximum Dry Density with a footed compaction equipment having feet at least as long as the loose lift height. As needed, clay shall be disked or otherwise mechanically processed before compaction to break up clods and allow moisture content adjustment. Clod size shall be no greater than 4 inches. All compaction equipment utilized shall have a minimum static weight of 30,000 pounds.

Provide all equipment necessary to adjust low permeable clay to the proper moisture content for compaction.

Make sufficient number of passes of the compaction equipment over each lift of clay to ensure complete remolding of the clay.

Do not proceed with placement of additional lifts until all required low permeable clay testing and documentation has been completed for the previous lift.

During placement of the low permeable clay the minimum moisture content shall be as defined by the testing performed in the source evaluation and with the following limits:

- No drier than the optimum moisture content as determined by the Standard Proctor test.

If the in-place low permeable clay fails to meet the requirements of Table 1, then remove and replace or rework any portion of the low permeable clay not meeting the project requirements until project specifications are met. There shall be no compensation for removing, replacing and reworking low permeable clay not meeting the requirements in Table 1.

#### **C.1.4 QA/QC Testing of the Low Permeable Clay**

The department will perform the QA/QC testing at the frequency shown in Table 1. The department will record the thickness of low permeable clay on a 100 foot x 100 foot grid pattern.

Provide the following:

- Access for on-site testing, inspection, and documentation.
- Machinery required to grade/blade density test locations.
- Machinery required to collect undisturbed clay samples (i.e., with Shelby tubes).
- Replace and recompact clay material removed for testing purposes.

#### **D Measurement**

The department will measure Pond Liner Clay in volume by the cubic yards, 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
640.1303.S	Pond Liner Clay	CY

Payment is full compensation for dewatering areas of site where the low permeable clay is to be placed; for furnishing, placing and compacting the low permeable clay; and for performing all tests.

stp-640-016 (20130615)

### **46. Electrical Conduit.**

*Append standard spec 652.3.1.2 with the following:*

Any disturbed sidewalk areas resulting from electrical conduit installation shall be temporarily replaced on the same day of disturbance with a hot asphalt mix conforming to standard spec 465 Asphaltic Surfaces Temporary. The top 8" of excavation shall consist of 6" of traffic bond or crushed stone and 2" of asphalt temporary patch. Temporary sidewalk restoration shall be incidental to conduit installation.

Restoration of disturbed non-pavement areas shall be completed within five days after the engineer's acceptance of backfilling.

All disturbed non-pavement areas shall have four inches of topsoil placed, and the area shall be fertilized, seeded and erosion-matted or fertilized and sodded as required, conforming to the requirements of standard spec 625, 628, 629, and 630.

The contractor shall directional bore, not trench, in areas of trees, shrubbery, and under driveways, sidewalks and streets unless otherwise noted. The root zone limits shall be determined by the Waukesha County Engineer and/or Forester. Trenching or excavation for pull boxes, signal bases and controller cabinets within the root zone of a tree shall not be permitted. The minimum depth of bored conduit within the root zone shall be 30 inches.

The contractor shall strip the minimum length of jacket necessary to make terminations in a neat and technically proficient manner.

**47. Electrical Service Meter Breaker Pedestal (Intersection), Item 656.0200.**

*Append standard spec 656.3.4 with the following:*

The contractor will be responsible for electrical service installation or relocation requests. The county will be responsible for any charges from We Energies. Electrical utility company service installation or relocation and energy cost will be billed to and paid for by the maintaining authority.

Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials.

*Append standard spec 656.5(3) with the following:*

Payment is full compensation for grading the service trench and replacing topsoil; and for fertilizing, seeding, and erosion-matted to restore the disturbed area of the service trench if necessary.

**48. Filter Aggregate Layer, Item SPV.0035.01;  
Engineered Soil, Item SPV.0035.02;  
Storage Layer, Item SPV.0035.03.**

**A Description**

This special provision describes furnishing and installing items for the construction of the bioretention devices according to the standard specifications, as shown on the plans, and as hereinafter provided.

**B Materials**

**B.1 General**

The materials shall conform to the standard specifications and as specified below.

**B.2 Storage Layer**

The storage layer shall meet the requirements of standard spec 501.2.5 Course Aggregate No. 2. Material shall be washed.

**B.3 Filter Aggregate Layer**

The filter aggregate material shall be either pea gravel or crushed stone well graded from 0.25 to 1.5 inch size.

**B.3.1 Submittals**

Submit test results of grain size analysis of the proposed filter aggregate layer.

**B.4 Engineered Soil Layer**

The soil shall be engineered to the following specifications and consist of a mixture of 75% sand and 25% compost.

The compost component shall meet the requirements of Wisconsin Department of Natural Resources Specification S100, Compost.

The engineered soil mix shall be free of rocks, stumps, roots, brush, or other material over 1-inch in size. No other materials shall be mixed with the engineered soil that may be harmful to plant growth or prove a hindrance to planting maintenance.

The engineered soil layer shall be tested by the contractor who shall arrange and pay for analysis of topsoil by a qualified soil testing laboratory, acceptable to the department and independent of the contractor. Analysis shall indicate percentages of organic matter; gradation of sand, silt and clay content; deleterious material; pH; and mineral and plant nutrient quantities of nitrogen, phosphorus and potash nutrients and soil amendments to be added to produce satisfactory topsoil. A minimum of one test is required per bioretention area and all testing shall be performed at the same testing facility.

**B.5 Submittals**

Submit laboratory analysis results of the engineered soil.

## **C Construction**

### **C.1 General**

Construction site runoff from disturbed areas shall not be allowed to enter bioretention device. Runoff from pervious areas shall be diverted until final stabilization is completed. Construction shall be suspended during periods of rainfall and during periods of ponded water, soil smearing, soil clumping or other forms of compaction problems.

Compaction of soils beneath the floor of the bioretention device, side slopes, and soil used as backfill in the bioretention device shall be minimized. During construction, heavy equipment shall be prevented access to bioretention area. Acceptable equipment includes excavation track hoes, light equipment with turf type tires, marsh equipment, or wide track loaders.

If compaction occurs beneath the floor of the bioretention device, the soil shall be refractured to a depth of 12-inches. Raking and scarification shall alleviate smeared areas.

Conduct work during favorable weather conditions between April 15 and September 15. Do not proceed when air temperatures may exceed 90 degrees F or when ground surface is frozen except seeding may be performed in November prior to snow cover if seed is applied over mulch that was placed during period from September to November 1.

### **C.2 Storage Layer Placement**

Backfill storage layer 12 inches as shown on the bioretention plan and profiles. No compaction of the storage layer material will be required beyond that resulting from placing and spreading operations. Underdrains will be placed in the top 6 inches of the storage layer.

### **C.3 Filter Aggregate Layer Placement**

Filter aggregate layer shall be placed on top of underdrains and storage layer as shown on the plans. No compaction shall be performed beyond that resulting from placing and spreading operations. Geotextile Fabric Type DF, Schedule A shall be placed on top of the Filter Aggregate Layer.

### **C.4 Engineered Soil Layer Placement**

Prior to placement in the Bioretention Device, the engineered soil shall be pre-mixed, and the moisture content shall be low enough to prevent clumping and compaction during placement.

The engineered soil shall be placed in multiple lifts of 12-inches in depth. No compaction shall be performed beyond that resulting from placing and spreading operations. Milt settling may occur and additional engineered soil shall be placed prior to mulching and planting operations to provide a level and uniform planting surface. Vibrating plate-style compactors shall not be used to induce settling.

## **D Measurement**

The department will measure Filter Aggregate Layer, Engineered Soil, Storage Layer by the cubic yard, 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.0035.01	Filter Aggregate Layer	CY
SPV.0035.02	Engineered Soil	CY
SPV.0035.03	Storage layer	CY

Payment is full compensation for furnishing and installing all materials.

## **49. Sediment Filter Bag, Item SPV.0060.01.**

### **A Description**

This special provision describes furnishing and installing sediment filter bags as shown on the plans within the temporary settlement basins proposed with this project.

**B Materials**

Provide filter bags with a minimum of size of 4' x 6' from one of the following manufacturer's or approved equal.

- Interstate Products Incorporated: Ultra-Dewatering Bag
- ACF Environmental: Dirtbag
- Ultratech: Oil and Sediment Dewatering Bag

**C Construction**

Install sediment filter bag on the discharge hose of all dewatering operations. Insert the discharge pump hose into the spout of the filter bag and secure it well. Do not exceed initial recommended pumping rates. As pumping activity continues, the flow from the filter bag will reduce over time depending on how much sediment is getting pumped. Do Not Overfill.

Place sediment filter bags within temporary settling basins as identified in the construction plan details. Replace sediment filter bags and dispose of trapped sediment as directed by the engineer and manufacturers recommendations.

**D Measurement**

The department will measure Sediment Filter Bags by each bag installed, 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	Sediment Filter Bag	Each

Payment is full compensation for furnishing and placing filter bags on the discharge hose for dewatering operations; and for the removal and disposal of the trapped sediment and used bags when filled.

**50. Sump Pump Connection, Item SPV.0060.02.**

**A Description**

Work under this item will connect existing sump pump outlets to a storm sewer or structure when the proposed condition does not allow the outlet to remain flowing to a ditch.

**B Materials**

Material shall be as specified in the Construction Details section of the plans under the Sump Pump Connection Detail item.

**C Construction**

Construction shall be as shown in the Construction Details section of the plans under the Sump Pump Connecting Detail item.

The contractor will be allowed to connect to a storm sewer pipe as shown in the plans or to a drainage structure.

This item will not pay for the relaying and regarding of a sump pump outlet that outlets directly to a proposed ditch. This will be considered as included in the common excavation item used to final grade the project site.

**D Measurement**

The department will measure Sump Pump Connection as each individual sump pump connection, 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.0060.02	Sump Pump Connection	EACH



Payment is full compensation for furnishing materials, making the sewer connection, and laying tracer wire per the construction details in the plans; for laying pipe; for sealing connections; for backfilling; for providing granular backfill material; for disposal of excess materials; and for cleaning out.

**51. Relocate Existing Lighting Unit, Item SPV.0060.03.**

**A Description**

This special provision describes relocation of existing light pole, base and fixture.

**B Materials**

**C Construction**

**C.1** Under Relocate Existing Lighting Unit bid items, remove existing lighting unit, pole, transformer base and concrete pole base. Protect and store light pole and fixture until pole can be relocated to it finished location upon completion of storm sewer improvements.

**C.2** Construct new concrete base. Serve fixture with schedule 40 PVC electrical conduits conforming to the electrical conduit specified in section 652.

**C.3** For relocated pole fixture shown on plans furnish new anchor bolts, nuts, and washers conforming to ASTM F 1554, grade 105. Hot-dip zinc coat the entire length of the anchor rods, and the nuts and washers conforming to AASHTO M 232. Thread at least 12 inches (300 mm) of the anchor rod. Use zinc coated nuts manufactured with sufficient allowance to allow nuts to run freely on the threads.

**C.4** Furnish bar steel reinforcement for concrete base conforming to 505.2.

**C.5** Furnish grade A, A-FA, A-S, A-T, A-IS, or A-IP concrete conforming to 501.2.

Anchor bolts shall be as recommended by manufacturer, Grade 55 full length hot dipped galvanized. All hardware shall be stainless steel grade 8.

**C.6** Intercept existing lighting circuit and extend new wiring to new location and reinstall transformer base, pole and lighting unit.

**D Measurement**

The department will measure Relocate Existing Lighting Unit as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Relocate Existing Lighting Unit	EACH

Payment is full compensation for providing all materials including conduit, wiring, bushings, caps or plugs, or both, anchor rods, nuts, washers, grounding electrodes, exothermic welds, copper equipment grounding conductors, and bar steel reinforcement, if required, and new concrete base; and for excavating, backfilling, and disposing of surplus materials.

**52. Traffic Signal Controller & Cabinet, Item SPV.0060.04.**

**A Description**

This specification describes furnishing and installing a fully equipped and operational NEMA TS2 Type 2 traffic signal control cabinet.

**B General Requirements**

**B.1 General**

Furnish and install equipment and assemble the cabinet conforming to the latest revision of NEMA Standards Publication TS 2-2003, *Traffic Controller Assemblies with NTCIP Requirements*, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard, except where modified in this specification. All work shall conform to the Wisconsin State Electrical Code (WSEC). All work shall conform to standard spec 651, as supplemented or modified in this specification.

Provide cabinets designed for TS2 Type 2 operation. Pre-wire cabinets for a minimum of sixteen phases as specified herein.

Furnish and install at no extra cost any equipment and materials not specifically described but required in order to perform the intended functions in the cabinet.

Install the cabinet on the foundation and terminate all connections. Test for correct operation.

## **B.2 Definitions**

Contractor or vendor: The firm under contract with the county or other entity for furnishing and installing the traffic signal cabinet

Construction contractor: The firm under contract with the county or another entity to construct a roadway facility. The construction contractor may designate a subcontractor, such as an electrical subcontractor, to represent them with regards to the signal cabinet installation.

County: Waukesha County

Manufacturer: The firm that builds or produces the traffic signal equipment other than the cabinet. For example, the "controller manufacturer"

## **C Cabinet**

### **C.1 Design**

Furnish a door-in-door ground mounted (without anchor bolts) aluminum cabinet of clean-cut design and appearance. Provide a cabinet of minimum size 44 inches wide, minimum 24 inches deep and minimum 52 inches to maximum 60 inches high. The size of the cabinet shall provide ample space for housing the controller, all of the associated devices which are to be furnished with the controller, all other auxiliary devices herein specified, and all equipment to be furnished and installed by others as listed in the Description section of this specification.

The cabinet shall comply with the environmental and operating standards outlined in the NEMA TS2 Standard. The cabinet shall provide reasonable vandalism protection. The cabinet shall have a NEMA 3R rating.

Construct the cabinet 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.

On the top of the cabinet, incorporate a 1-inch slope toward the rear to prevent rain accumulation. Incorporate a rain channel into the design of the main door opening to prevent liquids from entering the enclosure.

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

Equip the lower section of the cabinet door 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. Secure a washable, fiberglass, removable air filter to the air entrance. The filter shall fit snugly against the cabinet door wall. Attach an aluminum, easily removable, gasketed cover over the air filter and louver.

### **C.2 Doors**

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. Permanently bond the gaskets to the cabinet.

Equip the main door 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. Position the lock assembly so the key will not cause any interference with the handle, or a person's hand on the handle, when opening the cabinet door.

Include on the main door 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). Attach the hinge in such a manner that no rivets or bolts are exposed.

Equip the main door with a brass Corbin tumbler lock No. 2, swing away dust cap, and provide two keys No. 2. Equip the police door-in-door with a standard police lock and provide one key.

Electrically bond the door to the rest of the cabinet with a braided copper grounding conductor. The length of the grounding conductor shall allow the door to swing fully open, without using the stop bar, without stretching or breaking the grounding conductor. The grounding conductor shall not interfere with normal door operation.

Provide a door switch for the main cabinet door. When the door is opened the switch shall send a signal to the controller sufficient for the controller to log an alarm.

### **C.3 Shelves and Mountings**

Mount a minimum of three 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 cabinets and shall be of sufficient strength to rigidly hold specified shelves and equipment.

Provide two full-width, 11-inch deep, fully adjustable, aluminum shelves to support the controller and other equipment. Mount the lower shelf at a height above the bottom of the cabinet such that the shelf and attached drawer does not interfere with the ability to tilt the terminal facility forward on its hinges for maintenance purposes. Mount the top shelf at least 13 inches above the surface of the lower shelf.

Locate the controller and Malfunction Management Unit (MMU) on the top shelf. Locate the loop detector racks and other auxiliary equipment on the lower shelf. The power supply may be mounted on either shelf.

Provide an under-shelf drawer under the lower shelf. The drawer shall be approximately 20 inches wide and the full depth of the shelf. The drawer shall operate easily and smoothly and shall have a stop to prevent inadvertently pulling the drawer out of its support. Design the stop to allow purposeful complete removal of the drawer without the use of tools.

### **C.4 Auxiliary Cabinet Equipment**

Ventilate the cabinet by means of a 120 VAC, 60HZ, tube axial compact type fan located in the top of the cabinet plenum. The fan's free delivery airflow shall be equal to or greater than 100 cubic feet per minute. The magnetic field of the 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 seven 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 90 to 120 degrees F. The fan shall run until the cabinet temperature decreases below the turn-on temperature setting by approximately 30 degrees F. The fan shall be fused.

Mount an incandescent lamp and socket in the cabinet to sufficiently illuminate the field terminals. Wire the lamp to a 15-amp ON/OFF toggle switch mounted on the rear cover of the police panel as specified in the Cabinet Switches section of this specification.

Provide a 250 watt element heater. Install the heater on the face of the aluminum, louvered air filter cover such that feed air is supplied through the cover. Provide a protective, ventilated cover over the heater. Provide a cord and twist-off plug to an electrical receptacle on the cabinet door. 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. Provide a thermal limit switch to prevent the heater's protective cover from exceeding 170 degrees F.

### **C.5 Terminals and Facilities**

#### **C.5.1 Terminal Facility**

The terminal facility 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.

Mount the bottom of the terminal facility a minimum of 9 inches from the bottom of the cabinet. Hinge the terminal facility 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 the lower shelf, the shelf drawer, or any shelf-mounted equipment to hinge down the terminal facility. Provide sufficient slack in the load bay wiring to allow for dropping the load bay.

Fully wire the terminal facility with 16 load switch sockets: 8 phases of vehicular, 4 phases of pedestrian, and 4 phases of overlap operation; 8 flash transfer relay sockets; 1 flasher socket; and 2 terminal facility Bus Interface Unit (BIU) rack slots. The use of printed circuit boards is not acceptable on the terminal facility, except printed circuit boards are acceptable for the BIU interface with the load bay. Position the 16 load switch sockets in two horizontal rows of 8 sockets each. Support the load switches and flasher by a bracket or shelf extending at least three inches from the terminal facility.

Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silk-screening on the front and rear of the terminal facility to match drawing designations.

Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

Provide two each 16-channel, 8-position, TS2 detector racks, each with an integrally mounted BIU mounting. Racks shall be addressable. Power each detector rack by the cabinet power supply. Fasten the loop detector racks towards the left side of the lower shelf.

For BIU rack connectors, provide pre-wired address pins or jumper plugs corresponding to the requirements of the NEMA TS2 Standard. The address pins or jumper plugs shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

For the terminal facility, contain all field wires within one or two rows of horizontally-mounted Marathon heavy duty terminal blocks. Terminate all field output circuits on an unfused terminal block with a minimum rating of 10 amps. Use mechanical connector lugs rated for copper wire. Angle the lower section of the terminal block out from the back of the cabinet at approximately a 45 degree angle.

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.

All field flash sequence programming at the field terminals shall be able to be accomplished with the use of only a screwdriver.

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).

Wire one RC network in parallel with each flash transfer relay coil.

Permanently label all logic-level, NEMA-controller and MMU input and output terminations on the terminal facility. Identify the function of each terminal position on the cabinet drawings.

Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum. Functions to be terminated shall be as specified in the listing of Input/ Output Terminals in Section 5 of the NEMA TS2 Standard.

Conform all terminal facility and cabinet wiring to the Wisconsin State Electrical Code (WSEC). The green/ walk, yellow, and red/ don't walk load switch outputs shall be minimum 16 gauge wire. The MMU (other than AC power), controller I/O, and logic ground shall be minimum 22 gauge wire. All wire colors shall be consistent in all cabinets furnished in one order.

## **C.6 Auxiliary Panels**

### **C.6.1 Vehicle Detection Interface Panel**

Provide a 32-position interface panel or two 16-position panels. Each interface panel shall allow for the connection of 32 or 16 independent field loops, respectively. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque. Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop lead-in cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet.

Provide a cable consisting of 20 AWG twisted pair wires to enable connection to and from the interface panel to a detector rack. The twisted pair wires shall be color-coded wires. Provide a cable of sufficient length to allow the detector rack to be placed on either shelf.

Identify all termination points by a unique number silk screened on the panel.

### **C.6.2 Intersection Lighting**

Provide an intersection lighting control panel as described. The intersection lighting control panel shall consist of an aluminum panel 0.125 inches thick and approximately 5 inches by 10 inches. Determine the actual panel size by the cabinet's mounting rail placement. Attach to the panel a 2 pole-30 amp contactor-120vac coil (Square D #8910DPA32V02 or equal), and a heavy duty six position terminal block (Marathon DJ1606 or equal). Use wire sizes 10AWG for power and load wiring, and 16AWG for control wires. Wire the terminal strip as follows:

1. Control coil
2. L1 in
3. L2 in
4. Neutral in and control coil
5. L1 out
6. L2 out

Protect each output by a MOV (V150LA20A) wired between the output and neutral. Include a photo control (Intermatic #K4021C or equal). Mount the photo control just above the cabinet door and approximately 12 inches from the right side of the cabinet. Wire the photo control to a 3 position terminal strip using 16AWG wire color coded to match the photo control wiring connected to the intersection lighting control panel.

### **C.7 Conductors and Cabling**

All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MIL-W-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL or NRTL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.

Provide controller and MMU cables of sufficient length to allow the units to be placed on either cabinet shelf in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. Exposed tie-wraps and interwoven cables are unacceptable.

Provide the cabinet configuration with enough SDLC RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.

Pre-wire the terminal facility for a Type 16 MMU.

All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

Optoisolate all pedestrian pushbutton inputs from the field to the controller through the BIU and operate at 12 VAC.

Hook or loop all wire, size 16 AWG or smaller, at solder joints around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

### **C.8 Cabinet Switches**

Locate the following switches on a maintenance panel on the inside of the cabinet door:

- a. Controller On/Off
- b. Cabinet Light
- c. Stop Time (Three Position)

d. Manual Detector Switches (Three Position)

<u>Position</u>	<u>Switch Label</u>	<u>Function</u>
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove the stop time input to the controller
Lower	Normal	Connects the MMU to the controller stop time input

Locate the following switches behind the police access door:

- a. Signal/Off
- b. Flash/Normal
- c. Hand/ auto
- d. Coiled hand control and cable

The above switches shall function as follows:

Off: Signals Dark

Signal: Signals On and operating as follows:

<u>Auto</u>	<u>Hand</u>
Flash: Signals Flash	Signals Flash
Normal: Signals Normal	Signals Advance by use of hand control

Provide manual detector switches. Provide a minimum of 16 vehicle detector switches, and four pedestrian detector switches. The switches shall be spring loaded and automatically return to the center position. Wire the vehicle detector switches to detector BIU slot 1. Wire the pedestrian switches to the T&F BIU slot 1. The switches shall operate as follows:

<u>Position</u>	<u>Function</u>
Up	Detector Disabled
Center	Detector Enabled
Down	Detector Called

## C.9 Power Panel

### C.9.1 Design

The power panel shall consist of a separate module, securely fastened to the interior right side wall of the cabinet. Wire the power panel to provide the necessary power to the cabinet, controller, MMU, cabinet power supply, and all auxiliary equipment. Manufacture the power panel from 0.090-inch, 5052-H32 aluminum. Panel layout shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

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.

### C.9.2 Bus Bar

Provide a minimum 20-position neutral bus bar capable of connecting three #12 AWG wires per position.

### C.9.3 Circuit Breakers

House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz, circuit breakers, with the ON position being up:

- One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted. Breakers shall be thermal magnetic type, UL or NRTL listed, with a minimum of 22,000 amp interrupting capacity.



- One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater.
- One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.
- One 20-amp circuit breaker for future use.

Power the cabinet light through the GFI fuse, not a circuit breaker.

#### **C.9.4 Radio Interference Suppressor**

Equip each control cabinet with a single radio interference suppressor (RIS) of sufficient ampere rating to handle the load requirements. Install the RIS at the input power point. The RIS shall minimize interference in both the broadcast and the aircraft frequencies and shall provide a maximum attenuation of 50 DB over a frequency range from 200 KHZ to 75 MHZ, when used in connection with normal installations. The RIS shall be hermetically sealed in a substantial metal case filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two #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 be rated at minimum 50 amperes. Design the RIS for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and to meet the standards of UL or a NRTL and Radio Manufacturer's Association.

#### **C.9.5 Bus Relay**

Provide a normally-open, 60 amp, solid state relay.

#### **C.9.6 Surge Protector**

Install a plug-in type EDCO SHA-1250, or Atlantic/Pacific approved equal, surge protector across the load terminal of the 10-amp circuit breaker. Install a General Electric Varistor, catalog #V130PA20A, at the load terminals of the circuit breaker from the hot line to the grounded current carrying neutral conductor.

#### **C.9.7 Power receptacles**

Mount a 120 VAC 20 amp, NEMA 5-20R GFCI duplex convenience outlet at each of these two locations:

- On the interior right side wall above the power panel. The outlet shall be fully operational and fuse protected.
- Near the power panel where it will not interfere with power panel maintenance. This outlet is to be wired by field installation personnel.

#### **C.10 Suppressors and RC Network**

Provide a suppressor for each 120 VAC circuit that serves an inductive device, such as a fan motor or a mechanical relay, 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. Wire one RC network in parallel with each inductive device.

#### **C.11 Auxiliary Devices**

##### **C.11.1 Load Switches**

Provide 16 solid state load switches conforming to the requirements of section 6.2 of the NEMA TS2 Standard.

##### **C.11.2 Flashers**

Provide one solid state flasher conforming to the requirements of section 6.3 of the NEMA TS2 Standard.

##### **C.11.3 Flash Transfer Relays**

Provide four flash transfer relays conforming to the requirements of section 6.4 of the NEMA TS2 Standard.

##### **C.11.4 Inductive Loop Detector Units**

Provide the quantity of inductive loop detector units required by the plans and conforming to the requirements of section 6.5 of the NEMA TS2 Standard for 2-channel, rack mount detector units, type C. Install all required units in one detector rack.

### **C.11.5 Cabinet Power Supply**

Provide one cabinet power supply with each cabinet conforming to the requirements of section 5.3.5 of the NEMA TS2 Standard. Provide LED indicators for the 12 VDC, 12 VAC, and 24 VDC outputs. Provide jack plugs on the front panel for access to the +24 VDC for test purposes.

### **C.12 Bus Interface Units (BIU)**

Provide three BIUs conforming to the requirements of section 8 of the NEMA TS2 Standard. Provide two BIUs with the main panel and one BIU with one of the detector racks.

### **C.13 Malfunction Management Unit (MMU)**

Provide one shelf-mountable, 16 channel, solid-state MMU with Ethernet capability. The MMU shall meet the requirements of Section 4 of the NEMA TS2 Standard.

The MMU shall be capable of the following:

- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.
- Determining if the field signal input states detected as active or inactive by the MMU correspond with the data provided by the Controller Unit.
- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.
- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).
- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.
- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special programs cards.
- A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction.

The MMU shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

### **C.14 Traffic Signal Controller**

The traffic signal controller provided shall be a Siemens m60 series model, compatible with the NEMA TS2 Type 2 specifications.

#### **C.14.1 Firmware**

Provide installed in the controller current, fully operational, controller firmware and software sufficient for the controller to perform all functions shown on the plans, sequence of operation plan sheet, specifications, and signal timing plan for the local intersection. Provide all software licenses.

The firmware and software shall be compatible with and able to fully communicate with:

- All phase sequences used by the County, including flashing yellow for both left and right turns.
- Communications, closed loop, and on-street control software designed for use with the provided controller and provided under separate bid items.
- Both the controller and the MMU.
- County PC laptop and desktop computers with Windows XP and Windows 7 operating systems.
- Backwards compatibility with older traffic signal controllers and software produced by the controller manufacturer and installed in County traffic signals since 2000.
- The supplier's multi-level central operation software programs for potential future Application.



## **C.14.2 Features/ Functions**

### **C.14.2.1 General**

Provide shelf-mounted controller units.

Provide intersection controller units with up to 16-phase operation plus 16 programmable overlaps regardless of whether or not preemption, coordination, or other special programming is used.

Provide a four-ring, programmable for both single and dual entry concurrent timing, nine-phase frame or equivalent. Provide volume density timing for eight phases and pedestrian timing for all phases. Provide MUTCD flash capability. All controls shall be according to the NEMA TS2 Standard.

All controller timing parameters shall be fully programmable from the front panel keyboard inputs, and memory storage features shall be non-volatile under power-off conditions for at least 30 days. A security code must be entered before any timing parameters can be changed. The locking, non-locking detection mode and per phase recall shall also be accessible on the front panel.

Provide a data key port on the controller to load and store intersection programming.

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

### **C.14.2.2 Front Panel Display**

Provide a display panel on the front panel consisting of a backlit alphanumeric LCD display. The face of the display shall be scratch, chemical, and solvent resistant. The operator shall access the controller through a menu system. By selecting various menu options, real time operational status or stored parameter tables shall be presented to the operator.

Show on the LCD display, in addition to information required elsewhere:

- (a) the status of each signal phase on
- (b) the interval status
- (c) phase termination information
- (d) the presence of vehicular and pedestrian calls for each phase

### **C.14.2.3 Timing**

The passage timer shall time concurrently with the minimum green timer, such that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

In the dual-ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. 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. Service calls on a single entry basis. Both rings shall cross the barrier simultaneously according 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 timeout.
- (c) Phases timing concurrently shall terminate simultaneously if one has a gap-out and the other has a maximum time-out.
- (d) 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.

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
- standard minimum walk - 4.0 seconds
- preemption minimum walk = 0.0 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.

#### **C.14.2.4 Manual (Police) Control**

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.

#### **C.14.2.5 Coordination**

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-Modes (per controller)
- External Start (per controller)

#### **C.14.2.6 Diagnostic Program**

Provide a diagnostic program prepared by the manufacturer of the controller unit which will demonstrate the proper operation of all of the inputs, outputs, controls and indicators in the controller, and have visual confirmation on the front panel. The diagnostic program shall be resident in each controller. The controller shall continuously run a diagnostic routine in the background to assure unit integrity.

#### **C.14.2.7 Message Logging**

Provide user programmable, data logging of local events or alarm events including, but not limited to: Conflict Flash, Remote Flash, Local Flash, Controller Voltage Monitor, Detector Failure, On Line and Data Change. The time and date shall be recorded as a part of the message logged. The logging function shall be resident in the controller unit. The logging function shall be viewed from the front panel LCD display. If the logging function cannot be viewed from the front panel LCD display, it shall be performed by supplemental auxiliary equipment supplied with this specification.

#### **C.14.2.8 Closed Loop Operation**

The controller shall be able to be used in a closed loop system using twisted pair copper, single mode fiber, multimode fiber, or wireless radio to connect to compatible equipment.

#### **C.14.2.9 RS-232 Interface and Ethernet Port**

Provide a RS-232C interface and connector for interconnecting to a conflict monitor, printer, another like controller unit, or a local personal computer, as well as a remote personal computer through an external modem. A modem is not required to be provided with this specification. Include Ethernet communications capability as a standard feature and provide an Ethernet port. Ports shall be on the front panel of the controller.

## **C.15 Documentation**

### **C.15.1 Cabinet Intersection Wiring Diagrams**

For each individual cabinet ordered, within 10 calendar days after receipt of the procurement order, furnish to the County's traffic engineer two sets of 22X34-inch detailed printed cabinet intersection wiring diagrams for information only.

At the time of the cabinet delivery, furnish to the County's traffic engineer two sets of printed 22X34-inch cabinet intersection wiring diagrams per cabinet. Printing the 22X34-inch sheet in smaller sizes is not acceptable. Leave a third drawing in the under-shelf drawer in the signal cabinet. After cabinet acceptance is complete, if any cabinet wiring changes were made, revise the cabinet wiring diagrams, leave one drawing in the under-shelf drawer in the signal cabinet, and furnish to the County's traffic engineer two sets of as-built printed cabinet wiring diagrams per cabinet. If no changes were made from time of cabinet delivery, notify the County's traffic engineer in writing.

### **C.15.2 MMU and Controller Programming**

At the time of cabinet delivery, furnish to the County's traffic engineer two printed copies of the MMU programming and two copies of the signal timing in the traffic signal controller. Leave a third copy in the under-shelf drawer in the signal cabinet. After cabinet acceptance is complete, if any MMU or controller timing changes were made, revise the documents, leave one copy in the under-shelf drawer in the signal cabinet, and furnish to the County's traffic engineer two copies per cabinet. If no changes were made from time of cabinet delivery, notify the County's traffic engineer in writing.

### **C.15.3 Manuals**

At the time of the cabinet delivery, furnish to the County's traffic engineer one set of installation, operations, and maintenance manuals per cabinet including each type of equipment in the cabinet. 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) schematic diagrams
- e) pictorial diagrams of parts locations
- f) itemized parts lists with parts numbers
- g) theory of operation
- h) maintenance checklists.

The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC, diodes, switches, relays, etc.) used. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

For each of the traffic signal controller and MMU, in addition to the above manual requirements, furnish one reference manual for the processor and components proposed to perform the controller and MMU functions. Include a complete set of schematics for the controller, MMU, and any auxiliary circuit boards either in the reference manual or in a separate volume. In addition, furnish a written narrative describing the controller and MMU operation and front panel configuration, and a conceptual flow chart illustrating the control logic for comparison with these specifications. The narrative shall include a discussion of any limitation or exceptions to the performance described in these specifications, and a discussion of any control capabilities provided in addition to that required in these specifications.

## **C.16 Cabinet Delivery**

The construction contractor will provide the traffic signal specifications and plans, including the sequence of operation, to the contractor. The vendor shall determine the required cabinet equipment and assembly requirements from the plans and specifications and provide the County's traffic engineer a list of procurement items. The County's traffic engineer will approve or request resubmittal of the procurement items list prior to the cabinet being built.

Provide the list of procurement items to the County's traffic engineer a minimum of 30 days before the cabinet is scheduled to be installed in the field. The vendor is responsible for coordinating with the project construction contractor to determine the scheduled cabinet installation date. Cabinets shall be completed,

delivered, and accepted within 50 calendar days after the County's traffic engineer approves the procurement item list.

If the County makes a modification to any cabinet order before the entire cabinet is completely built in the vendor's shop, the delivery time does not change. If the County accepts a vendor requested cabinet order or other modification at any time, the delivery time does not change. All cabinet modifications will be made without additional cost to the County, except if an additional equipment item is added at the County's request and the additional item is not to remedy any contractor or vendor error.

The contractor shall deliver the fully wired and equipped cabinets to the intersection where the cabinet will be installed, or other site as designated by the County or the project construction contractor. The contractor is responsible for arranging the unloading of the cabinet.

When the County exercises its right to test a cabinet in the County's shop as described in the Acceptance Testing section of this specification, deliver the cabinet to the location specified by the County's traffic engineer. When the testing is complete, pick up the cabinet from the shop within three business days of notification.

The contractor is notified that delivery times and schedules may be changed or delayed at any time for any reason. The contractor may be required to store completed cabinets at their facility for extended periods of time.

### **C.17 Acceptance Testing**

Complete on-site traffic signal acceptance testing in the presence of the County. The acceptance testing will occur after the signal cabinet is fully installed at the project intersection and before the traffic signal is turned on. The construction contractor and the County will determine the time for the acceptance testing. In addition to the cabinet as specified in this specification, add-on accessory items, traffic signal interconnect, system communication, and closed loop system operation are included in the acceptance testing.

Provide an IMSA certified Traffic Signal Bench Technician, Level II or an IMSA certified Traffic Signal Field Technician, Level II with a minimum of three years' experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. Alternatively, provide a technician or electrician with a minimum of three years' experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. The technician or electrician shall be on-site during the entire acceptance testing and shall be capable and equipped to make in-field revisions / repairs to the signal cabinet and controller to conform to this specification.

Upon successful completion of the acceptance testing as determined by the County, a 30-day conditional acceptance of the signal cabinet will be provided to the contractor. Should the cabinet within the 30-day conditional acceptance period fail to perform in any way as determined by the County, the contractor shall repair the cabinet to bring it into conformance with this specification and the acceptance testing shall be repeated. Repair times shall conform to the warranty service response times in this specification. The acceptance testing shall be repeated. Upon successful completion of the retesting, a new 30-day conditional acceptance period shall begin. After the signal cabinet runs 30 days without failure, the cabinet will be fully accepted by the County. The contractor will be allowed up to two 30-day conditional acceptance periods. If the cabinet fails during the second 30-day period, an entirely new cabinet shall be furnished and installed in the field by the contractor at no cost to the County and a new acceptance testing procedure shall begin. Cabinet replacement times shall conform to the warranty service response times in this specification. The original cabinet becomes the property of the contractor.

The County reserves the right to perform its own tests on the traffic signal cabinet at any time using the County's control equipment. Should an individual traffic signal cabinet be found to not meet the requirements of these specifications, the contractor shall pick up the traffic signal cabinet from the County or from the field, perform at their shop repairs / revisions as necessary to bring the traffic signal cabinet into conformance with these specifications, and deliver the repaired / revised traffic signal cabinet back to the designated location, all at no additional cost to the County.

### **C.18 Certification**

Provide a written certification with the cabinet delivery that the equipment meets the requirements of the plans and specifications and will fully run the sequence of operation and the signal timing, including closed loop system operation if applicable. The certification shall be on the contractor's company letterhead, shall be addressed to both the department and the construction contractor, and shall be signed by a company officer authorized to legally obligate the company.

**D Measurement**

The department will measure Traffic Signal Controller & Cabinet as each 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.0060.04	Traffic Signal Controller & Cabinet	EACH

Payment is full compensation for furnishing and installing a complete traffic signal cabinet, including the signal controller and conflict monitor together with cabinet, all required control units, all necessary wiring, switches, and fittings to assure that the controller will perform the functions

**53. Existing Pipe Connections to Structures, Item SPV.0060.05.**

**A Description**

This special provision describes reconnecting existing storm sewer laterals to new structures or existing pipe.

**B Materials**

Provide culvert pipe concrete collars conforming to standard spec 520.2.4.

Provide couplings conforming to standard spec 607.2.

**C Construction**

Identify all existing pipes in existing structures before that structure’s removal. Remove existing pipes to the next good joint and replace in-kind. Verify that positive drainage is achieved when connecting to the new inlet or curb outlet structure. The contractor will be allowed to salvage any structurally sound pipe that was removed with prior approval by the engineer. Connect the existing pipes to the new pipes with the appropriate coupling, concrete collar or by means approved by the engineer. Any additional pipe or materials required to reconnect the storm sewer laterals are considered incidental to this bid item.

**D Measurement**

The department will measure Existing Pipe Connections to Structures by each connection, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Existing Pipe Connections to Structures	EACH

Payment is full compensation for removal of existing pipes, furnishing and installing all materials, couplings, concrete collars, and pipe.

**54. Reconstruct Water Manhole, Item SPV.0060.06.**

**A Description**

This special provision describes the reconstruction of City of Brookfield water manholes identified from above the bottom of the existing manhole deck to the top of frame and casting. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Reconstruct manhole using additional barrel sections as necessary, concrete adjusting rings, and mortar.

**C Construction**

Perform work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Set manhole frames to finished grade. All work shall be per City of Brookfield Standard Detail Plate No. 010 and 011A.

The contractor shall remove the existing deck to the top of the barrel section, salvage the existing frame, casting, and deck, install a new barrel section, construct the chimney section and reset the salvaged deck, frame and casting to proposed grade.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

**D Measurement**

The department will measure Reconstruct Water Manhole for each manhole reconstructed, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Reconstruct Water Manhole	EACH

Payment is full compensation for reconstruction of existing manholes from above the bottom of the existing deck to the top of the frame and casting. This shall include but not be limited to construction, necessary removals, excavation, and backfilling.

This shall also include adjusting the existing manhole frame and casting to finish grade. Any additional adjustments required to perform this work or additional adjustments as directed by the engineer shall be considered incidental. No payment will be made on this item for any new sanitary manhole frame and casting constructed as part of this project. Sanitary manhole seals will be paid separately at the respective unit bid price.

**55. Water Valve Extension Removal, Item SPV.0060.07.**

**A Description**

This special provision describes removing water valve nut extensions from existing valves throughout this project at locations identified in the plans.

**B Materials**

Existing water valve boxes and lids shall be reused.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

**C Construction**

Contractor shall remove valve extension rods of various lengths attached to the water valve nuts at locations identified in the plans.

Contractor shall excavate water valve box to depth required to remove extension rod from nut. Contractor shall reuse existing water valve box and shall backfill with the necessary material described below.

Contractor shall backfill in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders with crushed stone or crushed concrete backfill. All other areas within the terrace area shall be backfilled with native material.

Upon completion of the contract, the city will inspect the water valves identified for extension removal to ensure that the water valve extension rods were adequately removed, and existing water valve boxes reinstalled correctly. The contractor shall be responsible to make identified repairs.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

## D Measurement

The department will measure Water Valve Extension Removal as each individual unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Water Valve Extension Removal	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, removal of water valve extension rod and associated accessories, reinstallation of the existing water valve box, and restoration of the work site.

## 56. 1.25-inch Water Service Offset, Item SPV.0060.08.

### A Description

Furnish and install a water service offset where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure.

### B Materials

Water lateral offset shall be 1.25-inch CTS AWWA C-901 SDR-9 HDPE Water Tube meeting requirements of chapter 8.24.0 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The contractor shall connect to the existing 1.25-inch HDPE pipe with pack joint compression fittings as manufactured by Mueller, McDonald, or Ford or approved equal.

All water laterals shall be installed with 10 gauge copper tracer wire with the color of blue for water main.

The Bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

### C Construction

The contractor shall contact effected residents and/or businesses to coordinate the water service shutdown prior to starting the work. Install water service offsets with minimum amount of service disruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6<sup>th</sup> Edition and all amendments.

Install water service lateral offsets with minimum amount of service interruption. Water service lateral offset shall be installed with a minimum 18-inches in vertical clearance between the top of the water lateral pipe and the bottom of the proposed storm sewer line. The water service lateral offset shall have a minimum 6 foot bury depth, measured from the top of the water lateral pipe to the proposed finish grade. The water service offset shall be insulated according to the Standard Specifications for Sewer and Water Construction, 6th Edition and all amendments, File No. 48.

All water lateral offsets shall be installed with 10 gauge copper tracer wire. The wire shall be connected to the existing tracer wire installed with the in-place lateral on either side. This splice shall be made utilizing SnakeBite water proof connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water lateral installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe.

All trenches for the water lateral installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water lateral installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Density tests on backfill materials will be as specified or as directed by the engineer. The contractor will provide for all compaction testing. The contractor shall re-compact all areas represented by failed density tests. The contractor shall be responsible for the costs associated with any subsequent testing. The contractor shall correct settlement resulting from the consolidation of backfill.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three (3) days prior to work being performed.

#### **D Measurement**

The department will measure 1.25-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	1.25-inch Water Service Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

### **57. 2-inch Water Service Offset, Item SPV.0060.09.**

#### **A Description**

Furnish and install a water service offset where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure.

#### **B Materials**

Water lateral offset shall be 2-inch CTS AWWA C-901 SDR-9 HDPE Water Tube meeting requirements of chapter 8.24.0 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The contractor shall connect to the existing 2-inch HDPE pipe with McDonald 74758Q coupling or approved equal.

All water laterals shall be installed with 10 gauge copper tracer wire with the color of blue for water main.

The Bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

#### **C Construction**

The contractor shall contact effected residents and/or businesses to coordinate the water service shutdown prior to starting the work. Install water service offsets with minimum amount of service disruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Install water service lateral offsets with minimum amount of service interruption. Water service lateral offset shall be installed with a minimum of 18-inches in vertical clearance between the top of the water lateral pipe and the bottom of the proposed storm sewer line. The water service lateral offset shall have a 6 foot minimum bury depth measured from the top of the water lateral pipe to the proposed finish grade. The water service offset shall be insulated according to the Standard Specifications for Sewer and Water Construction, 6th Edition and all amendments, File No. 48.



All water lateral offsets shall be installed with 10 gauge copper tracer wire. The wire shall be connected to the existing tracer wire installed with the in-place lateral on either side. This splice shall be made utilizing SnakeBite water proof connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water lateral installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe.

All trenches for the water lateral installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water lateral installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Density tests on backfill materials will be as specified or as directed by the engineer. The contractor will provide for all compaction testing. The contractor shall re-compact all areas represented by failed density tests. The contractor shall be responsible for the costs associated with any subsequent testing. The contractor shall correct settlement resulting from the consolidation of backfill.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

#### **D Measurement**

The department will measure 2-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	2-inch Water Service Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

### **58. 4-inch Water Service Offset, Item SPV.0060.10.**

#### **A Description**

Furnish and install a water service offset as shown Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47, where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure. Note following modification to File No. 47: use restrained joints instead of rods.

#### **B Materials**

The water service offset shall be constructed of AWWA C900 PVC pipe ductile iron fittings (polyethylene encased) and restrained joints.

Fittings and bolts shall be per Chapter 8.22.2 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

## C Construction

Construct the water service offset per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47. Note following modification to File No. 47: use restrained joints instead of rods.

The contractor shall contact effected businesses to coordinate water service shutdown prior to starting the work. Install water service offsets with minimum amount of service interruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The water service offset shall be insulated according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

All water service offsets shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main on either side. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water service offset installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches for the water service offset installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water service offset installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

## D Measurement

The department will measure 4-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	4-inch Water Service Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

## 59. 6-inch Water Service Offset, Item SPV.0060.11.

### A Description

Furnish and install a water service offset as shown Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47, where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure. Note following modification to File No. 47: use restrained joints instead of rods.

### B Materials

The water service offset shall be constructed of AWWA C900 PVC pipe ductile iron fittings (polyethylene encased) and restrained joints.

Fittings and bolts shall be per Chapter 8.22.2 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

### **C Construction**

Construct the water service offset per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47. Note following modification to File No. 47: use restrained joints instead of rods.

The contractor shall contact effected businesses to coordinate water service shutdown prior to starting the work. Install water service offsets with minimum amount of service interruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The water service offset shall be insulated according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

All water service offsets shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main on either side. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water service offset installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches for the water service offset installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water service offset installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

### **D Measurement**

The department will measure 6-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	6-inch Water Service Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

## **60. 8-inch Water Main Offset, Item SPV.0060.12.**

### **A Description**

Furnish and install a water main offset as shown Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47, where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure. Note following modification to File No. 47: use restrained joints instead of rods.

## **B Materials**

The water main offset shall be constructed of AWWA C900 PVC pipe ductile iron fittings (polyethylene encased) and restrained joints.

Fittings and bolts shall be per Chapter 8.22.2 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

## **C Construction**

Construct the water main offset per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47. Note following modification to File No. 47: use restrained joints instead of rods.

The contractor shall contact effected residents and/or businesses to coordinate any water main shutdowns prior to starting the work. Install water main offsets with minimum amount interruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The water main offset shall be insulated according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

All water main offsets shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main on either side. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water main offset installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches for the water main offset installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water main offset installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

## **D Measurement**

The department will measure 8-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

## **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	8-inch Water Main Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

**61. 12-inch Water Main Offset, Item SPV.0060.13.**

**A Description**

Furnish and install a water main offset as shown Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47, where required to provide proper clearance between the water main and a storm sewer/catch basin or other structure. Note following modification to File No. 47: use restrained joints instead of rods.

**B Materials**

The water main offset shall be constructed of AWWA C900 PVC pipe and ductile iron fittings (polyethylene encased) and restrained joints.

Fittings and bolts shall be per Chapter 8.22.2 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

**C Construction**

Construct the water main offset per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 47. Note following modification to File No. 47: use restrained joints instead of rods.

The contractor shall contact effected residents and/or businesses to coordinate any water main shutdowns prior to starting the work. Install water main offsets with minimum amount interruption.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

The water main offset shall be insulated according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

All water main offsets shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main on either side. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material for the water main offset installation shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches for the water main offset installation in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill to the bottom of the storm sewer for which the offset is required.

All trenches for the water main offset installation within the terrace area shall be backfilled with native material to the bottom of the storm sewer for which the offset is required.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

**D Measurement**

The department will measure 12-Inch Water Service Offsets by each offset, acceptably completed. The offset shall include all pipe and fittings.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.13	12-inch Water Main Offset	EACH

Payment is full compensation for furnishing labor, materials, excavation, bedding, backfill, pipe laying, fittings, sheathing, shoring, dewatering, testing, and incidentals necessary to complete work. Insulation will be paid for separately at its respective unit bid price.

## 62. Adjust Hydrant, Item SPV.0060.14.

### A Description

This special provision describes adjusting, protecting, and maintaining accessibility for the duration of this project, to all hydrants specified on the plans for adjusting that are located within the project limits.

### B Materials

Existing hydrants shall be adjusted as identified on the plans.

Hydrant Extensions shall be compatible with the manufacturer of each type of hydrant adjusted.

### C Construction

Hydrants identified in the plans for adjustment within the project limits shall be adjusted to proposed elevations by the contractor using materials meeting city specifications.

Setting Hydrants: Locate as shown or as directed and in a manner to provide complete accessibility, also in such a manner that the possibility of damage from vehicles or injury to pedestrians will be minimized. Align the pumper nozzle per the owner's direction. Set to the established grade, with nozzles at least 18-24 inches above the proposed ground or as directed. The contractor shall verify the proposed grade elevations prior to adjusting the hydrant.

Throughout the duration of the project, the contractor must ensure that all at all times, all hydrants remain accessible for operation by city forces. Exercise caution working adjacent to hydrants to avoid damage and ensure accessibility.

Upon completion of the contract, the city will inspect all hydrants to ensure they are clean, properly aligned, set at the correct grades, and accessible. The contractor shall be responsible to make identified repairs and adjustments.

### D Measurement

The department will measure Adjust Hydrant as each individual unit, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Adjust Hydrant	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, and restoration of the work site.

## 63. Hydrant Relocation, Item SPV.0060.15.

### A Description

This special provision describes the removal of an existing hydrant and installation of a new hydrant at a new location designated in the plan.

## **B Materials**

Hydrants shall be Clow Medallion and/or Kennedy Guardian (with reservoir), or equal, red in color, AWWA C-502 breakaway type with two 2.5-inch outlets and one 4.5-inch outlet and wrapped with polyethylene, meeting requirements of section 8.26.0 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Water main shall be PVC pipe, conforming to AWWA C900, Class 235 (DR18).

Fittings and bolts shall be per Chapter 8.22.2 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Mega lug retainer glands shall be installed at all fittings locations. The cost for fittings shall be incidental.

Valve shall be a 6-inch valve. Valve shall be smooth bore resilient seat gate valves and shall be Kennedy Ken-Seal, SS Bolts, American Flow Control, Series 2500, SS Bolts, Clow F-6100, SS Bolts, Mueller 2360-20, SS Bolts, or equal, meeting requirements of section 8.27.1. of the Standard Specifications for Sewer & Water Construction in Wisconsin, 6th Edition. Valves shall open left.

Joints shall be push-on type rubber gaskets and conform to ASTM C1869.

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

## **C Construction**

Use methods that conform with Chapter 3 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Remove the existing hydrant and valve and install 6-inch hydrant lead, valve and hydrant as specified in the plan. The existing hydrant tee shall be capped and abandoned in areas where the hydrant is being relocated along the water main. Return removed hydrant and valve to the City of Brookfield Water Utility unless otherwise directed by the engineer. Any water main appurtenances that the engineer determines is not worth salvaging shall become property of the contractor and shall be removed from the project.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Construct hydrant and hydrant valve removal and new installation as shown on the plans, specified above, and as directed by the engineer per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and the City of Brookfield Standard Detail Plate No. 009 and/or No. 009A.

All water main shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

Setting Hydrants: Locate as shown or as directed and in a manner to provide complete accessibility, also in such a manner that the possibility of damage from vehicles or injury to pedestrians will be minimized. Stand plumb and have the pumper nozzle aligned as per the owner's direction. Set to the established grade, with nozzles at least 18-24 inches above the proposed ground or as directed. Set the hydrant and 6-inch gate valve set on hardwood blocking as shown on City of Brookfield Standard Detail Plate No. 009. The contractor shall verify the proposed grade elevations prior to setting the hydrant.

Where a hydrant is set in soil that is pervious, provide drainage at the base of the hydrant by placing coarse gravel or crushed stone mixed with coarse sand, from the bottom of the trench to at least 6 inches above the waste opening in the hydrant and to a distance of 12 inches around the elbow.

Wherever a hydrant is set in clay or other impervious soil, excavate a drainage pit 2 feet in diameter and 3 feet deep below each hydrant and fill compactly with coarse gravel or crushed stone mixed with coarse sand, under and around the elbow of the hydrant to a level of 6 inches above the waste opening.

Brace well the bowl of each hydrant against unexcavated earth at the end of the trench with concrete backing. Block or approved mechanical joint lugged retainer glands may be used.

Set elevation of breakaway flange a minimum of 2-inches and a maximum of 4 inches above proposed grade.

Provide drain pocket at base of hydrant of 1.5 cubic yards of crushed stone or rock conforming to requirements of ASTM C33, Gradation Number 2.

The bedding and cover material shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill. All other areas within the terrace area shall be backfilled with native material.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three (3) days prior to work being performed.

#### **D Measurement**

The department will measure Hydrant Relocation by each individual unit, acceptably completed, regardless of hydrant setting identified in the City of Brookfield Standard Detail Plate No. 009 and Plate No. 009A.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.15	Hydrant Relocation	EACH

Payment is full compensation for removing and replacing the hydrant in its new location as shown on the plans and directed by the engineer. This shall include removal of the existing hydrant, valve, piping, fittings, and capping and abandoning existing hydrant tee as necessary.

In addition, it shall include the connection, fittings, and any adjustments necessary to install the new hydrant lead, the hydrant, and hydrant valve. This shall include but not be limited to all labor, tools, equipment, materials, testing and incidentals for pavement sawing, pavement removal, excavating, shoring, backfilling, and all other required materials and labor to complete this work in place. All required 6-inch PVC lead piping will be paid for separately at its respective unit bid price.

### **64. Adjust Water Valve Box, Item SPV.0060.16.**

#### **A Description**

This special provision describes adjusting, protecting, and maintaining accessibility for the duration of this project, to all water valve boxes located within the project limits.

#### **B Materials**

Existing water valve boxes shall be adjusted as identified on the plans.

#### **C Construction**

All water valve boxes within the project limits shall be adjusted to proposed elevations by the contractor using materials meeting city specifications.

Throughout the duration of the project, the contractor must ensure that all water valve boxes are adequately located and identified by blue paint, and that at all times, all water appurtenances remain accessible for operation by city forces. Exercise caution working adjacent to water facilities to avoid damage and ensure accessibility.

Upon completion of the contract, the city will inspect all water facilities to ensure the water valve boxes are clean, properly aligned, and accessible. The contractor shall be responsible to make identified repairs and adjustments.



**D Measurement**

The department will measure Adjust Water Valve Box as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.16	Adjust Water Valve Box	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, and restoration of the work site. No payment will be made for any valve adjustments on new valves installed as part of this project.

**65. Adjust Curb Stop Box, Item SPV.0060.17.**

**A Description**

This special provision describes adjusting, protecting, and maintaining accessibility for the duration of this project, to all curb stop boxes located within the project limits.

**B Materials**

Existing curb stop boxes shall be adjusted as identified on the plans

**C Construction**

All curb stop boxes within the project limits shall be adjusted to proposed elevations by the contractor using materials meeting city specifications.

Throughout the duration of the project, the contractor must ensure that all curb stop boxes are adequately located and identified by blue paint, and that at all times, all water appurtenances remain accessible for operation by city forces. Exercise caution working adjacent to water facilities to avoid damage and ensure accessibility.

A meter box cover shall be installed over the top of any curb stop box that falls within a pavement area. See the Meter Box special provision for more information.

Upon completion of the contract, the city will inspect all water facilities to ensure the curb stop boxes are clean, properly aligned, and accessible. The contractor shall be responsible to make identified repairs and adjustments.

**D Measurement**

The department will measure Adjust Curb Stop Box as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	Adjust Curb Stop Box	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, and restoration of the work site. Meter Box Covers that are necessary shall be paid for separately at their respective unit bid price.

**66. Meter Box Cover, Item SPV.0060.18.**

**A Description**

This special provision describes the installation of a new meter box cover over the top of an existing curb stop box that falls within a proposed pavement area as directed by the engineer. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Meter box cover shall be a Ford Type A1 or approved equal.

**C Construction**

Install the meter box cover to match the surrounding pavement surface.

**D Measurement**

The department will measure Meter Box Cover a unit basis for each meter box cover, acceptably installed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.18	Meter Box Cover	EACH

Payment for each Meter Box Cover is full compensation including labor, material, and equipment to install the meter box cover over the top of each curb stop box that is installed in a pavement area or as directed by the engineer.

**67. Adjust Sanitary Sewer Manhole, Item SPV.0060.19.**

**A Description**

This special provision describes the adjustment of City of Brookfield or Village of Elm Grove sanitary sewer manholes from the top of cone to the top of manhole frame and cover. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Make adjustments using concrete adjusting rings and mortar.

**C Construction**

Perform work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Set manhole frames to finished grade. A manhole seal shall be installed upon completion of the work performed. All work shall be per City of Brookfield Standard Detail Plate No. 011.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, or the Village of Elm Grove Public Works Department, at (262) 782-6700, three days prior to work being performed.

**D Measurement**

The department will measure Adjust Sanitary Sewer Manhole on a unit basis for each manhole adjustment, 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.0060.19	Adjust Sanitary Sewer Manhole	EACH

Payment is full compensation for adjusting existing or new manhole frame and casting to finish grade from the top of existing cone to the top of manhole frame and casting. This shall include but not be limited to construction, necessary removals, excavation, and backfilling..

Multiple adjustments required to perform this work or additional adjustments as directed by the engineer shall be considered incidental. Sanitary manhole seals will be paid separately at their respective unit bid price.

**68. Reconstruct Sanitary Sewer Manhole, Item SPV.0060.20.**

**A Description**

This special provision describes the reconstruction of City of Brookfield sanitary sewer manholes identified from above the bottom of the existing manhole cone section to the top of frame and casting. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Reconstruct manhole using a cone section, additional barrel sections as necessary, and concrete adjusting rings and mortar.

**C Construction**

Perform work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Set manhole frames to finished grade. All work shall be per City of Brookfield Standard Detail Plate No. 011.

The contractor shall remove the existing cone section or deck to the top of the barrel section, salvage the existing frame and casting, install new deck or cone section, construct the chimney section and reset the salvaged frame and casting to proposed grade.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

**D Measurement**

The department will measure Reconstruct Sanitary Sewer Manhole on a unit basis for each manhole reconstructed, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Reconstruct Sanitary Sewer Manhole	EACH

Payment is full compensation for reconstruction of existing manholes from above the bottom of the existing cone section to the top of the frame and casting. This shall include but not be limited to construction, necessary removals, excavation, and backfilling.

This shall also include adjusting the existing or new manhole frame and casting to finish grade. Any additional adjustments required to perform this work or additional adjustments as directed by the engineer shall be considered incidental. Sanitary manhole seals will be paid separately at the respective unit bid price.

**69. Sanitary Manhole Frame & Casting, Item SPV.0060.21.**

**A Description**

This special provision describes the installation of new sanitary manhole frame & castings as directed by the engineer. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Sanitary manhole frame and castings shall be Neenah R-1661 or approved equal.

**C Construction**

Install a new sanitary manhole frame & casting as necessary and as directed by the engineer.

Perform work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Set manhole frame and casting to finished grade.

**D Measurement**

The department will measure Sanitary Manhole Frame & Casting shall be measured on a unit basis for each sanitary manhole frame & casting, acceptably installed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.21	Sanitary Manhole Frame & Casting	EACH

Payment is full compensation for furnishing and installation of a new sanitary manhole frame & casting and does not include any adjustments. This shall include but not be limited to construction, necessary removals, excavation, and backfilling.

Adjustments shall be included as part of the unit bid price for Adjust Sanitary Sewer Manhole or Reconstruct Sanitary Sewer Manhole. Sanitary manhole seals shall be paid separately at the respective unit bid price.

## 70. Sanitary Manhole Seal, Item SPV.0060.22.

### A Description

This special provision describes the installation of sanitary manhole seals.

### B Materials

Sanitary manhole seals, shall meet the material requirements of section 8.42.3 and the performance requirement of section 8.42.4 of the Standard Specifications for Sewer and Water Construction, 6<sup>th</sup> Edition, except as herein modified.

Sanitary Manhole Seals shall be Adaptor Internal/External seal ring or approved equal according to City of Brookfield Standard Detail Plate No. 011 and Plate No 011A.

### C Construction

Use methods that conform with Chapter 3 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition. Install seals according to the manufacturer's recommended installation procedures and per the City of Brookfield Standard Detail Plate No. 011 and Plate No. 011A.

Install all sanitary manhole seals after the manholes have been adjusted to proper grade, during placement of base aggregate dense, and prior to the completion of the pavement.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

### D Measurement

The department will measure Sanitary Manhole Seal by each individual unit, acceptably completed. The City of Brookfield or Village of Elm Grove will provide acceptance prior to backfilling and payment.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Sanitary Manhole Seal	EACH

Payment is full compensation for installing a manhole seal for a sanitary manhole.

## 71. Posts Tubular Steel, 1 3/4" x 1 3/4"- 8-FT, Item SPV.0060.23; Posts Tubular Steel, 1 3/4" x 1 3/4"- 10-FT, Item SPV.0060.24; Posts Tubular Steel, 1 3/4" x 1 3/4"- 11-FT, Item SPV.0060.25; Posts Tubular Steel, 1 3/4" x 1 3/4"- 12-FT, Item SPV.0060.26; Posts Tubular Steel, 1 3/4" x 1 3/4"- 14-FT Item SPV.0060.27.

### A Description

This section describes furnishing and erecting tubular steel posts to support signs

## B Materials

Furnish tubular steel sign post assemblies consisting of 2 telescoping square steel tubes consisting of a breakaway upper tube for mounting the sign and an outside anchor tube.

Fabricate the tubular components using structural quality 12-gauge strip steel conforming to ASTM designation A570, grade 50 with an average minimum yield strength, after cold-forming, of 55,000 psi. Punch holes on all 4 sides for the full length as the plans show. Provide corner radii of approximately 5/32 inches and conform to other dimensions and tolerances as follows:

COMPONENT	OUTSIDE DIMENSIONS inches	OUTSIDE DIMENSION TOLERANCE inches <sup>[1]</sup>	ALLOWABLE TWIST <sup>[2]</sup> inches/3 feet
UPPER TUBE	1.75 x 1.75	+/-0.008	+/-0.062
OUTSIDE ANCHOR TUBE	2.00 x 2.00	+/-0.008	+/-0.062

<sup>[1]</sup> Measure at least 2 inches from the ends of the tubes.

<sup>[2]</sup> Hold one side on a flat surface plate and measure the twist at the corner 3 feet away.

Hot-dip galvanize each tube according to ASTM A 653 grade 90. Treat corner welds and cut ends with cold-galvanized organic zinc paint as manufacturer recommends.

The engineer will inspect sign post assemblies before installation. Ensure that the assemblies fit together without damaging the coatings. Replace scratched or otherwise damaged components at no expense to the department.

Furnish upper tubes fabricated to the lengths the plans show.

For all installations use a 36-inch outer tube without soil stabilization fins.

## C Construction

Obtain the engineer's approval and locate all underground facilities before installing the tubular steel sign post assemblies. Install assemblies oriented to the direction of traffic as the plan details show to ensure that the system meets the yielding breakaway design requirements. Locate assemblies where the plans show or where the engineer directs. Do not install until the finished grade is established.

For installations in concrete or asphalt, use 12-inch inside diameter PVC pipe box outs. Position the PVC pipe so the top of pipe is flush with the adjacent concrete or asphalt. Install the post in the center of the box-out.

Install all anchor sections so that a length of one to 2 inches remains above the finished grade. Leave one hole of the anchor system exposed 1 inch above grade for connecting the upper tube with a 3/8-inch zinc plated corner bolt and nut.

Attach the required sign panels as the plans show or as the engineer directs. Mount the signs on the upper tube with the end 1/2 inch lower than the top of the sign. Place the entire tubular steel sign post assembly in a true vertical position and correctly align for proper visibility for the direction of traffic. Cut upper tubes to provide the sign height the plans show, or the engineer directs. Treat all exposed post surfaces after installation with cold-galvanized organic zinc paint according to the manufacturer's instructions.

## D Measurement

The department will measure the Posts Tubular Steel bid items as each individual post assembly, including each section and anchor, 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.0060.23	Posts Tubular Steel, 1 3/4" x 1 3/4"- 8-FT	EACH
SPV.0060.24	Posts Tubular Steel, 1 3/4" x 1 3/4"- 10-FT	EACH
SPV.0060.25	Posts Tubular Steel, 1 3/4" x 1 3/4"- 11-FT	EACH
SPV.0060.26	Posts Tubular Steel, 1 3/4" x 1 3/4"- 12-FT	EACH
SPV.0060.27	Posts Tubular Steel, 1 3/4" x 1 3/4"- 14-FT	EACH

Payment for the Posts Tubular Steel bid items is full compensation for providing, hauling, and placing the posts; treating cut post ends; and providing hardware and anchors. The department will not pay for replacing damaged posts or upper tube cut-offs.

**72. Section Corner Monuments, Item SPV.0060.28.**

**A Description**

Coordinate with Southeastern Wisconsin Regional Planning Commission (SEWRPC) for the perpetuation and replacement of a section corner (Public Land Survey System- PLSS) monument.

**B Materials**

SEWRPC will provide a pre-cast concrete monument or brass disk to be used to mark the PLSS corner. Furnish base aggregate dense materials that conform to standard spec 305 and concrete, asphalt, topsoil or other materials depending on the surface surrounding the corner.

**C Construction**

SEWRPC will perpetuate existing section corner monument. The contractor is responsible to coordinate with SEWRPC and the WisDOT Project Manager throughout the perpetuation and replacement process. The engineer will contact SEWRPC at (262) 953-4295 at least two weeks before starting construction operations or the preconstruction meeting to allow for section corner monument perpetuation. Contractor must excavate and completely remove the existing monument. Contractor is responsible for providing a backfilled 3 to 4-foot deep hole where existing monument was removed. Contractor is responsible to coordinate the materials and methodology to complete the construction of the surface surrounding the monument. This may include but is not limited to a 2' x 2' "box out" or 24" diameter core hole in concrete, asphalt pavement/paving rings, coring to facilitate poured in place monuments, topsoil, seed and mulching or other materials or methodologies as agreed to by the contractor and SEWRPC.

**Contact Information:**

Attn: John Washburn  
Southeastern Wisconsin Regional Planning Commission  
W239 N1812 Rockwood Drive  
P.O. Box 1607  
Waukesha, WI 53187-1607  
Phone (262) 547-6721  
Cell (262) 953-4295  
Fax (262) 547-1103  
E-mail: [jwashburn@sewrpc.org](mailto:jwashburn@sewrpc.org)

**D Measurement**

The department will measure Section Corner Monuments 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.0060.28	Section Corner Monuments	EACH

Payment is full compensation for all excavating; removal of existing monument, for placing and compacting backfill material; for disposing of surplus materials; for concrete or asphalt material, finishing of roadway or other surfaces, for all coordination with SEWRPC; and for furnishing all labor, tools, and equipment.

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**73. Concrete Base Spread Footing Type 1, Item SPV.0060.29;  
Concrete Base Spread Footing Type 2, Item SPV.0060.30.**

**A Description**

This special provision describes constructing Concrete Base Spread Footing Type 1 and Type 2 according to the details shown in the plans, the requirements of standard spec 654, and as hereinafter provided.

**B Materials.**

Provide materials that conform to the requirements of standard spec 654.2.

**C Construction**

Construct according to the details shown in the plans and requirements of standard spec 654.3.

**D Measurement**

The department will measure Concrete Base Spread Footing (Type) by each footing, acceptably completed

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.29	Concrete Base Spread Footing Type 1	EACH
SPV.0060.30	Concrete Base Spread Footing Type 2	EACH

Payment for the Bases bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor templates, rods, nuts, and washers; for bar steel reinforcement; and for excavating, backfilling, and disposing of surplus materials.

**74. Manhole 6-FT Diameter with Restrictor Plate, Item SPV.0060.31;  
Manhole 8-FT Diameter with Restrictor Plate, Item SPV.0060.32**

**A Description**

This special provision describes constructing a manhole of the given diameter with restrictor plate as shown in the plans and details according to the standard specifications.

**B Materials**

Provide manhole according to standard spec 611.2.

Provide steel and steel connections conforming to the requirements of standard spec 506.

**C Construction**

Construct and install manholes according to standard spec 611.3.

Provide two circular, two-foot diameter openings in the reinforced concrete flat slab top to accommodate two inlet covers. Position openings above opposite sides of the restrictor plate. Payment for providing inlet covers and frames are not included in this item.

Mount steel plate inside manhole utilizing two steel angles horizontally along the bottom of the plate, and vertically along each side. Fasten steels angles to the manhole structure with stainless steel studs and expansion anchors.

Any additional fabrication or materials required to construct manhole or connect the storm sewer to the manhole with restrictor plate are considered incidental to this bid item.

**D Measurement**

The department will measure Manhole (size) with Restrictor Plate by each individual unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.31	Manhole 6-FT Diameter with Restrictor Plate	EACH
SPV.0060.32	Manhole 8-FT Diameter with Restrictor Plate	EACH

Payment is full compensation for providing manhole of specified diameter, steel restrictor plate, steel angles and mounting hardware, furnishing and installing all materials.

## 75. New Pipe Connections to Existing Structures, Item SPV.0060.33.

### A Description

This special provision describes connecting new storm sewer and culvert pipes to existing structures or existing pipe.

### B Materials

Provide culvert pipe concrete collars conforming to standard spec 520.2.4.

Provide couplings conforming to standard spec 607.2.

### C Construction

Identify all existing pipes in existing structures before connecting to the structure to verify proper outlet for drainage. Remove existing pipes to the next good joint and replace in-kind. Verify that positive drainage is achieved when connecting to the existing structure or pipe.

Connect the new pipes to the existing structures by creating opening in structure for pipe connection by sawing or other means approved by the engineer. Connect new pipes to existing structures with the appropriate coupling, concrete collar or by means approved by the engineer. Repair damage to existing masonry to maintain proper function of the structure.

Connect the new pipes to the existing pipes with the appropriate coupling, concrete collar or by means approved by the engineer.

Any additional pipe or materials required to reconnect the storm sewer are considered incidental to this bid item.

### D Measurement

The department will measure New Pipe Connections to Existing Structures by each connection, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.33	New Pipe Connections to Existing Structures	EACH

Payment is full compensation for creating opening in masonry, furnishing and installing all materials, couplings, concrete collars, and pipe.

## 76. Concrete Curb and Gutter 66-Inch, Item SPV.0090.01.

### A Description

This special provision describes constructing concrete curb and gutter according to the details shown in the plans, the requirements of standard spec 601, and as hereinafter provided.

### B Materials.

Provide materials that conform to the requirements of standard spec 601.2.

### C Construction

Construct according to the requirements of standard spec 601.3.



## D Measurement

The department will measure Concrete Curb and Gutter 66-Inch in length 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(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 66-Inch	LF

Payment is full compensation for furnishing all foundation excavation and preparation; providing all materials, including concrete, expansion joints, and reinforcement tie bars unless specified otherwise; placing, finishing, protecting, and curing; sawing joints; disposing of surplus excavation material, restoring the work site.

The department will adjust pay for crack repairs on as specified in standard spec 416.5.2 for ancillary concrete.

## 77. 6-inch PVC Water Main, Item SPV.0090.02.

### A Description

Furnish and install 6-inch PVC Water Main (Crushed Stone Backfill) for hydrant leads at locations identified on the plans.

### B Materials

Water main shall be PVC pipe, conforming to AWWA C900, Class 235 (DR18).

The bedding and cover material shall be in conformance with 8.43.2 Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments and shall consist of 3/8 inch crushed limestone.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

### C Construction

Water main shall be installed at the grades indicated on the plans with a 6' minimum depth of cover over the water main. Polystyrene insulation shall be installed over the water main where indicated on the plans, or at storm sewer crossings and as directed by the engineer. Insulation shall be according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

All pipe and fittings shall be disinfected prior to installation per the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

All water main shall be installed with 10 gauge copper tracer wire with the color of blue for water main. The wire shall be connected to the existing tracer wire installed with the in-place water main. This splice shall be made utilizing SnakeBite water proof Connectors manufactured by Copperhead Industries or approved equal. Soldering wires together is not allowed.

The bedding and cover material shall have a minimum of 4" bedding to a cover of 12" above the crown of the pipe. Care must be taken to ensure proper compaction of said bedding material under the lower quadrants of the pipe.

All trenches in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill. All other areas within the terrace area shall be backfilled with native material.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

**D Measurement**

The department will measure 6-inch PVC Water Main per linear foot of hydrant lead furnished and placed, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	6-inch PVC Water Main	LF

Payment is full compensation for furnishing and installing all materials; excavating, backfilling, and compacting. Insulation will be paid for separately at its respective unit bid price. This item only applies to Hydrant Leads. Any water main piping used for water main offsets will be paid for as part of each respective water main offset item.

**78. Excavate and Install Polystyrene Insulation 4-Inch Thickness, Item SPV.0090.03.**

**A Description**

This special provision describes furnishing and placing polystyrene insulation board as shown on the plans in areas where there is less than the minimum cover depth over the top of the existing water main pipe.

**B Materials**

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230, except as hereinafter revised. Delete flammability requirement.

Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in Section 8.43.7 of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

**C Construction**

All trenches for the excavation and installation of polystyrene insulation shall be backfilled according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

Backfill identified in File No. 48 that is in the surfaced section of existing streets, driveways, parking areas, sidewalks, street shoulders or within five feet of the edge of such surfaces or shoulders shall be backfilled with crushed stone or crushed concrete backfill. All other areas within the terrace area shall be backfilled with native material.

Polystyrene insulation shall be installed at locations shown on the plans and as directed by the engineer according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48 with the following exception. The insulation shall be 8 feet width and is not required to extend down both sides of the pipe flowline.

Insulation shall be installed in two layers for a total of 4-inches thickness. Joints between such layers shall be staggered.

All backfill material shall be mechanically compacted per Section 2.6.14 (b) of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

**D Measurement**

The department will measure Excavate and Install Polystyrene Insulation 4-Inch Thickness by linear the feet (8-ft width centered along the water main pipe installed in two layers for a total of 4-inches thick) of insulation installed along the centerline of the pipe being insulated, 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	Excavate and Install Polystyrene Insulation 4-Inch Thickness	LF

Payment is full compensation for all excavation and backfill; and furnishing and placing the insulation board.

**79. Split Rail Fence, Item SPV.0090.04.**

**A Description**

This special provision describes furnishing and installing cedar wood split rail fencing, with three rails, at the locations shown on the plans and as hereinafter provided.

**B Materials**

Furnish western red cedar split rail line, corner, and end posts and western red cedar split rails as commonly available from landscape suppliers. Posts shall be 3-rail posts with 12-inch rail spacing.

Furnish granular backfill Grade 2 according to standard spec 209.2.

**C Construction**

Set posts at the plan locations and at 10-foot spacing. Excavate post holes to a diameter of twice the nominal post size and to a minimum depth of 30 inches below finished grade. Set the post plumb and backfill and compact around the posts at 6-inch maximum intervals.

**D Measurement**

The department will measure Split Rail Fence by the linear foot, measured from center of post to center of post, 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.0090.04	Split Rail Fence	LF

Payment is full compensation for furnishing and installing all materials including rails, posts and hardware; for excavating post holes and disposing of excess material off site; for furnishing and placing backfill; and for restoring the worksite.

**80. Timber Fence, Item SPV 0090.05.**

**A Description**

This special provision describes the construction of Timber Fence, as shown on the plans, and according to the specifications and contract.

**B Materials**

Use material conforming to the requirements specified in standard spec 615.2. Use untreated posts and rails. The wood species of the rails and posts shall be cedar.

**C Construction**

Construct according to the pertinent requirements of standard spec 615.3.

Coordinate with masonry contractor to install the anchor plates and anchor bolts provided under this item.

**D Measurement**

The department will measure Timber Fence by linear feet from end to end the top of the rail, 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.0090.05	Timber Fence	LF

Payment is full compensation for furnishing all materials, including posts, anchor plate assembly, rails, bolts, paint, galvanizing, and incidentals; for all erecting; for attaching to retaining wall; properly disposing of surplus materials; and for preservative treatment and painting.

**81. Remove and Salvage Type F Tubular Steel Railing, Item SPV.0090.06.**

**A Description**

This special provision describes the removing and salvaging existing Type F Tubular Steel Railing and posts on the existing bridge structure over Underwood Creek according to the pertinent provisions of standard spec 204 and as hereinafter provided.

**B Materials (Vacant)**

**C Construction**

Arrange for the careful removal and storage of the Type F Tubular Steel Railing and posts after receiving approval from the engineer that the existing equipment can be removed. It shall be the contractor's responsibility to ensure safe removal and storage of equipment up to and including delivery of all salvaged items.

All existing railing and posts removed shall be returned to the Waukesha County public works storage facility located at 1801 Woodburn Rd, Waukesha, WI 53188.

Contact Mike O'Neill from the County Highway Department at (262) 424-9009 at least three working days prior to delivery to make arrangements.

**D Measurement**

The department will measure Remove and Salvage Type F Tubular Railing by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.06	Remove and Salvage Type F Tubular Steel Railing	LF

Payment is full compensation for removing and disassembling of railing and posts, storing of salvaged items on site and for delivering the salvaged materials to the Waukesha County public works storage facility.

**82. Split Rail Fence, Item SPV.0090.07.**

**A Description**

This special provision describes furnishing and installing cedar wood split rail fencing, with three rails, at the locations shown on the plans and as hereinafter provided.

**B Materials**

Furnish western red cedar split rail line, corner, and end posts and western red cedar split rails as commonly available from landscape suppliers. Posts shall be 3-rail posts with 12-inch rail spacing.

Furnish granular backfill Grade 2 according to standard spec 209.2.

**C Construction**

Set posts at the plan locations and at 10-foot spacing. Excavate post holes to a diameter of twice the nominal post size and to a minimum depth of 30 inches below finished grade. Set the post plumb and backfill and compact around the posts at 6-inch maximum intervals.

**D Measurement**

The department will measure Split Rail Fence by the linear foot, measured from center of post to center of post, 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.0090.07	Split Rail Fence	LF

Payment is full compensation for furnishing and installing all materials including rails, posts and hardware; for excavating post holes and disposing of excess material off site; for furnishing and placing backfill; and for restoring the worksite.

### 83. Vehicular Video Detection System CTH M (North Ave) & Calhoun Road, Item SPV.0105.01; Vehicular Video Detection System CTH M (North Ave) & CTH YY (Pilgrim Rd), Item SPV.0105.02; Vehicular Video Detection System CTH M (North Ave) & Lilly Road, Item SPV.0105.03.

#### A Description

This specification describes furnishing and installing a system that detects vehicles on a roadway using only video images of vehicle traffic. This item includes all materials and labor necessary to install a completely functional vehicle detection system including but not limited to cameras, processors, video monitor, mounting hardware, power cable, and coaxial cable.

#### B General Requirements

##### B.1 System Hardware

The video detection system (VDS) shall consist of up to four video cameras, a video detection processor (VDP) capable of processing from one to four video sources, either wired or wireless, wireless video transmission receiver, receiver antenna and a pointing device.

##### 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.

#### C Functional Capabilities

##### C.1 System Configuration

The VDS will be deployed at locations where site conditions and roadway geometry vary. The VDS system may also be deployed at locations where existing cabinets or equipment exist. Existing site configurations will dictate the availability of cabinet space and VDS usage.

The proposed VDS shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have identical user interface for system setup and configuration. The communications protocol to each configuration shall be identical and shall be hardware platform independent. The proposed VDS shall have multiple configurations available for deployment.

**Table 1. VDS Configuration**

Description	No. Video Inputs	No. Video Outputs	Mounting Configuration	Power Supply Requirements
Single-Channel Rack Mounted	1	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack
Dual-Channel Rack Mounted	2	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack
Quad-Channel Rack Mounted	4	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack

- a. An option to have wireless video transmission between the camera sensor and VDP shall also be available from the VDS manufacturer.
- b. Wired camera systems shall be able to transmit NTSC or PAL video signals, with minimal degradation, up to 1000 feet under ideal conditions.
- c. Wireless camera systems shall be able to transmit an NTSC video signal, with minimal signal degradation, up to 500 feet under normal conditions and up to 900 feet under ideal electromagnetic interference conditions. Adjacent sources of electromagnetic radiation, or the absence of a direct line of sight between transmitter and receiver antennas, may result in video signal degradation.

## **C.2 System Interfaces**

The following interfaces shall be provided for each of the configurations identified in Table 1.

- a. 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.
- b. 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.
- c. 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.
- d. Serial Communications: A serial communications port shall be provided on the front panel. The serial port shall 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, or 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.
- e. Contact Closure Output: Open collector contact closure outputs shall be provided. Four (4) open collector outputs shall be provided for the single, dual or quad channel rack-mount configuration. Additionally, 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.
- f. 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.
- g. Mouse Port: A USB mouse 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. A mouse shall be provided with each video processor.

## **C.3 General System Functions**

Detection zones shall be programmed via an on board 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 Microsoft 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.

#### **C.4 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, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.

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.

## **D Hardware**

### **D.1 General**

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 available 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 according to user selectable channel assignments. The EM is available in 2, 4, or 24 channel configurations.

### **D.2 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.

### **D.3 Detection Outputs**

The VDP and EM shall include detector output pin out compatibility with industry standard detector racks. The 24-channel EM shall provide output through a 37-pin "D" connector on the front panel.

### **D.4 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.

### **D.5 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.

### **D.5 Mechanical and Environmental**

The VDP shall operate satisfactorily 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.

### **D.6 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.

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 3.8mm 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 design so that 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.

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

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.

## D.7 Video Monitor

The monitor shall be a flat screen color video monitor with a minimum 9" diagonal picture display. It shall support EIA standards RS-170 composite video signal (1.0 v p-p, 75 OHM).

It shall have a resolution of 900 lines at center. Video bandwidth shall be >11 MHz. Loop through connectors shall be provided, and both input and output connectors shall be BNCs.

The monitor power source shall be 120 VAC +/- 10%, 60 Hz. Power consumption shall not be greater than 18 W. Ambient operating temperature shall be +50 to +122 degrees Fahrenheit.

Located on the front panel, the controls shall be on/off, contrast, bright, vertical hold, and horizontal hold. Rear panel shall have controls for vertical size, vertical linearity and scan switch.

Dimensions shall not exceed 9" (W), 10" (H), and 7" (D). Weight shall not exceed 10 pounds.

## D.8 Coaxial Cable

The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be recommended by the manufacture. 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.

## D.9 Power Cable

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.

## E Installation

The video detection camera 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.

## F 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 on site 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.

## G Measurement

The department will measure Vehicle Video Detection System (Intersection) as each individual unit, acceptably completed per intersection.

## H Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Vehicular Vehicle Video Detection System CTH M (North Ave) & Calhoun Rd	LS
SPV.0105.02	Vehicular Vehicle Video Detection System CTH M (North Ave) & CTH YY (Pilgrim Rd)	L.S.
SPV.0105.03	Vehicular Vehicle Video Detection System CTH M (North Ave) & Lilly Rd	L.S.

Payment is full compensation for furnishing and installing control units, cameras, cabling, mounting brackets, testing and setting up the system.

**84. Reinstall Vehicular Video Detection System CTH M (North Ave) & N 124<sup>th</sup> St, Item SPV.0105.04.**

**A Description**

This work shall consist of salvaging and reinstalling the Non-Intrusive Detection Systems at CTH M (North Avenue) & N. 124<sup>th</sup> Street, as shown on the plans and as hereinafter provided.

**B Materials and Construction Methods**

1. Reinstall Vehicular Video Detection System shall include salvaging and reinstalling existing video detection cameras and mounting hardware as shown in the plans.
2. Salvaged video detection cameras units shall be mounted on the monotube or luminaire arms as shown on the Plans.
3. The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.
4. In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.
5. Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.
6. Furnish and install new video detection cables and power cables (as required) for all units impacted during construction to create a complete and functional system. There shall be no cable splices from the video detection units to the controller.

**D Measurement**

The department will measure Reinstall Vehicular Video Detection System as a lump sum unit of work at the intersection, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Reinstall Vehicular Video Detection System CTH M (North Ave) & N 124 <sup>th</sup> St	LS

Payment is full compensation for salvaging and reinstalling video detection equipment, cabling, necessary additional items, testing and setting up the systems.

**85. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Calhoun Road, Item SPV.0105.05.**

**A Description**

This work shall consist of salvaging and reinstalling the Emergency Vehicle Preemption (EVP) System at CTH M (North Ave) & Calhoun Road, as shown on the plans and as hereinafter provided.

**B Materials and Construction Methods**

1. The Emergency Vehicle Preemption System shall include salvaging and reinstalling detectors (4), confirmation lights (4) and discriminator (1). Contractor shall furnish and install EVP detector cable and confirmation light power cable.
2. Detectors shall be mounted on the monotube or luminaire arms as shown on the Plans. Contractor shall provide new mounting as required.
3. The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.
4. In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.
5. Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.

6. Furnish and install new detector cable to create a complete and functional system. There shall be NO detector cable splices from the detector assembly to the controller terminations.
7. The EVP detector cables shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. The contractor will perform all terminations inside the cabinet.
8. The EVP as specified and shown in the plans shall be complete in place, tested, and in full operation.

**C Measurement**

The department will measure Reinstall Emergency Vehicle Preemption System as a lump sum unit of work at the intersection, acceptably completed.

**D 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	Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Calhoun Road	LS

Payment is full compensation for salvaging and reinstalling EVP equipment, cabling, necessary additional items, testing and setting up the systems.

**86. Modify and Reinstall Emergency Vehicle Preemption System CTH M & CTH YY, Item SPV.0105.06.**

**A Description**

This work shall consist of salvaging and reinstalling the Emergency Vehicle Preemption (EVP) System at CTH M & CTH YY, as shown on the plans and as hereinafter provided.

**B Materials and Construction Methods**

1. The Emergency Vehicle Preemption System shall include salvaging and reinstalling detectors (3), confirmation lights (3) and discriminator (1). Contractor shall furnish and install one new detector and confirmation light assembly. Contractor shall furnish and install EVP detector cable and confirmation light power cable.
2. Detectors shall be mounted on the monotube or luminaire arms as shown on the Plans. Contractor shall provide new mounting as required.
3. The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.
4. In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.
5. Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.
6. Furnish and install new detector cable to create a complete and functional system. There shall be NO detector cable splices from the detector assembly to the controller terminations.
7. The EVP detector cables shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. The contractor will perform all terminations inside the cabinet.
8. The EVP as specified and shown in the Plans shall be complete in place, tested, and in full operation.

**C Measurement**

The department will measure Modify and Reinstall Emergency Vehicle Preemption System as a lump sum unit of work at the intersection, acceptably completed.

## D Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.06	Modify and Reinstall Emergency Vehicle Preemption System CTH M & CTH YY	LS

Payment is full compensation for salvaging and reinstalling EVP equipment, providing one new EVP detector and confirmation light assembly, cabling, necessary additional items, testing and setting up the systems.

## 87. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Lilly Road, Item SPV.0105.07.

### A Description

This work shall consist of salvaging and reinstalling the Emergency Vehicle Preemption (EVP) System at CTH M (North Ave) & Lilly Road, as shown on the plans and as hereinafter provided.

### B Materials and Construction Methods

1. The Emergency Vehicle Preemption System shall include salvaging and reinstalling detectors (3), confirmation lights (3) and discriminator (1). Contractor shall furnish and install EVP detector cable and confirmation light power cable.
2. Detectors shall be mounted on the monotube or luminaire arms as shown on the Plans. Contractor shall provide new mounting as required.
3. The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.
4. In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.
5. Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.
6. Furnish and install new detector cable to create a complete and functional system. There shall be NO detector cable splices from the detector assembly to the controller terminations.
7. The EVP detector cables shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. The contractor will perform all terminations inside the cabinet.
8. The EVP as specified and shown in the Plans shall be complete in place, tested, and in full operation.

### C Measurement

The department will measure Reinstall Emergency Vehicle Preemption System as a lump sum unit of work at the intersection, acceptably completed.

## D 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	Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Lilly Road	LS

Payment is full compensation for salvaging and reinstalling EVP equipment, cabling, necessary additional items, testing and setting up the systems.

## 88. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & N. 124<sup>th</sup> St, Item SPV.0105.08.

### A Description

This work shall consist of salvaging and reinstalling the Emergency Vehicle Preemption (EVP) System at CTH M (North Ave) & N 124<sup>th</sup> St, as shown on the plans and as hereinafter provided.

**B Materials and Construction Methods**

1. The Emergency Vehicle Preemption System shall include salvaging and reinstalling detectors (1) and confirmation lights (1) for westbound EVP detector "D". Contractor shall furnish and install EVP detector cable and confirmation light power cable.
2. Detector shall be mounted on the monotube as shown on the Plans.
3. The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.
4. In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.
5. Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.
6. Furnish and install new detector cable to create a complete and functional system. There shall be NO detector cable splices from the detector assembly to the controller terminations.
7. The EVP detector cables shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. The contractor will perform all terminations inside the cabinet.
8. The EVP as specified and shown in the Plans shall be complete in place, tested, and in full operation.

**C Measurement**

The department will measure Reinstall Emergency Vehicle Preemption System as a lump sum unit of work at the intersection, acceptably completed.

**D Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.08	Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & N. 124th St	LS

Payment is full compensation for salvaging and reinstalling EVP equipment, cabling, necessary additional items, testing and setting up the systems.

**89. Railroad Preemption System CTH M (North Ave) & CTH YY (Pilgrim Rd), Item SPV.0105.09.**

**A Description**

This work shall consist of furnishing and installing a Railroad Preemption System (RPS) at the intersection of CTH M (North Avenue) and CTH YY (Pilgrim Road), as shown on the plans and as hereinafter provided.

The RPS shall be used for both the temporary and permanent traffic signal system.

**B Materials**

The RPS shall be manufactured by CTC, Incorporated and shall consist of Processor Module, Expansion Module, RPS Rack with Backpanel and Cabinet Wiring Assembly. This equipment shall be furnished and installed by the contractor. The model numbers for the RPS system components are included below:

- X-RPS Processor Module – shall be model CTC-RPS -PO5
- X-RPS Expansion Module – shall be model CTC-RPS -E03
- X-RPS 2 Position RPS Rack with Backpanel
- X-RPS Cabinet Wiring Assembly – shall be model (CTC 20-1041)

The contractor shall furnish and installed, and Railroad Preemption Interconnect Circuit cable shall be Type UF Cable, 14 Conductor, No. 14 cable according to Section 655 of the Standard Specifications.

The Railroad Preemption Interconnect Circuit cable shall be routed from the RPS to the Railroad Equipment Bungalow. There shall be NO cable splices from the RPS to the Railroad Equipment Bungalow.

The RPS shall be used for both the temporary and permanent traffic signals. Additionally, the RPS shall interconnect to both the existing and proposed Railroad Equipment Bungalow. This will require coordination with SOO Railroad.

The RPS as specified and shown in the Plans shall be complete in place, tested, and in full operation.

### C Construction

Install the RPS per manufactures recommendations. The contractor will terminate the Railroad Preemption Interconnect Circuit cable ends in the signal controller and the Railroad shall terminate the cable in the Railroad Equipment Bungalow.

### D Measurement

The department will measure Preemption System (RPS) at the intersection 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.0105.09	Railroad Preemption System CTH M (North Ave) & CTH YY (Pilgrim Rd)	LS

Payment is full compensation for furnishing and installing the Railroad Preemption System (RPS) including Processor Module, Expansion Module, RPS Rack with Back panel, Cabinet Wiring Assembly, Railroad Preemption Interconnect Circuit cable, and setting up the system.

## 90. Temporary Vehicle Detection System, CTH M (North Ave) & Calhoun Road, Item SPV.0105.10; Temporary Vehicle Detection System, CTH M (North Ave) & CTH YY (Pilgrim Road), Item SPV.0105.11.

### A Description

This work shall consist of furnishing, installing, maintaining and placing into operation a temporary non-intrusive vehicle detection system (NIVDS) as shown on the plans, and as directed by the engineer in the field.

### B Materials

This specification sets forth the minimum requirements for a system that detects vehicles on a roadway and provides detection outputs to a traffic signal controller. The materials shall also include all brackets, mounting hardware, cable, terminations, interface panels, and all other incidentals for the installation of the non-intrusive vehicle detection equipment. This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.

All detection equipment, components, and terminations supplied under this item shall be fully compatible with the temporary traffic signal controller supplied for the project. The system architecture shall fully support Ethernet networking of system components. All required interface equipment needed for transmitting and receiving data shall be provided with the NIVDS.

The NIVDS shall provide flexible detection zone placement anywhere and at any orientation. Preferred detector configurations shall be detection zones placed across lanes of traffic for optimal count accuracy, detection zones placed parallel to lanes of traffic for optimal presence detection accuracy of moving or stopped vehicles. Detection zones shall be able to be overlapped for optimal road coverage.

### C Construction

The temporary NIVDS shall be installed by supplier factory-certified installers and as recommended by the supplier and documented in installation materials provided by the supplier.

In the event, at installation or turn on date, a noticeable obstruction is present in line with the detection zone(s), the contractor **shall** be obligated to advise the engineer before setting the zone.

The non-intrusive vehicle detection system, as shown in the traffic signal construction plans, **shall** be complete, in place, tested, and in full operation during each stage of construction.

Maintain all temporary vehicle detection zones as the plans show or as the engineer directs. The temporary vehicle detection zones shall be set near the vicinity and with approximate distance from the stop bar as shown on the plans. Check temporary vehicle detection zones every other week and at the opening of each stage of temporary traffic signal operation to ensure that they are working properly and aimed properly. Periodic adjustment of the detection zones and/or moving of the temporary vehicle detection sensors may be required due to changes in traffic control, staging, or other construction operations.

Ensure the non-intrusive vehicle detection system stays in clean working order. Periodic cleaning of the equipment may be required due to dirt and dust build-up.

#### **D Measurement**

The department will measure Temporary Vehicle Detection System (location) as a single lump sum unit of work at each intersection, acceptably completed.

#### **D Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.10	Temporary Vehicle Detection System, CTH M (North Ave) & Calhoun Road	LS
SPV.0105.11	Temporary Vehicle Detection System, CTH M (North Ave) & CTH YY (Pilgrim Road)	LS

Payment is full compensation for furnishing and installing the temporary non-intrusive vehicle detection system, including cabling, mounting brackets, mounting hardware, terminations, interface panels, testing and set up; for periodic checking and resetting of detection zones; for periodic cleaning for dirt and dust build-up; and for removing all equipment at the completion of the project.

### **91. Maintaining Temporary Drainage, STA 49+19, Item SPV.0105.13.**

#### **A Description**

This special provision describes maintaining drainage during construction operations at existing Structure B-67-31, as shown on the plans and according to the pertinent requirements of the standard specifications and as hereinafter provided.

#### **B Material**

Provide materials according to standard spec 520 and 628.

#### **C Construction**

Maintain drainage at and through worksite during construction according to standard spec 205, 520, and 628.

#### **C.1 Design Requirements**

It is the responsibility of the contractor to submit a design for maintaining temporary drainage during construction with the Erosion Control Implementation Plan (ECIP) documentation for approval by the department and the DNR.

An example of a potential method to maintain temporary drainage is provided in the plans. The contractor is not required to use this detail and shall be responsible for designing a temporary drainage system using the design criteria below. The contractor shall be responsible for determining sand bag placement, polyethylene sheeting, and pump size.

The design must withstand a 2-year storm event, using the design criteria shown in the plans.

Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps is considered incidental to the project.

Pumping clean water from the upstream to the downstream, bypassing the worksite, as the sole means of maintaining drainage is permitted.



## **C.2 Dewatering**

Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate best management practice for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection.

## **C.3 Dewatering (Mechanical Pumping) for Bypass Water (sediment-free) Operations**

If dewatering bypass operations are required from one pipe structure to another downstream pipe structure or from the upstream to downstream end of a culvert and the bypass flow is not transporting sediments (sand, silt, and clay particles) from a tributary work site area, bypass pumping operations will be allowed provided that the department has been made aware of and approves operation. When pumping bypass flows, the discharge location will need to be stable and not produce any erosion from the discharge velocity that would cause release of sediment downstream.

## **C.4 Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations**

If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. During dewatering operations, sediment laden water shall be pumped into an adequate sediment basin, approved by the engineer, in an upland area prior to discharge into a wetland or waterway.

## **C.5 Dewatering / Bypass Pumping Backup Equipment**

Provide an additional dewatering pump and generator to remain on site for use as a backup in case either the primary pump or generator is not in good working condition.

Provide the engineer with 24-hour contact information for an individual who is responsible for operating the pumps.

A representative of the contractor shall be at the construction site during rain events in order to monitor temporary drainage during rain events. Contact the engineer immediately if temporary drainage measures are damaged or are insufficient to handle the volume of water.

## **D Measurement**

The department will measure Maintaining Temporary Drainage as a single complete unit of work.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.13	Maintaining Temporary Drainage, STA 49+19	LS

Payment is full compensation for any common excavation needed for temporary pipe installation; for all pumping and dewatering operations; for all materials including (but not limited to) temporary culvert pipes, cofferdams, piling steel sheet temporary, polyethylene sheeting, and rock bags; for placement, replacement, and any moving of materials.

## **92. Removing Roadway Signs, Item SPV.0105.14.**

### **A Description**

This special provision describes removing signs and supports along CTH M and sideroads within the project limits.

### **B (Vacant)**

**C Construction**

Under this special provision, the contractor shall remove existing signs from their supports.

Aluminum Type II signs along CTH M and CTH YY are the property of the Waukesha County Department of Public Works. The contractor shall return these signs to the Waukesha County Department of Public Works facility located at 1641 Woodburn Road, Waukesha, WI 53188. Signs shall be palletized for handling with a forklift. Contact the shop at least 3 business days in advance to coordinate the shipment. No deliveries shall occur on Friday.

Street name signs along sideroads are the property of the City of Brookfield Department of Public Works. The contractor shall return these signs to the City of Brookfield Department of Public Works facility located at 19700 Riverview Drive, Brookfield, WI 53045. Signs shall be palletized for handling with a forklift. Contact the Highway Division at (262) 782-5029 at least three business days in advance to coordinate the shipment.

The contractor shall remove wood supports, and flanged, steel channel or other supports. The supports are to become the contractor’s property. The contractor shall satisfactorily dispose of these supports off the right-of-way.

Restore the site to repair any damage caused by removing the signs. Dispose of any surplus materials or excavation. Remove all unused concrete footings resulting from the removing of the signs and fill the resulting holes with earth or other suitable material as required. Restore the area to a condition similar to the adjacent area.

**D Measurement**

The department will measure Removing Roadway Signs as a complete unit, in place, and accepted, and will be measured as lump sum.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.14	Removing Roadway Signs	LS

Payment is full compensation for removing the roadway signs, handling and returning Waukesha County and City of Brookfield signs, and restoring the site. Payment does not include compensation for furnishing new wood posts, steel sign supports and concrete footings, if required.

**93. Vibration Monitoring, Item SPV.0135.01.**

**A Description**

This special provision describes developing a vibration monitoring plan, deploying seismographs for continuous monitoring and recording, documentation, and reporting.

**B (Vacant)**

**C Construction**

**C.1 General**

Vibration Monitoring establishes vibration recordings at the closest affected locations. This spans the entire duration of operations for various vibration inducing activities identified within this special provision unless monitored readings are sufficiently below nuisance limits in Figure 1 and engineer determines that continued monitoring will be at the contractor’s discretion.

**C.2 Equipment**

Use a seismograph meeting the requirements of Wisconsin Department of Safety and Professional Services SPS307.43. Use monitoring equipment with an instantaneous alert notification system that consists of a text message or an e-mail alert message automatically sent directly to the engineer and all individuals identified by the engineer any time the nuisance limits in Figure 1 are exceeded.

### **C.3 Preconstruction Survey**

The engineer will conduct preconstruction surveys of structures that may be potentially affected by vibration before any work. The engineer will visually inspect and record all existing defects in the structures before construction. Photographs or video may be used to assist in documentation.

The contractor may conduct and document pre-construction surveys of any additional nearby buildings or structures not identified by the engineer. Provide results to engineer before construction. Any damage resulting from excessive vibration-causing operations or claims of damage during construction is the responsibility of the contractor to resolve.

### **C.4 Monitoring Plan**

Submit a monitoring plan that includes the following:

- Location of each vibration-inducing activity to be monitored
- Locations at which the approved seismographs will be placed
- Anticipated vibration levels at the closest building(s) or other sensitive facility during the various activities
- Anticipated monitoring duration for each monitoring location
- Maximum allowable vibration limits
- Mitigation plan to reduce potentially excessive vibration levels to acceptable limits.

Obtain the engineer's acceptance seven calendar days before any vibration-inducing activity for the project.

### **C.5 Monitoring and Recording**

Monitor the following operations:

- Bridge and sign bridge pile driving or bridge demolition
- Sheet pile installation and removal
- MSE wall compaction
- Asphalt compaction
- Pavement breaking
- All compaction activities utilizing large vibratory rollers
- Any other activities that may cause vibration damage to adjacent buildings, structures, or utilities.

Ensure that a qualified person operates and continuously monitors the vibration monitoring equipment. If any vibration levels exceed the nuisance levels shown, immediately halt the vibration-inducing work, and notify the engineer.

Monitor between the construction vibration source and the closest structure or other sensitive facility subject to vibration damage, and as close as practical to the subject structure or facility. Monitor vibration levels according to Figure 1 and SPS 307.43.

Compare the measured peak particle velocity and frequency data to the nuisance limits specified in Figure 1. Record peak particle velocity and frequency in three mutually perpendicular directions.

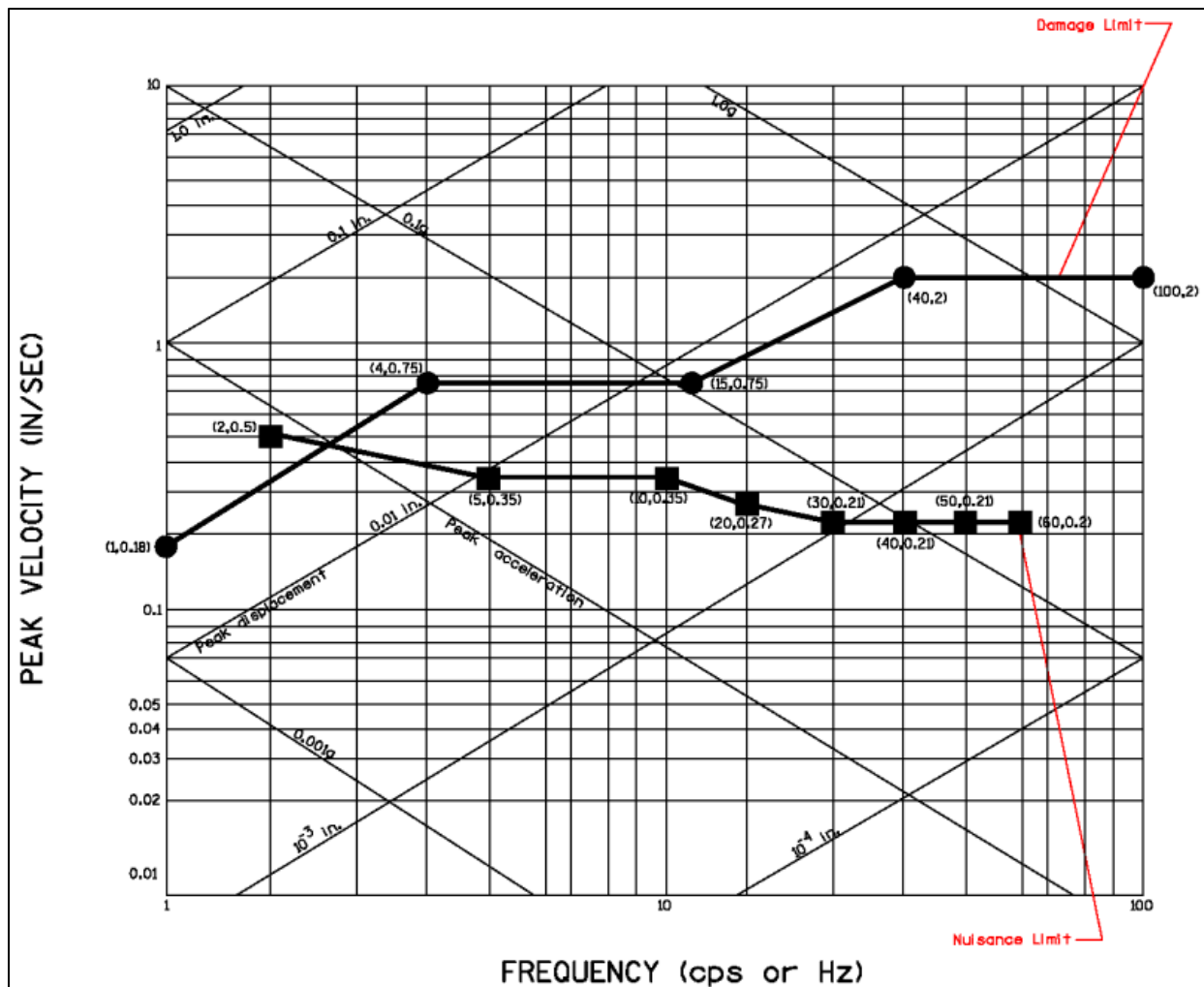


Figure 1: Amplitude of Vertical Vibrations

### C.6 Reporting

Furnish a weekly bound report of data recorded at each location to the engineer by 4 PM CST every Friday. Additionally, provide a separate daily report documenting any work that was halted before the next vibration-causing workday. Include the following in both reports:

- Date vibration monitoring operations began for each location with an associated compilation of total days currently monitored at each site.
- Identification of vibration inducing activities monitored each day at each location
- Serial number of vibration monitoring instrument used and record of latest calibration.
- Description of contractor's equipment.
- Name of qualified observer and interpreter.
- Distance and direction of recording station from vibration source.
- Surficial material type at recording station.
- Principal frequency and particle velocity in each component direction.
- Copy of records of seismograph readings, dated and signed by the person qualified to perform vibration monitoring.
- Contractor documentation of any operational changes necessary to reduce vibration levels below nuisance levels.

## D Measurement

The department will measure Vibration Monitoring by months, or partial months where applicable, for each seismograph monitoring site, 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.0135.01	Vibration Monitoring	MON

Payment of the item Vibration Monitoring is full compensation for providing, setting up and removal of recording unit, an approved vibration monitoring plan, continuous monitoring and recording vibrations, and reporting. No payment for Vibration Monitoring will be made without agreement on recommended locations. Continued monitoring at locations where readings are sufficiently below nuisance limits will be at the contractor's expense.

Any pre-construction surveys of additional nearby buildings or structures not identified by the engineer will be conducted at no additional cost to the department.

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- 94. Wall Modular Block Gravity Landscape, Sta. 98+50 LT; Item SPV.0165.01;  
Wall Modular Block Gravity Landscape, Sta. 99+40 LT; Item SPV.0165.02;  
Wall Modular Block Gravity Landscape, Sta. 131+60, LT; Item SPV.0165.03;  
Wall Modular Block Gravity Landscape, Sta. 148+00 LT, Item SPV.0165.04;  
Wall Modular Block Gravity Landscape, Sta. 214+00 RT, Item SPV.0165.05.**

### A Description

This special provision describes designing, furnishing materials and erecting a permanent earth retention system according to the lines, dimension, elevations and details as shown on the plans and provided in the contract. The design life of the wall and all wall components shall be 75 years minimum.

### B Materials

#### B.1 Proprietary Wall Systems

The supplied wall system must be from the department's approved list of Modular Block Gravity Landscape Wall systems. Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures. The department maintains a list of pre-approved proprietary wall systems. The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The location of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid closing date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared in accordance to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section at the following email address: [DOTDLStructuresFabrication@dot.wi.gov](mailto:DOTDLStructuresFabrication@dot.wi.gov).

#### B.2 Design Requirements

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design is in compliance with the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit electronically to the engineer and Bureau of Structures for review and acceptance. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

The plans and shop drawings shall be prepared on reproducible sheets 11-inch x 17-inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the WisDOT project identification number and structure number. Design calculations and notes shall be on 8 ½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All plans, shop drawings, and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.

The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current Standard Specifications for Highway and Structure Construction (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 in AASHTO LRFD.

Design and construct the walls according to the lines, grades, heights and dimensions shown on the plans, as herein specified, and as directed by the engineer.

Walls shall be designed for a minimum live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as shown on the plans.

A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees.

An external stability check at critical wall stations showing Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing checks is provided by the department and are provided on the wall plans.

The design of the wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. Internal stability shall also be considered at each block level. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. The width of the modular block from front face to back face of the wall shall be included in the design computations and shown on the wall shop drawings. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software program used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Wall facing units shall be designed according to AASHTO LRFD 11.10.2.3.

The minimum embedment of the wall shall be 1 foot 6 inches below finished grade, or as given on the plans. All walls shall be provided with a concrete or base aggregate leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

Wall facing units shall be installed on a concrete leveling pad or base aggregate leveling pad. The bottom row of blocks shall be horizontal and 100% of the block surface shall bear on the leveling pad.

Concrete leveling pads shall be as wide as the proposed blocks plus six inches, with six inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6-inches.

Base aggregate leveling pads shall be as wide as the blocks plus 12 inches, and the modular blocks shall be centered on the leveling pad. The minimum thickness of the leveling pad shall be 12-inches after compaction. The leveling pad shall be made from base aggregate dense 1 1/4-inch in conformance with standard spec 305.

### **B.3 Wall System Components**

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All documentation related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

### B.3.1 Wall Facing

Wall facing units shall consist of precast modular concrete blocks. Furnish concrete produced by a dry-cast or wet-cast process. Concrete for all blocks shall not contain less than 565 pounds of cementitious materials per cubic yard. The contractor may use cement conforming to standard spec 501.2.1 or may substitute for portland cement at the time of batching conforming to standard spec 501.2.6 for fly, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30% of the total cementitious content by weight.

Dry-cast concrete blocks shall be manufactured according to ASTM C1372 and this specification.

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02" and longer than 25% of the nominal height of the unit, chips larger than 1", have excessive efflorescence, or are otherwise deemed unacceptable by the engineer, shall not be used within the wall. A single block type and style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course of facing units shall be as noted on the plans, either;

- Solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material.
- A formed cast-in-place concrete cap. A cap of this type shall have texture, color, and appearance, as noted on the plans. The vertical dimension of the cap shall not be less than 3 1/2 inches. Expansion joints shall be placed in the cap at a maximum spacing of 20 feet unless noted otherwise on the plan. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Block dimensions may vary no more than  $\pm 1/8$  inch from the standard values published by the manufacturer. Blocks must have a minimum depth (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. The minimum allowed thickness of any other portions of the block is  $1\frac{3}{4}$  inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

If pins are used to align modular block facing units, they shall consist of a non-degrading polymer, or hot dipping galvanized steel and be made for the express use with the modular block units supplied, to develop mechanical interlock between facing unit block layers. Connecting pins shall be capable of holding the wall in the proper position during backfilling. Furnish documentation that establishes and substantiates the design life of such devices.

For concrete leveling pad, use Grade A, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete.

For base aggregate leveling pad conform to item 305.0120 Base Aggregate Dense 1 1/4-Inch.

### B.3.2 Material Testing

Provide independent quality verification testing of project materials according to the following requirements:

Test	Method	Requirement	
		Dry-cast	Wet-cast
Compressive Strength (psi)	ASTM C140	5000 min.	4000 min.
Air Content (%)	AASHTO T152	N/A	6.0 +/-1.5
Water Absorption (%)	ASTM C140	6 max. <sup>[3]</sup>	N/A
Freeze-Thaw Loss (%) 40 cycles, 5 of 5 samples 50 cycles, 4 of 5 samples	ASTM C1262 <sup>[1]</sup>	1.0 max. <sup>[2][3]</sup> 1.5 max. <sup>[2][3]</sup>	N/A

- [1] Test shall be run using a 3% saline solution and blocks greater than 45 days old.
- [2] Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable.
- [3] The independent testing laboratory shall control and conduct all sampling and testing. Prior to sampling, the manufacturer's representative shall identify materials by lot. Five blocks per lot shall be randomly selected for testing. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory. All pallets of blocks within a lot shall be strapped or wrapped to secure the contents and tagged or marked for identification. The engineer will reject any pallet of blocks delivered to the project without intact security measures. At no expense to the department, the contractor shall remove all rejected blocks from the project. If a random sample of five blocks of any lot tested by the department fails to meet any of the above testing requirements, the entire lot will be considered non-conforming.

The contractor and fabricator shall coordinate with the independent testing agency to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot.

The certified test report shall include the following:

- Project ID
- Production process used (dry-cast or wet-cast)
- Name and location of testing facility
- Name of sampling technician
- Lot number and lot size

Testing of project materials shall be completed not more than 18 months prior to delivery. Independent testing frequency shall not exceed 5000 blocks for dry-cast blocks and the lesser of 150 CY or 1 day's production for wet-cast blocks. The certified test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting certified test reports will be rejected and shall be removed from the project at no expense to the department.

Nonconforming materials will be subject to evaluation according to standard spec 106.5.

### **B.3.3 Backfill**

Furnish and place backfill for the wall as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate Size No. 1 as given in standard spec 501.2.5.4. All backfill placed within a zone from the top 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 shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

A layer of Geotextile Type "DF" (Schedule B) shall be placed vertically between the backfill and the Type A backfill. The geotextile shall extend from the top of the leveling pad to 6 inches below the surface of the retained soil. The geotextile shall then wrap across the top of the Type A backfill to the back of block wall facing.

Backfill placed between retained soil and Type A backfill shall comply with the requirements for Granular Backfill Grade 1 as contained in standard spec 209.2.2. The contractor may substitute Type A Backfill for Granular Backfill Grade 1.

## **C Construction**

### **C.1 Excavation and Backfill**

Excavation and preparation of the foundation for the wall and the leveling pad shall be according to standard spec 206. 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 back of the wall.

Place backfill materials in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth, after compaction. Backfilling shall closely follow erection of each course of wall facing units.



Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units or other wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the contractor and the engineer.

Do not operate tracked or wheeled equipment on the backfill within 3 feet from the back face of modular blocks. The engineer may order the removal of any large or heavy equipment that may cause damage or misalignment of the wall facing units.

### **C.2 Compaction**

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

Ensure adequate moisture is present in the backfill during placement and compaction to prevent segregation and to help achieve compaction.

Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks.

### **C.3 Wall Components**

Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers according to the manufacturer's directions.

### **C.4 Geotechnical Information**

Geotechnical data to be used in the design of the wall is given on the wall plan.

### **D Measurement**

The department will measure Wall Modular Block Gravity Landscape by the square foot acceptably completed, measured at the front face of wall as defined by the pay limits the contract plans show. Unless the engineer directs in writing, a change to the limits indicated on the contract plan, wall area constructed above or below these limits will not be measured for payment.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Wall Modular Block Gravity Landscape Sta. 98+50 LT	SF
SPV.0165.02	Wall Modular Block Gravity Landscape Sta. 99+40 LT	SF
SPV.0165.03	Wall Modular Block Gravity Landscape Sta. 131+60 LT	SF
SPV.0165.04	Wall Modular Block Gravity Landscape Sta. 148+00 LT	SF
SPV.0165.05	Wall Modular Block Gravity Landscape Sta. 214+00 RT	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional wall system including cap, copings and leveling pad; constructing the retaining system including drainage system; providing backfill, backfilling, compacting, and performing compaction testing.

Payment limit for all walls is the line of minimum embedment per section B.2. No payment will be made for additional embedment detailed for construction purposes.

Parapets, railings, and other items above the wall cap or coping will be paid for separately. Vehicle barrier and its support will be paid separately.

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

**95. Hydroseeding, Item SPV.0180.01.**

**A Description**

This special provision describes furnishing, hauling and applying hydroseed including seed mix, fertilizer, and water as directed by the engineer, and as hereinafter provided. Conform to the requirements of standard spec 630 and as hereinafter provided.

**B Materials**

Furnish materials conforming to standard spec 630 or as modified herein.

Seed mix shall be #30 as specified in standard spec 630. Seed mix #30 shall also include 5% winter wheat.

Fertilizer shall be Type B as specified in standard spec 629.

Mulch shall be a hydraulically-applied matrix of blended materials, pre-packaged by the manufacturer that consists of mechanically processed straw (75% +/- 3%), mechanically processed reclaimed cotton plant material (15% +/- 3%) and proprietary hydro-colloid tackifiers (10% +/- 1%). HydraCM by North American Green®, A Tensar® Company or equivalent material shall be used.

**C Construction**

Conform to the requirements of standard spec 630.3.3.2 Method B.

Prior to installation, examine substrates and conditions where materials will be applied. Apply product to geotechnically stable slopes.

Strictly comply with manufacturer's installation instructions and recommendations. For optimum pumping and application performance use approved mechanically agitated, hydraulic seeding/mulching machines. Apply pre-packaged mulch from opposing directions to achieve maximum soil coverage.

Fill tank of a mechanically agitated hydroseeding machine with sufficient water to suspend seed and fertilizers. Add all soil amendments. Continue adding water slowly while adding the pre-packaged mulch at a steady rate. Consult application and loading charts to determine the proper application rates. Mix at a rate of 50 lbs of pre-packaged mulch per 100 gallons of water. Confirm loading rates with equipment manufacturer. All mulch should be loaded when the tank is approximately ¾ full. Agitate for a minimum of fifteen minutes after adding the last amount of mulch. For machines with variable speed agitation bring agitator to a slow roll while maintaining high RPMs.

Apply the hydroseed in a uniform layer from two opposing directions to ensure complete soil coverage. Irregular surfaces may need slightly higher application rates to obtain adequate coverage. Apply materials at the following minimum application rate:

<b>Minimum Application Rates</b>	
<b>SLOPE</b>	<b>APPLICATION RATE</b>
2H:1V	4,000 lbs./ac (4,500 kg/ha)
≥ 3H:1V and < 2H:1V	3,500 lbs./ac (3,900 kg/ha)
≥ 4H:1V and < 3H:1V	3,000 lbs./ac (3,400 kg/ha)
< 4H:1V	2,500 lbs./ac (2,800 kg/ha)

Material should not be applied in channels, swales, or other areas where concentrated flows are anticipated, unless installed in conjunction with a temporary erosion control blanket or permanent turf reinforcement mat. The hydroseed may be applied on saturated soils.

Clean equipment properly after use of this product to ensure that the hydroseed is removed from the pump, tank, and hoses. Clean spills promptly. Do not allow foot traffic or grazing on treated areas until vegetated. Be cautious of slippery surfaces while applying.

**D Measurement**

The department will measure Hydroseeding in place by the square yard of surface area, 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	Hydroseeding	SY

Payment is full compensation for furnishing, hauling and applying hydroseed including seed mix, fertilizer, and water.

**96. Polystyrene Insulation, 4-Inch Thickness, Item SPV.0180.02.**

**A Description**

This special provision describes furnishing and placing polystyrene insulation board as shown on the plans in areas where a water main and/or water services crosses a storm sewer and as hereinafter provided.

**B Materials**

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230, except as hereinafter revised. Delete flammability requirement.

**C Construction**

Insulation shall be used where a water main and/or water service crosses a storm sewer. Insulation shall be installed at locations shown on the plans and as directed by the engineer according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, File No. 48.

Insulation shall be installed in two layers for a total of 4-inches thickness. Joints between such layers shall be staggered.

**D Measurement**

The department will measure Polystyrene Insulation, 4-Inch Thickness measured by area in square yards of work, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.02	Polystyrene Insulation, 4-Inch Thickness	SY

Payment is full compensation for all excavation; furnishing and placing the insulation board.

**97. Rebuild Sanitary Sewer Manhole, Item SPV.0200.01.**

**A Description**

This special provision describes the rebuilding of City of Brookfield sanitary sewer manholes identified from below the bottom of the existing cone section to the top of frame and casting. Perform this work according to the pertinent provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments, except as herein modified.

**B Materials**

Rebuild manhole using a cone section, additional barrel sections as necessary, and concrete adjusting rings and mortar.

**C Construction**

Perform work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition and all amendments. Set manhole frames to finished grade. All work shall be per City of Brookfield Standard Detail Plate No. 011.

The contractor shall remove the existing cone section or deck and any necessary barrel sections, salvage the existing frame and casting, install new barrel(s), deck or cone section, construct the chimney section, and reset the salvaged frame and casting to proposed grade.

Contact the Brookfield Engineering Department to schedule inspection, at (262) 787-3919, three days prior to work being performed.

**D Measurement**

The department will measure Rebuild Sanitary Sewer Manhole shall be measured per vertical foot (VF) from the bottom of the lowest barrel section removed to the top of the frame and casting, 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.0200.01	Rebuild Sanitary Sewer Manhole	EACH

Payment is full compensation for rebuilding existing manholes from the bottom of the lowest barrel section removed to the top of the frame and casting. This shall include but not be limited to construction, necessary removals, excavation, and backfilling.

This shall include adjusting the existing or new manhole frame and casting to finish grade. Any additional adjustments required to perform this work or additional adjustments as directed by the engineer shall be considered incidental. No payment will be made on this item for any new sanitary manhole frame and casting constructed as part of this project. Sanitary manhole seals will be paid separately at their respective unit bid price.

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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 15 (*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 6 (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 under-representation 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 [DBE] PROGRAM IMPLEMENTATION

#### 1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
  - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
  - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance.  
<https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>
  - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. 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.
  - (2) Wisconsin DOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from 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.
  - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:  
<https://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

## 2. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **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.
- e. **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.
- f. **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. 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. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. 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. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

- a. **Department's DBE Evaluation Process**  
WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.
- b. **Documentation Submittal**  
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]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) ([DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov)) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

(1) **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 calculation. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

(2) **Bidder Does Not Meet DBE Goal**

- i. 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 Efforts 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 efforts submission.
- ii. The department will evaluate the bidder's good faith effort request and notify the bidder of one of the following:
  - (a) If the department grants a good faith efforts, the bid is eligible for contract execution with respect to DBE commitment.
  - (b) If the department rejects the good faith efforts request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith efforts request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

c. **Bidder Fails to Submit Documentation**

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] 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.

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

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly 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 practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

The department will only approve a contractor's good faith efforts 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 efforts 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.

- a. 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.

## b. Prime Contractors should:

- (1) 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.
- (2) Prime contractors may request assistance with DBE outreach and follow-up by contacting the department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Requesting assistance with outreach is not a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: [DOTDBESupportServices@dot.wi.gov](mailto:DOTDBESupportServices@dot.wi.gov).
- (3) 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.
  - i. Solicit quotes from certified DBE firms who match 'possible items to subcontract' using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which you are seeking quotes to [DOTDBESupportServices@dot.wi.gov](mailto:DOTDBESupportServices@dot.wi.gov).
  - ii. 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, at least two Fridays before the letting, to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
    - (c) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up solicitation.
  - iii. 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.
  - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit or insurance if requested.
  - v. 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) Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

c. Evaluate DBE quotes Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.

- (1) 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 by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
- (2) In striving to meet an assigned DBE 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.

- (3) **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.
- i. Compare bid items common to both quotes, noting the reasonableness in the price comparison.
  - ii. 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.
- d. Immediately after notification of contract award, the prime submits all '**Commitment to Subcontract**' forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
- (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
  - (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. A printed copy of SBN solicitation is acceptable.
  - (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.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

## 6. Use of Joint Checks

*The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE, a prime contractor and the regular dealer of materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE in cases where the prime has submitted the DBE and material for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.*

The cost of material and supplies purchased by the DBE is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
  - (1) Request should be made when the DBE Commitment form or Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
  - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
  - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
  - (4) The joint check for supplies must be strictly for the cost of supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following.
  - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
  - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor,
  - (1) The prime agrees to furnish the check used for the payment of materials/supplies under the contract.
  - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractors negotiated unit price.

## 7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. 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 denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- 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 5 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.

## 8. Department's Criteria for DBE Participation

### Directory of DBE firms

- a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:  
<https://wisconsin.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

## 9. 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 whether the work that is committed and/or contracted to a DBE certified firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he is committing/contracting the DBE to do. Note that the department encourages the prime contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

## 10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE is performing a commercially useful function if the following conditions are met:
  - (1) 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.
  - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.



## 11. Credit Evaluation for Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at <https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

## 12. Credit Evaluation for Manufacturers, Suppliers, Brokers

The department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The department will count the material and supplies that a DBE provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

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.

### a. Manufacturers

- (1) A manufacturer is 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 and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, count **100%** percent of the cost of the materials or supplies toward DBE goals.

### b. Regular Dealers of Material and/or Supplies

- (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
  - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
  - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

### c. Brokers, Transaction Expeditors, Packagers, Manufacturers Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit; however, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives or other persons who arrange or expedite transactions.
- (2) Brokerage fees have historically been calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site.
- (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.



When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and documentation of the calculations used as the basis for the purchase agreement, subcontract or invoice. *WisDOT recognizes that the amount on the Attachment 'A' form may be more or less than the amount on the invoice.* Please respond to the following questions and submit with your DBE Commitment Form.

1. What is the product or material?
2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
3. Which contract line items were referenced to develop this quote?
4. What is the amount of material or product used on the project?

### **13. Credit Evaluation for DBE Primes**

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

### **14. 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 for DBE credit.

### **15. Mentor Protégé**

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be evaluated and confirmed by the DBE Office for any contracts on which the mentor protégé team identifies itself to the DBE Office as a current participant of the Mentor Protégé Program.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

### **16. DBE Replacement or Termination**

#### **Contractual Requirement**

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

#### **Contractor Considerations**

- a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason or is terminated from a contract, the prime contractor is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
  - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
    - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
    - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent* to request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
    - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
    - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days to respond, in writing. **EXCEPTION:** The prime contractor must provide a verifiable reason for a response period shorter than five days. For example a WisDOT project manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
    - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

### **The Request to Replace or Terminate a DBE**

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

1. Contract ID number.
2. Wisconsin DOT Contract Project Manager name and contact information.
3. DBE name and work type and/or NAICS code.
4. Contract's progress schedule.
5. Reason(s) for requesting that the DBE be replaced or terminated.
6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

*Examples of Good Causes to Replace a DBE according to the federal DBE program guidelines {49 CFR part 26.53}*

- The listed DBE subcontractor fails or refuses to execute a written contract.
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor.
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

**Evaluation and Response to the Request**

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) or by calling 608-267-3849.

**17. DBE Utilization beyond the approved DBE Commitment Form DT1506**

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- a. Send an email to the DBE Engineer at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally.  
If the scope change added work for a participating DBE; list the date and reason for the scope change.
- b. Forward a complete, signed Attachment 'A' form to the DBE Office at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov). A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.  
The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

## **18. 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.

## **19. 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

<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

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 alternatives 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 <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

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 someone contact me at this number

<p><b>Prime Contractor 's Contact Person</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Phone: _____</p> <p>Fax: _____</p> <p>Email: _____</p> <p>_____</p>	<p><b>DBE Contractor Contact Person</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Phone: _____</p> <p>Fax: _____</p> <p>Email: _____</p> <p>_____</p>
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**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 alternatives 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**

- Ø Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Ø Participate in speed networking and mosaic exercises as arranged by DBE office.
- Ø Host information sessions not directly associated with a bid letting.
- Ø Participate in a formal mentor protégé or joint venture with a DBE firm.
- Ø Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Ø Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods.
- Ø Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Ø 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**

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Ø 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.
- Ø Participate in DBE office assessment programs.
- Ø Participate on advisory and mega-project committees.
- Ø Sign up to receive the DBE Contracting Update.
- Ø Consider membership in relevant industry or contractor organizations.
- Ø 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 a 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](http://www.bidx.com) and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
  - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588.

## **ADDITIONAL SPECIAL PROVISION 4**

### **Payment to First-Tier Subcontractors**

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

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

### **Payment to Lower-Tier Subcontractors**

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

### **Release of Routine Retainage**

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

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

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

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

**ADDITIONAL SPECIAL PROVISIONS 5****Fuel Cost Adjustment****A Description**

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

**B Categories of Work Items**

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

### C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$2.15 per gallon.

### D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \frac{CFI}{BFI} - 1 \times Q \times BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

### E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

## Additional Special Provision 6

### ASP 6 - Modifications to the standard specifications

*Make the following revisions to the standard specifications:*

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#### 104.3 Contractor Notification

*Replace the entire text with the following effective with the December 2019 letting:*

##### 104.3.1 General

- (1) Subsection 104.3 specifies the step-by-step communication process to be followed to expedite the resolution of potential contract revisions identified by the contractor. Both contractor actions and department responses are outlined. The contractor's non-compliance with the requirements of 104.3 may constitute a waiver of entitlement to a pay adjustment under 109.4 or a time extension under 108.10. The department and contractor can mutually agree to extend any time frame specified throughout 104.3.

##### 104.3.2 Contractor Initial Oral Notification

- (1) If required by 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, the contractor must promptly provide oral notification to the project engineer. Upon notification, the project engineer will attempt to resolve the identified issue.

##### 104.3.3 Contractor 5-Day Written Statement

- (1) If the project engineer has not responded or resolved the identified issue within 5 business days after receipt of initial notification, provide a contractor written statement to the project engineer in the following format:

###### Part 1 - Executive Summary (label page 1.1 through page 1.x)

Include a detailed, factual statement of the request for additional compensation and contract time. Include the date the issue was identified, the date initial notification was given to the project engineer, and the dates and specific locations of work involved.

###### Part 2 - Contractor's Basis of Entitlement (label page 2.1 through page 2.x)

Include references to relevant contract provisions and a narrative summarizing how the contract provisions support the request for a revision to the original contract.

###### Part 3 - Contractor's Request for Damages (label page 3.1 through page 3.x)

When requesting additional compensation, include an itemized list of costs with a narrative supporting the requested amount and explaining how the costs are tied to the requested contract revision.

When requesting additional contract time, include a copy of the schedule that was in effect when the issue occurred and a detailed narrative explaining how the issue impacted controlling items of work. Provide a time impact analysis utilizing base and updated schedules.

If the full extent of either compensation or time is not known at the date of submittal of the contractor 5-Day written statement, provide a brief statement as to why, and include estimated compensation and time.

###### Part 4 - Supporting Documentation (label page 4.1 through page 4.x)

Include copies of the following:

- A. Relevant excerpts from specifications, special provisions, plans, change orders, or other contract documents.
  - B. Communication on the issue, including: letters, e-mails, meeting minutes, etc.
  - C. Any other documentation to support or clarify the contractor's position, including: daily work records, cost summary sheets, weigh tickets, test results, sketches, etc.
- (2) With the submittal of the written statement, the contractor may also request a meeting with the region.

##### 104.3.4 Region One-Day Written Acknowledgment

- (1) Within one business day after the contractor provides the 5-day written statement, the project engineer will provide a region one-day written acknowledgment to the contractor. The project engineer will continue to resolve the issue.

##### 104.3.5 Region 5-Day Written Response

- (1) Within 5 business days after receiving the contractor 5-day written statement, the project engineer may request specific additional information to allow the project engineer to decide whether item 1 or 2 of 104.3.6(1) applies. The project engineer will state the information needed and date it is to be



received for further review. Submit additional information as an amendment to the contractor 5-day written statement.

#### **104.3.6 Region Final Decision**

- (1) Within 10 business days after receiving the contractor 5-day written statement or additional information requested in 104.3.5(1), whichever comes last, the region will consider all information and provide a region final decision in writing to the contractor with one or more of the following responses:
    1. The region will confirm that the contractor is entitled to a contract revision and a contract change order is necessary as specified in 104.2. The project engineer will give direction concerning the potential change.
    2. The region will deny that the contractor is entitled to a contract revision. The project engineer will provide a statement as to why the issue is not a change to the contract. At a minimum, the project engineer will respond to the contractor's issues and refer to the contract to show why the issues are not a change from the original contract.
  - (2) If the contractor does not agree with the region's decision the contractor may pursue the issue as a claim as specified in 105.13. Alternatively, if the contractor and department mutually agree, the department will get a third-party advisory opinion according to the department's dispute resolution procedures.
  - (3) If a third party reviews the issue, their recommendation is not binding on either party. The region has 10 business days after receipt of the third party's written recommendation to render a decision. If the department fails to respond in writing within those 10 business days or the contractor disagrees with the region's decision, the contractor may pursue the issue as a claim as specified in 105.13.
- 

#### **104.6.1.2.1 General**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Conduct construction operations and provide facilities required to maintain the portion of the project open to the public in a condition that safely and adequately accommodates public traffic. Use barricades, signs, flaggers, and temporary barrier as specified in part VI, of the WMUTCD and ensure that the contractor's use of the right-of-way conforms to 107.9. Throughout the life of the contract, and as the engineer directs, conduct construction operations and provide facilities as follows:
    - Conduct flagging operations conforming to plan details and the department's flagging handbook.
    - Use drums, barricades, and temporary barrier to delineate and shield abrupt drop-offs and other hazards.
    - Furnish, erect, and maintain traffic control devices and facilities conforming to 643.
    - Furnish, erect, and maintain temporary pedestrian devices and facilities conforming to 644.
- 

#### **104.6.1.2.2 Flagging**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Provide associated advanced warning signs that meet the retroreflective requirements of 637.2.2.2. Provide temporary portable rumble strips from the department's APL installed according to manufacturer's instructions and as specified in the flagging plan details. Provide guidance service through the worksite using pilot vehicles if required.

Replace paragraph five with the following effective with the December 2019 letting:

- (5) Flagging is incidental to the contract and includes costs for advance signing, temporary portable rumble strips, and pilot vehicle guidance service.

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**104.8 Rights in the Use of Materials Found on the Project**

*Replace paragraph two with the following effective with the December 2019 letting:*

- (2) Do not excavate or remove material from within the right-of-way that is not within the vertical and horizontal excavation limits the plans show except as follows:
- If the contract does not identify potential source areas, obtain written authorization from the engineer to use those sources. Complete required environmental documentation and obtain necessary permits. The department will reduce pay by \$1.50 per cubic yard under the Material from Right-of-Way administrative item for material obtained from those areas.
  - If the contract identifies potential source areas that were evaluated and permitted in the original environmental document, do not begin excavating in those areas until the engineer allows in writing. Additional environmental documentation and environmental permits are not required. The department will not reduce pay for material obtained from those areas.

The department may suspend use of these sources if the contractor's operation affects the essential functions or characteristics of the project.

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**104.10.1 General**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Subsection 104.10 specifies a 2-step process for contractors to follow in submitting a cost reduction incentive (CRI) for modifying the contract in order to reduce direct construction costs computed at contract bid prices. The initial submittal is referred to as a CRI concept and the second submittal is a CRI proposal. The contractor and the department will equally share all savings generated to the contract due to a CRI as specified in 104.10.4.2(1). The department encourages the contractor to submit CRI concepts for the following situations:
1. The contractor generates the original cost savings idea and formulates it into a concept.
  2. The department generates the original cost savings idea and obtains the contractor's assistance to formulate the idea into a concept.

*Replace paragraph five with the following effective with the December 2019 letting:*

- (5) The department will consider a CRI that changes but does not impair the essential functions or characteristics of the project. These functions or characteristics include, but are not limited to, appearance, service life, economy of operations, ease of maintenance, design, and safety of structures and pavements, construction phasing or procedures, or other contract requirements. The department will not consider a CRI that changes the following:
- Permanent pavement type.
  - Permanent structural cross section above the subgrade.
- 

**104.10.2 Submittal and Review of a CRI Concept**

*Replace paragraphs five and six with the following effective with the December 2019 letting:*

- (5) The department may consider a CRI concept that addresses a potential change under 104.2.
- (6) The department will not implement a contractor-initiated CRI concept, or portion of that concept, without sharing the cost savings with the contractor as specified in 104.10.4.2.
- (7) The savings generated by the CRI must be sufficient to warrant its review and processing and offset the level of risk. The department will assess the risk of the CRI relative to departmental design policies and criteria for the project. The department may reject a CRI concept for the following reasons:
1. It requires excessive time or costs for the contractor to develop the CRI proposal.
  2. It requires excessive time or costs for review, evaluation, investigation, or implementation.
  3. It introduces an inappropriate level of risk.

**104.10.4.2 Payment for the CRI Work**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) The department will pay for completed CRI work as specified for progress payments under 109.6. The department will pay for CRI's under the Cost Reduction Incentive administrative item. When all CRI costs are determined, the department will execute a contract change order that does the following:
  1. Adjusts the contract time, interim completion dates, or both.
  2. Pays the contractor for the unpaid balance of the CRI work.
  3. Pays the contractor 50 percent of the net savings resulting from the CRI, calculated as follows:

$$NS = CW - CRW - CC - DC$$

**Where:**

**NS** = Net Savings

**CW** = The cost of the work required by the original contract that is revised by the CRI. CW is computed at contract bid prices if applicable.

**CRW** = The cost of the revised work, computed at contract bid prices if applicable.

**CC** = The contractor's cost of developing the CRI proposal.

**DC** = The department's cost for investigating, evaluating, and implementing the CRI proposal.

**105.13 Claims Process for Unresolved Changes**

*Replace the entire text with the following effective with the December 2019 letting:*

**105.13.1 General**

- (1) Before submitting a claim, the department and contractor can mutually agree to have the department get a third-party advisory opinion as specified in 104.3.6.
- (2) The department and contractor can mutually agree to extend any time frame specified throughout 105.13 and can mutually agree to utilize an alternative dispute resolution method at any point before the department renders its final decision.
- (3) The department and contractor share costs related to referral to a dispute review board (DRB) as prescribed in the department's dispute resolution procedures.

**105.13.2 Notice of Claim**

- (1) If the contractor has followed the procedures for revising the contract specified in 104.2 and provided the notification specified in 104.3, but still disagrees with the region, the contractor may pursue the issue as a claim. File a notice of claim with the project engineer concerning the disagreement within 14 calendar days of receiving the region's decision under 104.3.6(1).
- (2) The project engineer may deny the applicable portion of a claim if the contractor does not do the following:
  1. File the notice of claim within 14 calendar days as specified in 105.13.2(1).
  2. Give the project engineer sufficient access to keep a record of the actual labor, materials, and equipment used to perform the claimed work.

- (3) Upon filing the notice of claim, maintain records as specified for force account statements in 109.4.5. Unless the project engineer issues a suspension, continue to perform the disputed work. The department will continue to make progress payments to the contractor as specified in 109.6.

**105.13.3 Submission of Claim**

- (1) Submit the claim to the project engineer as promptly as possible following the submission of the Notice of Claim, but not later than the end of the time allowed under 109.7 for the contractor to respond in writing to the engineer-issued semi-final estimate. If the contractor does not submit the claim within that response time, the department will deny the claim.
- (2) The department will not accept the submission of a claim until the resolution process in 104.3 has been completed and the contractor makes no further requests to submit updated information that may affect the region's final decision.

**105.13.4 Content of Claim**

- (1) The final contractor written statement under 104.3.3 is considered the content of the claim. If the contractor makes a request to submit updated information that may affect the region’s final decision under 104.3.6, submit the updated information as an amendment to the contractor written statement and continue the resolution process in 104.3 before submitting a claim.
- (2) The department may refer the claimant of a false claim to the appropriate authority for criminal prosecution. Certify the claim using the following form:

The undersigned is duly authorized to certify this claim on behalf of (the contractor).

(The contractor) certifies that this claim is made in good faith, that the supporting data are accurate and complete to the best of (the contractor's) knowledge and belief, and that the amount requested accurately reflects the contract adjustment for which (the contractor) believes that the department is liable.

(THE CONTRACTOR)

By: \_\_\_\_\_

(Name and Title)

Date of Execution: \_\_\_\_\_

**105.13.5 Department Final Decision**

- (1) The department will have up to 28 calendar days, from the contractor's submission of the claim, to perform a final review of the claim and conduct all meetings. The department may request, in writing, that the contractor submit additional information related to the claim. Submit that additional information, or notify the department in writing to base its decision on the information previously submitted. Either the contractor or region may request a meeting to present their views. Before the meeting, both parties will agree upon written ground rules for the meeting.
- (2) Upon completion of the 28 calendar days for the department’s review and meetings, the department will have up to 21 calendar days to render a written decision. The department will consider written and oral submissions from the contractor and region, and may consider other relevant information in the project records.
- (3) The department will provide the following in its final decision:
  - 1. A concise description of the claim.
  - 2. A clear, contractual basis for its decision that includes a reference to 104.2 on revisions to the contract and as appropriate, specific reference to language regarding the bid items in question.
  - 3. Other facts the department relies on to support its decision.
  - 4. A concise statement of the circumstances surrounding the claim and reasons for its decision. If the department rejects the claim in whole or in part, the department will explain why the claimed work is not a change to the contract work.
  - 5. The amount of money or other relief, if any, the department will grant the contractor.
- (4) If the contractor disagrees with the department's final decision, the contractor may initiate a legal action pursuant to state statutes.

**106.3.4.2.2 Freeze-Thaw Soundness**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Perform freeze-thaw soundness testing according to AASHTO T103 as modified in CMM 8-60.2. Provide freeze/thaw soundness test results based on the fraction retained on the No. 4 sieve as follows:
  - 1. Using virgin crushed stone aggregates produced from limestone/dolomite sources in one or more of the following counties or from out of state:
 

Brown	Columbia	Crawford	Dane	Dodge
Fond du Lac	Grant	Green	Green Lake	Iowa
Jefferson	Lafayette	Marinette	Oconto	Outagamie
Rock	Shawano	Walworth	Winnebago	
  - 2. Using gravel aggregates produced from pit sources in one or more of the following counties or from out of state:
 

Dodge	Washington	Waukesha		
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**208.5 Payment**

*Replace paragraph three with the following effective with the December 2019 letting:*

- (3) The department will adjust pay for material obtained from within the project right-of-way limits but outside project excavation limits, furnished under 208.2.2, as specified in 104.8.

**301.2.3 Sampling and Testing**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Department and contractor testing shall conform to the following:

Sampling <sup>[1]</sup> .....	AASHTO T2
Percent passing the 200 sieve.....	AASHTO T11
Gradation <sup>[1]</sup> .....	AASHTO T27
Gradation of extracted aggregate.....	AASHTO T30
Moisture content <sup>[1]</sup> .....	AASHTO T255
Liquid limit.....	AASHTO T89
Plasticity index.....	AASHTO T90
Wear.....	AASHTO T96
Sodium sulfate soundness (R-4, 5 cycles).....	AASHTO T104
Freeze/thaw soundness <sup>[1]</sup> .....	AASHTO T103
Lightweight Pieces in Aggregate.....	AASHTO T113
Fracture.....	ASTM D5821 as modified in CMM 8-60
Moisture/density <sup>[1]</sup> .....	AASHTO T99 and AASHTO T180
In-place density <sup>[1]</sup> .....	AASHTO T191
Asphaltic material extraction.....	CMM 8-36 WisDOT Test Method 1560

<sup>[1]</sup> As modified in CMM 8-60.

**301.2.4.5 Aggregate Base Physical Properties**

*Replace paragraph one with the following effective with the December 2019 letting:*

(1) Furnish aggregates conforming to the following:

**TABLE 301-2 AGGREGATE BASE PHYSICAL PROPERTIES**

PROPERTY	CRUSHED STONE	CRUSHED GRAVEL	CRUSHED CONCRETE	RECLAIMED ASPHALT	REPROCESSED MATERIAL	BLENDED MATERIAL
Gradation AASHTO T27						
dense	305.2.2.1	305.2.2.1	305.2.2.1	305.2.2.2	305.2.2.1	305.2.2.1 <sup>[1]</sup>
open-graded	310.2	310.2	not allowed	not allowed	not allowed	not allowed
Wear AASHTO T96 loss by weight	<=50%	<=50%	note <sup>[2]</sup>	—	note <sup>[2]</sup>	note <sup>[3]</sup>
Sodium sulfate soundness AASHTO T104 loss by weight						
dense	<=18%	<=18%	—	—	—	note <sup>[3]</sup>
open-graded	<=12%	<=12%	not allowed	not allowed	not allowed	not allowed
Freeze/thaw soundness AASHTO T103 <sup>[6]</sup> loss by weight						
dense	<=18%	<=18%	note <sup>[2]</sup>	—	—	note <sup>[3]</sup>
open-graded	<=18%	<=18%	not allowed	not allowed	not allowed	not allowed
Liquid limit AASHTO T89	<=25	<=25	<=25	—	—	note <sup>[3]</sup>
Plasticity AASHTO T90	<=6 <sup>[4]</sup>	<=6 <sup>[4]</sup>	<=6 <sup>[4]</sup>	—	—	note <sup>[3]</sup>
Fracture ASTM D5821 <sup>[6]</sup> min one face by count						
dense	58%	58%	58%	—	note <sup>[5]</sup>	note <sup>[3]</sup>
open-graded	90%	90%	not allowed	not allowed	not allowed	not allowed

<sup>[1]</sup> The final aggregate blend must conform to the specified gradation.

<sup>[2]</sup> No requirement for material taken from within the project limits. For material supplied from a source outside the project limits:

- LA wear maximum of 50 percent loss, by weight.
- Freeze thaw maximum of 42 percent loss, by weight.

<sup>[3]</sup> Required as specified for the individual component materials defined in columns 2 - 6 of the table before blending.

<sup>[4]</sup> For base placed between old and new pavements, use crushed stone, crushed gravel, or crushed concrete with a plasticity index of 3 or less.

<sup>[5]</sup> >=75 percent by count of non-asphalt coated particles.

<sup>[6]</sup> as modified in CMM 8-60.

**450.2.2 Aggregate Sampling and Testing**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) The department and the contractor will sample and test according to the following methods, except as revised with the engineer's approval:
- |  |             |
|--|-------------|
| Sampling aggregates.....                                       | AASHTO T2   |
| Material finer than No. 200 sieve .....                        | AASHTO T11  |
| Sieve analysis of aggregates.....                              | AASHTO T27  |
| Mechanical analysis of extracted aggregate.....                | AASHTO T30  |
| Sieve analysis of mineral filler .....                         | AASHTO T37  |
| Los Angeles abrasion of coarse aggregate .....                 | AASHTO T96  |
| Freeze-thaw soundness of coarse aggregate <sup>[1]</sup> ..... | AASHTO T103 |
| Sodium sulfate soundness of aggregates (R-4, 5 cycles).....    | AASHTO T104 |
| Extraction of bitumen.....                                     | AASHTO T164 |

<sup>[1]</sup> As modified in CMM 8-60.2.

**450.3.2.6.3 Compaction Roller Pattern Determined by Growth Curve**

Add 450.3.2.6.3 as a new subsection effective with the December 2019 letting:

**450.3.2.6.3 Compaction Roller Pattern Determined by Growth Curve**

- (1) When specified in 460.3.3.1, compact asphaltic mixture using the roller pattern established during construction of a control strip. Use 2 or more rollers per paver if placing more than 165 tons per hour.
- (2) On the first day of production, construct a control strip under the direct observation of department personnel. After compacting the control strip with a minimum of 3 passes, mark the gauge outline and take a one-minute wet density measurement using a nuclear density gauge in back scatter mode at a single location. Take a density measurement at the same location after each subsequent pass. Continue compacting and testing until the increase in density is less than 1 pcf for 3 consecutive passes. Submit the final roller pattern to the engineer in writing. Once the roller pattern is established do not change the pattern or decrease the number, type, or weight of rollers without the engineer's written approval.
- (3) After establishing the roller pattern, and under the direct observation of the engineer, cut at least one 4-inch diameter or larger core from the control strip density gauge outline. Prepare cores and determine density according to AASHTO T166. Dry cores after testing. Fill core holes and obtain engineer approval before opening to traffic. The department will maintain custody of cores throughout the entire sampling and testing process. The department will label cores, transport cores to testing facilities, witness testing, store dried cores, and provide subsequent verification testing.

**450.3.2.8 Jointing**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Construct notched wedge longitudinal joints for mainline paving of HMA layers 1.75 inches or greater. Extend the wedge beyond the normal lane width as the plans show or as the engineer directs.

Replace paragraph five with the following effective with the December 2019 letting:

- (5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted steel side roller wheel or vibratory plate compactor the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.
- (6) Clean longitudinal and transverse joints coated with dust and, if necessary, paint with hot asphaltic material, a cutback, or emulsified asphalt to ensure a tightly bonded, sealed joint.

**455.2.5 Tack Coat**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Under the Tack Coat bid item, furnish type SS-1h, CSS-1h, QS-1h, CQS-1h, or modified emulsified asphalt with an "h" suffix, unless the contract specifies otherwise.

**460.2.2.3 Aggregate Gradation Master Range**

*Replace paragraph one with the following effective with the December 2019 letting:*

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

**TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS**

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm)	No. 2 (25.0 mm)	No.3 (19.0 mm)	No. 4 (12.5 mm)	No. 5 (9.5 mm)	No. 6 (4.75 mm)	SMA No. 4 (12.5 mm)	SMA No. 5 (9.5 mm)
50.0-mm	100							
37.5-mm	90 - 100	100						
25.0-mm	90 max	90 - 100	100					
19.0-mm	___	90 max	90 - 100	100			100	
12.5-mm	___	___	90 max	90 - 100	100		90 - 97	100
9.5-mm	___	___	___	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm	___	___	___	___	90 max	90 - 100	25 - 35	35 - 45
2.36-mm	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm	___	___	___	___	___	30 - 55	___	___
0.60-mm	___	___	___	___	___	___	18 max	18 max
0.075-mm	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min <sup>[1]</sup>	15.0 min <sup>[2]</sup>	16.0 - 17.5	16.0 min	17.0 min

<sup>[1]</sup> 14.5 for LT and MT mixes.

<sup>[2]</sup> 15.5 for LT and MT mixes.

**460.2.7 HMA Mixture Design**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) For each HMA mixture type used under the contract, develop and submit an asphaltic mixture design according to CMM 8-66 and conforming to the requirements of table 460-1 and table 460-2. Ensure that SMA mixture designs adhere to AASHTO R 46 and AASHTO M 325 in addition to the required test procedures outlined in CMM 8-66 table 1 and CMM 8-66 table 2. Determine the specific gravity of fines or super fines used as a mineral filler or additional stabilizer in SMA designs according to AASHTO T 100. The values listed are design limits; production values may exceed those limits. The department will review mixture designs and report the results of that review to the designer according to CMM 8-66.



TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	35
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103 as modified in CMM 8-60.2) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821 as modified in CMM 860) (one face/2 face, % by count)	65/___	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40 <sup>[1]</sup>	43 <sup>[1]</sup>	45	45
Sand Equivalency (AASHTO T176, min)	40	40 <sup>[2]</sup>	45	50
Clay Lumps and Friable Particle in Aggregate (AASHTO T112)	<= 1%	<= 1%	<= 1%	<= 1%
Plasticity Index of Material Added to Mix Design as Mineral Filler (AASHTO T89/90)	<= 4	<= 4	<= 4	<= 4
Gyratory Compaction				
Gyrations for Nini	6	7	8	7
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	100
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.5 (95.5)
% Gmm Nini	<= 91.5 <sup>[3]</sup>	<= 89.0 <sup>[3]</sup>	<= 89.0	___
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	<= 98.0
Dust to Binder Ratio <sup>[4]</sup> (% passing 0.075/Pbe)	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 <sup>[6] [8]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283) <sup>[10] [11]</sup>				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.80 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)	___	___	___	<= 0.30
Minimum Effective Asphalt Content, Pbe (%)	___	___	___	5.5

<sup>[1]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified fine aggregate angularity is 43 for LT and 45 MT mixes.

<sup>[2]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified sand equivalency is 43 for MT mixes.

<sup>[3]</sup> The percent maximum density at initial compaction is only a guideline.

<sup>[4]</sup> For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

<sup>[5]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified dust to binder ratio limits are 1.0 - 2.0 for LT mixes and 1.5 - 2.0 for MT and HT mixes.

<sup>[6]</sup> For No. 6 (4.75mm) nominal maximum size mixes, the specified VFB is 67 - 79 percent for LT mixes and 66 - 77 percent for MT and HT mixes.

<sup>[7]</sup> For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

<sup>[8]</sup> For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[9]</sup> For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[10]</sup> WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

<sup>[11]</sup> Run TSR at asphalt content corresponding to 3.0% air void regressed design, or 4.5% air void design for SMA, using distilled water for testing.

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#### **460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater**

*Replace paragraph four with the following effective with the December 2019 letting:*

- (4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:

Drum plants:

- Field extraction by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1. Gradation of resulting aggregate sample determined according to AASHTO T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to AASHTO T11 and T27.

Batch plants:

- Field extraction by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1. Gradation of resulting aggregate sample determined according to AASHTO T30.

Asphalt content (AC) in percent:

AC by ignition oven according to AASHTO T308 (CMM 8-36.6.3.6), by chemical extraction according to AASHTO T-164 method A or B; or by automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1. Gradation of resulting aggregate sample determined according to AASHTO T30.

Bulk specific gravity of the compacted mixture according to AASHTO T166.

Maximum specific gravity according to AASHTO T209.

Air voids ( $V_a$ ) by calculation according to AASHTO T269.

VMA by calculation according to AASHTO R35.

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#### **460.2.8.2.1.4.2 Control Charts**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Maintain standardized control charts at the laboratory. Record contractor test results on the charts the same day as testing. Record data on the standardized control charts as follows:
- Blended aggregate gradation tests in percent passing. Of the following, plot sieves required in table 460-1: 37.5-mm, 25.0-mm, 19.0-mm, 12.5-mm, 9.5-mm, 4.75-mm, 2.36-mm, 1.18-mm, 0.60-mm, and 0.075-mm.
  - Asphalt material content in percent.
  - Air voids in percent.
  - VMA in percent.
- (2) Plot both the individual test point and the running average of the last 4 data points on each chart. Show QC data in black with the running average in red. Draw the warning limits with a dashed green line and the JMF limits with a dashed red line. The contractor may use computer generated black-and-white printouts with a legend that clearly identifies the specified color-coded components.

**460.2.8.2.1.5 Control Limits**

*Replace paragraph one with the following effective with the December 2019 letting:*

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

ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
4.75-mm	+/- 5.0	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
1.18-mm	+/- 4.0	+/- 3.0
0.60-mm	+/- 4.0	+/- 3.0
0.075-mm	+/- 2.0	+/- 1.5
Asphaltic content in percent	- 0.3	- 0.2
Air voids in percent <sup>[1]</sup>	+1.3/-1.0	+1.0/-0.7
VMA in percent <sup>[2]</sup>	- 0.5	- 0.2

<sup>[1]</sup> For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

<sup>[2]</sup> VMA limits are based on requirements for each mix design nominal maximum aggregate size in table 460-1. For No. 6 (4.75mm) mixes, JMF limits are +/- 0.5 and warning limits are +/- 0.2.

**460.3.2 Thickness**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Provide the plan thickness for lower and upper layers limited as follows:

NOMINAL SIZE	MINIMUM LAYER THICKNESS (in inches)	MAX LOWER LAYER THICKNESS (in inches)	MAX UPPER LAYER THICKNESS (in inches)	MAX SINGLE LAYER THICKNESS <sup>[3]</sup> (in inches)
No. 1 (37.5 mm)	4.5	6	4.5	6
No. 2 (25.0 mm)	3.0	5	4	6
No. 3 (19.0 mm)	2.25	4	3	5
No. 4 (12.5 mm) <sup>[1]</sup>	1.75	3 <sup>[2]</sup>	2.5	4
No. 5 (9.5 mm) <sup>[1]</sup>	1.25	3 <sup>[2]</sup>	2	3
No. 6 (4.75 mm)	0.75	1.25	1.25	1.25

<sup>[1]</sup> SMA mixtures use nominal size No. 4 (12.5 mm) or No. 5 (9.5 mm).

<sup>[2]</sup> SMA mixtures with nominal sizes of No. 4 (12.5 mm) and No. 5 (9.5 mm) have no maximum lower layer thickness specified.

<sup>[3]</sup> For use on cross-overs and shoulders.

- (2) Place leveling layers using No. 4 (12.5 mm), No. 5 (9.5 mm), or No. 6 (4.75 mm) mixtures. Leveling layers may be thinner than the minimum lower layer thickness for the mixture used.
- (3) Place wedging layers as the contract specifies or engineer directs. Wedging layers have no specified minimum or maximum thickness.

**460.3.3.1 Minimum Required Density**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Compact No. 6 mixtures in lower layers as specified in 450.3.2.6.2 and in upper layers as specified in 450.3.2.6.3. For other HMA mixtures, compact all layers to the density table 460-3 specifies.

**TABLE 460-3 MINIMUM REQUIRED DENSITY<sup>[1]</sup>**

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT and MT	HT	SMA <sup>[5]</sup>
TRAFFIC LANES <sup>[2]</sup>	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	—
	UPPER	93.0	93.0	93.0
SHOULDERS & APPURTENANCES	LOWER	91.0	91.0	—
	UPPER	92.0	92.0	92.0

<sup>[1]</sup> The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer will investigate the acceptability of that material according to CMM 8-15.11.

<sup>[2]</sup> Includes side roads, crossovers, turn lanes, ramps, parking lanes, bike lanes, and park-and-ride lots as defined by the contract plans.

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

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

**460.3.3.2 Pavement Density Determination**

*Replace paragraph three with the following effective with the December 2019 letting:*

- (3) A lot is defined in CMM 8-15 and placed within a single layer for each location and target maximum density category indicated in table 460-3. The lot density is the average of all samples taken for that lot. The department determines the number of tests per lot according to CMM 8-15.

**460.5.2.1 General**

*Replace paragraph six with the following effective with the December 2019 letting:*

- (6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:
  - Va less than 2.5 or greater than 6.5 percent for SMA, or for other mixes, less than 1.5 or greater than 5.0 percent.
  - VMA more than 1.0 percent below the minimum or above the maximum specified in table 460-1.
  - AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

**501.2.5.5 Sampling and Testing**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Sample and test aggregates for concrete according to the following:
  - Sampling aggregates<sup>[1]</sup> ..... AASHTO T2
  - Lightweight pieces in aggregate ..... AASHTO T113
  - Material finer than No. 200 sieve<sup>[1]</sup> ..... 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
  - Alkali Silica Reactivity of Aggregates ..... ASTM C1260
  - Alkali Silica Reactivity of Combinations of Cementitious Materials and Aggregates ..... ASTM C1567
  - Freeze-thaw soundness of coarse aggregate<sup>[1]</sup> ..... AASHTO T103
  - Sodium sulfate soundness of coarse aggregates (R-4, 5 cycles) ..... AASHTO T104
  - Specific gravity and absorption of fine aggregate ..... AASHTO T84
  - Specific gravity and absorption of coarse aggregate<sup>[1]</sup> ..... AASHTO T85
  - Flat & elongated pieces based on a 3:1 ratio<sup>[1]</sup> ..... ASTM D4791
  - 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.

**505.2.2 Bar Steel Reinforcement**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, type S or type W.

**505.2.3 High-Strength Bar Steel Reinforcement**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, grade 60, type S or type W.

**505.2.4.1 General**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, grade 60, type S or type W. Ensure that the coating is applied in a CRSI certified epoxy coating plant. Bend bars that require bending before coating, unless the fabricator can bend the bar without damaging the coating.

**505.2.6.1 General**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) For dowel bars and straight tie bars, there is no requirement for bend tests. Ensure that the bars are the specified diameter and length the plans show.

**505.2.6.2.2 Solid Dowel Bars**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Furnish coated bars conforming to AASHTO M31 grade 40 or 60. Alternatively the contractor may furnish dowel bars conforming to AASHTO M227 grade 70-80. Coat in a plant certified by the Concrete Reinforcing Steel Institute with a thermosetting epoxy conforming to AASHTO M254, type B.

**625.3.2 Processing Topsoil or Salvaged Topsoil**

*Delete paragraph four effective with the December 2019 letting.*

**701.3.1 General**

*Replace the entire text with the following effective with the December 2019 letting:*

- (1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Use the test methods specified in table 701-1.

**TABLE 701-1 TESTING AND CERTIFICATION STANDARDS**

TEST	TEST STANDARD	MINIMUM REQUIRED CERTIFICATION (any one of the certifications listed for each test)
Random Sampling	CMM 8-30.9.2	Transportation Materials Sampling Technician (TMS) Aggregate Technician I (AGGTEC-I) AGGTEC-I Assistant Certified Technician (ACT-AGG) PCC Technician I (PCCTEC-I) PCCTEC-I Assistant Certified Technician (ACT-PCC) Grading Technician I (GRADINGTEC-I) Grading Assistant Certified Technician (ACT-GRADING)
Sampling Aggregates	AASHTO T2 <sup>[1][4]</sup>	TMS, AGGTEC-1, ACT-AGG
Percent passing the No. 200 sieve	AASHTO T11 <sup>[1]</sup>	AGGTEC-I, ACT-AGG
Fine and coarse aggregate gradation	AASHTO T27 <sup>[1]</sup>	
Aggregate moisture content	AASHTO T255 <sup>[1]</sup>	
Fractured faces	ASTM D5821 <sup>[1]</sup>	
Liquid limit	AASHTO T89	Aggregate Testing for Transportation Systems (ATTS) GRADINGTEC-I, or ACT-GRADING
Plasticity index	AASHTO T90 <sup>[3]</sup>	
Sampling freshly mixed concrete	AASHTO R60	PCCTEC-1 ACT-PCC
Air content of fresh concrete	AASHTO T152 <sup>[2]</sup>	
Air void system of fresh concrete	AASHTO TP118 <sup>[5]</sup>	
Concrete slump	AASHTO T119 <sup>[2]</sup>	
Concrete temperature	ASTM C1064	
Making and curing concrete cylinders	AASHTO T23	
Moist curing for concrete cylinders	AASHTO M201	
Concrete compressive strength	AASHTO T22	Concrete Strength Tester (CST) CST Assistant Certified Technician (ACT-CST)
Concrete flexural strength	AASHTO T97	
Profiling	—	PROFILER

<sup>[1]</sup> As modified in CMM 8-60.

<sup>[2]</sup> As modified in CMM 8-70.

<sup>[3]</sup> A plasticity check, if required under individual QMP provisions, may be performed by an AGGTEC-I in addition to the certifications listed for liquid limit and plasticity index tests.

<sup>[4]</sup> Plant personnel may operate equipment to obtain samples under the direct observation of a TMS or higher.

<sup>[5]</sup> Consolidate tests by rodding only.

**715.2.1 General**

*Replace paragraph five with the following effective with the December 2019 letting:*

- (5) For new lab-qualified mixes, test the air void system of the proposed concrete mix. Include the SAM number as a part of the mix design submittal.

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**715.3.1.1 General**

Replace paragraph two with the following effective with the December 2019 letting:

- (2) Test the air void system at least once per lot and enter the SAM number in the MRS for information only. SAM testing is not required for the following:
- For lots with less than 4 sublots.
  - High early strength (HES) concrete.
  - Special high early strength (SHES) concrete.
  - Concrete placed under the following bid items:
    - Concrete Pavement Approach Slab
    - Concrete Masonry Culverts
    - Concrete Masonry Retaining Walls
    - Steel Grid Floor Concrete Filled
    - Crash Cushions Permanent
    - Crash Cushions Permanent Low Maintenance
    - Crash Cushions Temporary

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**730.3.1 General**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Stockpile tests<sup>[1]</sup> can be used for multiple projects. If placement on a project does not begin within 120 calendar days after the date the stockpile sample was obtained, retest the stockpile before placement begins.

<sup>[1]</sup> Replace the stockpile test with an in-place production test for concrete pavement recycled and processed on-site; test on the first day of production.

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**730.3.2 Contractor QC Testing**

Replace paragraph four with the following effective with the December 2019 letting:

- (4) Submit test results to the engineer within one business day of obtaining the sample, except any aggregate classification with recycled asphalt may be submitted within two business days.

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**730.3.4.1 Contractor QC Testing**

Replace the entire text with the following effective with the December 2019 letting:

- (1) For small quantity contracts with  $\leq 500$  tons, submit 2 production tests or 1 stockpile test. Production tests are valid for 3 years from the date the production sample was obtained. Begin placement within 3 years of the date sampled.
- (2) For small quantity contracts with  $\leq 6000$  tons and  $\geq 500$  tons, do the following:
1. Conduct one QC stockpile test before placement.
  2. Submit 2 production tests or conduct 1 loadout test instead of placement tests. Production tests are valid for 3 years from the date the production sample was obtained; the first day of placement must be within 3 years of the date sampled.
  3. If the actual quantity placed is more than 6000 tons, on the next day of placement perform one additional random QC test for each 3000 tons of overrun, or fraction thereof.

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**740.3.2 Contractor QC Testing**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Field-locate the beginning and ending points for each profile run. Measure the profiles of each standard and partial segment. Define primary segments starting at a project terminus and running contiguously along the mainline to the other project terminus. Define segments one wheel path wide and distinguished by length as follows:
1. Standard segments are 500 feet long.
  2. Partial segments are less than 500 feet long.

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**Errata**

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**614.3.6 Thrie Beam Structure Approach Retro Fits**

Correct errata by deleting the galvanization reference already required under 614.3.1.

- (2) Install posts and drill holes into existing thrie beam conforming to 614.3.2.
- 

**628.3.7 Mobilizations for Erosion Control**

Correct errata by clarifying that mobilizations for erosion control include proceeding with the work.

- (1) Move personnel, equipment, and materials to the project site and promptly proceed with construction of erosion control items at the stages the contract indicates or the engineer directs.



**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.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to [paul.ndon@dot.wi.gov](mailto:paul.ndon@dot.wi.gov) within 5 days of payment receipt to be logged manually.

\*\*\*Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

## **ADDITIONAL SPECIAL PROVISION 9**

### **Electronic Certified Payroll or Labor Data Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data 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 their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals 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/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at [paul.ndon@dot.wi.gov](mailto:paul.ndon@dot.wi.gov). Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.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.

## **Non-discrimination Provisions**

**During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:**

**1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

**2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

**3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

**4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

**5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

**6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:**

**Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);



- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

**SEPTEMBER 2002**

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

**Goals for Minority Participation for Each Trade:**

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

**Goals for female participation for each trade: 6.9%**

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director  
Office of Federal Contract Compliance Programs  
Ruess Federal Plaza  
310 W. Wisconsin Ave., Suite 1115  
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

**APRIL 2013**

**ADDITIONAL FEDERAL-AID PROVISIONS**

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**Effective August 2015 letting**

### **BUY AMERICA PROVISION**

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

<https://wisconsin.gov/rdwy/cmm/cm-02-28.pdf>

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

<https://wisconsin.gov/hcciDocs/contracting-info/ws4567.doc>

## Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses*. "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses*. "Use of United States-flag vessels: The contractor agrees—"

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS  
FOR PROJECTS WITH FEDERAL AID**

**I. PREVAILING WAGE RATES**

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however 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 will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

**II. COVERAGE OF TRUCK DRIVERS**

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. [https://www.dol.gov/whd/FOH/FOH\\_Ch15.pdf](https://www.dol.gov/whd/FOH/FOH_Ch15.pdf)
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work.”
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<https://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

### **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 and accessible place at the site of work:

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

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

### **IV. RESOURCES**

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract



"General Decision Number: WI20200010 01/24/2020

Superseded General Decision Number: WI20190010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020

BRWI0001-002 06/03/2019

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.80	24.28

BRWI0002-002 06/01/2019

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.94	23.30

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 BRWI0002-005 06/01/2019

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,  
 CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,  
 FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE,  
 LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,  
 OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK,  
 SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA,  
 WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37

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 BRWI0003-002 06/03/2019

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90

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 BRWI0004-002 06/01/2019

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.43	25.10

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 BRWI0006-002 06/01/2019

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,  
 ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.06	23.02

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 BRWI0007-002 06/03/2019

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.57	24.22

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 BRWI0008-002 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.93	24.22
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BRWI0011-002 06/03/2019		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90
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BRWI0019-002 06/03/2019		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.40	24.68
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BRWI0034-002 06/03/2019		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
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CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39
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CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Rates Fringes

CARPENTER

CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIVER.....	\$ 34.12	18.00

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CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

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CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

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CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

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CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

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ELEC0014-002 06/03/2019

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & 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

	Rates	Fringes
Electricians:.....	\$ 35.59	20.87

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ELEC0014-007 06/03/2019

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer Installer/Technician.....	\$ 27.25	14.34

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

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ELEC0127-002 06/01/2019

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 40.49	30%+12.07

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ELEC0158-002 06/03/2019

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausaukee 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

	Rates	Fringes
Electricians:.....	\$ 33.52	29.75%+10.26

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ELEC0159-003 06/01/2019

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and 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

	Rates	Fringes
Electricians:.....	\$ 40.30	22.24

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ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under \$180,000.....	\$ 30.18	18.42
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ELEC0242-005 05/16/2018		

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17
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ELEC0388-002 06/03/2019		

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.56	26%+11.01
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* ELEC0430-002 01/01/2020		

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 40.30	22.19
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ELEC0494-005 06/01/2019		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 41.03	25.11
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ELEC0494-006 06/01/2019		

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.73	22.27

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ELEC0494-013 06/01/2019

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 20.53	18.13
Technician.....	\$ 30.18	19.58

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

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ELEC0577-003 06/01/2019

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, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.15	28.50%+10.00

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ELEC0890-003 06/01/2019

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

Rates	Fringes
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Electricians:.....\$ 35.91 25.95%+10.83

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ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	31.5%+7.41
(2) Heavy Equipment Operator.....	\$ 45.15	31.5%+7.35
(3) Equipment Operator.....	\$ 38.02	31.5%+7.18
(4) Heavy Groundman Driver..	\$ 33.27	31.5%+7.06
(5) Light Groundman Driver..	\$ 30.89	31.5%+7.00
(6) Groundsman.....	\$ 26.14	31.5%+6.89

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ENGI0139-005 06/03/2019

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.17	23.03
Group 2.....	\$ 40.67	23.03
Group 3.....	\$ 40.17	23.03
Group 4.....	\$ 39.91	23.03
Group 5.....	\$ 39.62	23.03
Group 6.....	\$ 33.72	23.03

HAZARDOUS WASTE PREMIUMS:

- EPA Level ""A"" protection - \$3.00 per hour
- EPA Level ""B"" protection - \$2.00 per hour
- EPA Level ""C"" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

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.

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 jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer;



bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (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 & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator 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 Tender.

GROUP 6: Off-road material hauler with or without ejector.

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 \* IRON0008-002 06/01/2019

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 35.07	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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 \* IRON0008-003 06/01/2019

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.12	27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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IRON0383-001 06/01/2019

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 35.50	26.57

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IRON0498-005 06/01/2019

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 40.25	40.53

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\* IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40

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\* IRON0512-021 06/03/2019

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40

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LAB00113-002 06/03/2019

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER Group 1.....	\$ 29.02	21.92

Group 2.....	\$ 29.17	21.92
Group 3.....	\$ 29.37	21.92
Group 4.....	\$ 29.52	21.92
Group 5.....	\$ 29.67	21.92
Group 6.....	\$ 25.51	21.92

LABORERS CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/03/2019

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.27	21.92
Group 2.....	\$ 28.37	21.92
Group 3.....	\$ 28.42	21.92
Group 4.....	\$ 28.62	21.92
Group 5.....	\$ 28.47	21.92
Group 6.....	\$ 25.36	21.92

LABORERS CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter  
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

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LAB00113-011 06/03/2019

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.08	21.92
Group 2.....	\$ 28.23	21.92
Group 3.....	\$ 28.43	21.92
Group 4.....	\$ 28.40	21.92
Group 5.....	\$ 28.73	21.92
Group 6.....	\$ 25.22	21.92

LABORERS CLASSIFICATIONS:

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, and  
Utility Man); Batch Truck Dumper or Cement Handler;  
Bituminous worker (Dumper, Ironer, Smoother, and Tamper);  
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler  
(Pavement); Vibrator or Tamper Operator (Mechanical Hand  
Operated); Chain Saw Operator; Demolition Burning Torch  
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter  
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

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LAB00140-002 06/03/2019

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT,  
CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR,  
DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST,  
GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA,  
JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN,  
MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE,

OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.84	17.54
Group 2.....	\$ 32.94	17.54
Group 3.....	\$ 32.99	17.54
Group 4.....	\$ 33.19	17.54
Group 5.....	\$ 33.04	17.54
Group 6.....	\$ 29.47	17.54

LABORER CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

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LAB00464-003 06/03/2019

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 33.12	17.54
Group 2.....	\$ 33.22	17.54
Group 3.....	\$ 33.27	17.54
Group 4.....	\$ 33.47	17.54
Group 5.....	\$ 33.32	17.54
Group 6.....	\$ 29.47	17.54

LABORERS CLASSIFICATIONS:

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

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 PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

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 PAIN0108-002 06/01/2019

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 36.08	20.36
Spray & Sandblast.....	\$ 37.08	20.36

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 PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

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 PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45
-----		
PAIN0781-002 06/01/2019		

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 33.30	23.86
Brush.....	\$ 32.95	23.86
Spray & Sandblast.....	\$ 33.70	23.86
-----		
PAIN0802-002 06/01/2019		

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 30.93	18.44
PREMIUM PAY:		
Structural Steel, Spray, Bridges = \$1.00 additional per hour.		
-----		
PAIN0802-003 06/01/2019		

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 30.93	18.58
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PAIN0934-001 06/01/2017		

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

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PAIN1011-002 06/02/2019

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 25.76	13.33

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PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

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TEAM0039-001 06/01/2019

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 29.57	22.03
3 or more Axles; Euclids Dumpton & Articulated, Truck Mechanic.....	\$ 29.72	22.03

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WELL DRILLER.....\$ 16.52 3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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 (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1,

2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

**August 2018**

**NOTICE TO BIDDERS  
WAGE RATE DECISION**

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department 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.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	143.000 STA	_____.	_____.
0004	201.0205 Grubbing	143.000 STA	_____.	_____.
0006	203.0100 Removing Small Pipe Culverts	68.000 EACH	_____.	_____.
0008	203.0200 Removing Old Structure (station) 01. 9+25	LS	LUMP SUM	_____.
0010	203.0600.S Removing Old Structure Over Waterway With Minimal Debris (station) 02. 105+50 LT	LS	LUMP SUM	_____.
0012	203.0600.S Removing Old Structure Over Waterway With Minimal Debris (station) 06. 105+50 RT	LS	LUMP SUM	_____.
0014	204.0100 Removing Pavement	41.000 SY	_____.	_____.
0016	204.0115 Removing Asphaltic Surface Butt Joints	1,663.000 SY	_____.	_____.
0018	204.0120 Removing Asphaltic Surface Milling	12,314.000 SY	_____.	_____.
0020	204.0150 Removing Curb & Gutter	17,984.000 LF	_____.	_____.
0022	204.0155 Removing Concrete Sidewalk	4,193.000 SY	_____.	_____.
0024	204.0165 Removing Guardrail	148.000 LF	_____.	_____.
0026	204.0170 Removing Fence	352.000 LF	_____.	_____.
0028	204.0195 Removing Concrete Bases	54.000 EACH	_____.	_____.
0030	204.0210 Removing Manholes	17.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0220 Removing Inlets	119.000 EACH	_____.	_____.
0034	204.0245 Removing Storm Sewer (size) 01. 12-Inch	3,367.000 LF	_____.	_____.
0036	204.0245 Removing Storm Sewer (size) 02. 15-Inch	1,935.000 LF	_____.	_____.
0038	204.0245 Removing Storm Sewer (size) 03. 18-Inch	1,776.000 LF	_____.	_____.
0040	204.0245 Removing Storm Sewer (size) 04. 19x30-Inch	45.000 LF	_____.	_____.
0042	204.0245 Removing Storm Sewer (size) 05. 21-Inch	206.000 LF	_____.	_____.
0044	204.0245 Removing Storm Sewer (size) 06. 24-Inch	1,056.000 LF	_____.	_____.
0046	204.0245 Removing Storm Sewer (size) 07. 29x45-Inch	86.000 LF	_____.	_____.
0048	204.0245 Removing Storm Sewer (size) 08. 30-Inch	443.000 LF	_____.	_____.
0050	204.0245 Removing Storm Sewer (size) 09. 36-Inch	999.000 LF	_____.	_____.
0052	204.0245 Removing Storm Sewer (size) 10. 42-Inch	470.000 LF	_____.	_____.
0054	204.9060.S Removing (item description) 01. 24-Inch Concrete Piling	2.000 EACH	_____.	_____.
0056	204.9105.S Removing (item description) 01. Traffic Signals CTH M (North Avenue) & Calhoun Road	LS	LUMP SUM	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0058	204.9105.S Removing (item description) 02. Traffic Signals CTH M (North Avenue) & CTH YY (Pilgrim Road)	LS	LUMP SUM	_____.
0060	204.9105.S Removing (item description) 03. Traffic Signals CTH M (North Avenue) & Lilly Road	LS	LUMP SUM	_____.
0062	204.9105.S Removing (item description) 04. Traffic Signals CTH M (North Avenue) & 124th Street	LS	LUMP SUM	_____.
0064	205.0100 Excavation Common	179,595.000 CY	_____.	_____.
0066	205.0400 Excavation Marsh	2,420.000 CY	_____.	_____.
0068	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	1,150.000 TON	_____.	_____.
0070	206.1000 Excavation for Structures Bridges (structure) 02. B-67-375	LS	LUMP SUM	_____.
0072	206.1000 Excavation for Structures Bridges (structure) 06. B-67-374	LS	LUMP SUM	_____.
0074	206.2000 Excavation for Structures Culverts (structure) 06. B-67-256	LS	LUMP SUM	_____.
0076	206.3000 Excavation for Structures Retaining Walls (structure) 03. R-67-152	LS	LUMP SUM	_____.
0078	206.3000 Excavation for Structures Retaining Walls (structure) 04. R-67-153	LS	LUMP SUM	_____.
0080	206.3000 Excavation for Structures Retaining Walls (structure) 05. R-67-154	LS	LUMP SUM	_____.
0082	210.1500 Backfill Structure Type A	1,146.000 TON	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0084	213.0100 Finishing Roadway (project) 01. 2759-03-70	1.000 EACH	_____.	_____.
0086	305.0110 Base Aggregate Dense 3/4-Inch	377.000 TON	_____.	_____.
0088	305.0120 Base Aggregate Dense 1 1/4-Inch	115,543.000 TON	_____.	_____.
0090	310.0110 Base Aggregate Open-Graded	196.000 TON	_____.	_____.
0092	311.0110 Breaker Run	110,517.000 TON	_____.	_____.
0094	371.2000.S QMP Base Aggregate Dense 1 1/4-Inch Compaction	88.000 EACH	_____.	_____.
0096	415.0410 Concrete Pavement Approach Slab	327.000 SY	_____.	_____.
0098	416.0170 Concrete Driveway 7-Inch	2,558.000 SY	_____.	_____.
0100	416.0270 Concrete Driveway HES 7-Inch	570.000 SY	_____.	_____.
0102	416.1010 Concrete Surface Drains	21.500 CY	_____.	_____.
0104	450.4000 HMA Cold Weather Paving	1,335.000 TON	_____.	_____.
0106	455.0605 Tack Coat	13,146.000 GAL	_____.	_____.
0108	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	2.000 EACH	_____.	_____.
0110	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	2.000 EACH	_____.	_____.
0112	460.2000 Incentive Density HMA Pavement	26,500.000 DOL	1.00000	26,500.00
0114	460.2005 Incentive Density PWL HMA Pavement	25,890.000 DOL	1.00000	25,890.00





Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0116	460.2010 Incentive Air Voids HMA Pavement	41,400.000 DOL	1.00000	41,400.00
0118	460.6223 HMA Pavement 3 MT 58-28 S	26,151.000 TON	_____	_____
0120	460.6424 HMA Pavement 4 MT 58-28 H	15,249.000 TON	_____	_____
0122	465.0120 Asphaltic Surface Driveways and Field Entrances	790.000 TON	_____	_____
0124	465.0125 Asphaltic Surface Temporary	3,838.000 TON	_____	_____
0126	502.0100 Concrete Masonry Bridges	600.000 CY	_____	_____
0128	502.2000 Compression Joint Sealer Preformed Elastomeric (width) 06. 2 1/4 Inch	52.000 LF	_____	_____
0130	502.3200 Protective Surface Treatment	572.000 SY	_____	_____
0132	502.3210 Pigmented Surface Sealer	151.000 SY	_____	_____
0134	502.4105 Adhesive Anchors 5/8-inch	16.000 EACH	_____	_____
0136	504.0500 Concrete Masonry Retaining Walls	181.000 CY	_____	_____
0138	504.0900 Concrete Masonry Endwalls	59.000 CY	_____	_____
0140	505.0400 Bar Steel Reinforcement HS Structures	4,660.000 LB	_____	_____
0142	505.0600 Bar Steel Reinforcement HS Coated Structures	120,590.000 LB	_____	_____
0144	506.3003 Welded Stud Shear Connectors 5/8x4-Inch	2,456.000 EACH	_____	_____
0146	509.2000 Full-Depth Deck Repair	1.000 SY	_____	_____



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0148	511.1200 Temporary Shoring (structure) 02. B-67-375	840.000 SF	_____.	_____.
0150	511.1200 Temporary Shoring (structure) 06. B-67-256	550.000 SF	_____.	_____.
0152	512.0500 Piling Steel Sheet Permanent Delivered	8,290.000 SF	_____.	_____.
0154	512.0600 Piling Steel Sheet Permanent Driven	8,290.000 SF	_____.	_____.
0156	513.7006 Railing Steel Type C1	343.000 LF	_____.	_____.
0158	516.0500 Rubberized Membrane Waterproofing	48.000 SY	_____.	_____.
0160	517.1010.S Concrete Staining (structure) 01. B-67-374	393.000 SF	_____.	_____.
0162	517.1010.S Concrete Staining (structure) 02. B-67-375	393.000 SF	_____.	_____.
0164	517.1015.S Concrete Staining Multi-Color (structure) 01. B-67-374	124.000 SF	_____.	_____.
0166	517.1015.S Concrete Staining Multi-Color (structure) 02. B-67-375	124.000 SF	_____.	_____.
0168	517.1015.S Concrete Staining Multi-Color (structure) 03. R-67-152	226.000 SF	_____.	_____.
0170	517.1015.S Concrete Staining Multi-Color (structure) 04. R-67-153	860.000 SF	_____.	_____.
0172	517.1015.S Concrete Staining Multi-Color (structure) 05. R-67-154	1,780.000 SF	_____.	_____.
0174	517.1050.S Architectural Surface Treatment (structure) 01. B-67-374	124.000 SF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0176	517.1050.S Architectural Surface Treatment (structure) 02. B-67-375	124.000 SF	_____.	_____.
0178	517.1050.S Architectural Surface Treatment (structure) 03. R-67-152	226.000 SF	_____.	_____.
0180	517.1050.S Architectural Surface Treatment (structure) 04. R-67-153	860.000 SF	_____.	_____.
0182	517.1050.S Architectural Surface Treatment (structure) 05. R-67-154	1,780.000 SF	_____.	_____.
0184	520.1012 Apron Endwalls for Culvert Pipe 12-Inch	17.000 EACH	_____.	_____.
0186	520.1015 Apron Endwalls for Culvert Pipe 15-Inch	4.000 EACH	_____.	_____.
0188	520.2012 Culvert Pipe Temporary 12-Inch	212.000 LF	_____.	_____.
0190	520.2015 Culvert Pipe Temporary 15-Inch	114.000 LF	_____.	_____.
0192	520.8000 Concrete Collars for Pipe	3.000 EACH	_____.	_____.
0194	520.8700 Cleaning Culvert Pipes	3.000 EACH	_____.	_____.
0196	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch	18.000 EACH	_____.	_____.
0198	521.1015 Apron Endwalls for Culvert Pipe Steel 15-Inch	6.000 EACH	_____.	_____.
0200	521.1018 Apron Endwalls for Culvert Pipe Steel 18-Inch	4.000 EACH	_____.	_____.
0202	521.3112 Culvert Pipe Corrugated Steel 12-Inch	184.000 LF	_____.	_____.
0204	521.3115 Culvert Pipe Corrugated Steel 15-Inch	100.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0206	521.3118 Culvert Pipe Corrugated Steel 18-Inch	44.000 LF	_____.	_____.
0208	522.0112 Culvert Pipe Reinforced Concrete Class III 12-Inch	53.000 LF	_____.	_____.
0210	522.0196 Culvert Pipe Reinforced Concrete Class III 96-Inch	159.000 LF	_____.	_____.
0212	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	15.000 EACH	_____.	_____.
0214	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	4.000 EACH	_____.	_____.
0216	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	4.000 EACH	_____.	_____.
0218	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	4.000 EACH	_____.	_____.
0220	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	5.000 EACH	_____.	_____.
0222	522.1042 Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	1.000 EACH	_____.	_____.
0224	530.0112 Culvert Pipe Corrugated Polyethylene 12-Inch	53.000 LF	_____.	_____.
0226	550.0020 Pre-Boring Rock or Consolidated Materials	20.000 LF	_____.	_____.
0228	550.1100 Piling Steel HP 10-Inch X 42 Lb	1,760.000 LF	_____.	_____.
0230	601.0407 Concrete Curb & Gutter 18-Inch Type D	28,688.000 LF	_____.	_____.
0232	601.0411 Concrete Curb & Gutter 30-Inch Type D	13,075.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0234	601.0600 Concrete Curb Pedestrian	104.000 LF	_____	_____
0236	602.0410 Concrete Sidewalk 5-Inch	206,404.000 SF	_____	_____
0238	602.0505 Curb Ramp Detectable Warning Field Yellow	1,496.000 SF	_____	_____
0240	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	482.000 SF	_____	_____
0242	602.1500 Concrete Steps	15.000 SF	_____	_____
0244	606.0200 Riprap Medium	31.000 CY	_____	_____
0246	606.0300 Riprap Heavy	285.000 CY	_____	_____
0248	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	1,819.000 LF	_____	_____
0250	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	2,038.000 LF	_____	_____
0252	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	2,033.000 LF	_____	_____
0254	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch	20.000 LF	_____	_____
0256	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	1,862.000 LF	_____	_____
0258	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	346.000 LF	_____	_____
0260	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	3,089.000 LF	_____	_____



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Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0262	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	96.000 LF	_____.	_____.
0264	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	2,966.000 LF	_____.	_____.
0266	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	2,670.000 LF	_____.	_____.
0268	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	3,758.000 LF	_____.	_____.
0270	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	1,549.000 LF	_____.	_____.
0272	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	499.000 LF	_____.	_____.
0274	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	1,145.000 LF	_____.	_____.
0276	608.0442 Storm Sewer Pipe Reinforced Concrete Class IV 42-Inch	533.000 LF	_____.	_____.
0278	608.2319 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	216.000 LF	_____.	_____.
0280	608.2324 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 24x38-Inch	187.000 LF	_____.	_____.
0282	608.2329 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45-Inch	220.000 LF	_____.	_____.
0284	608.2414 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	277.000 LF	_____.	_____.



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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0286	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	63.000 LF	_____.	_____.
0288	608.2424 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	111.000 LF	_____.	_____.
0290	611.0530 Manhole Covers Type J	98.000 EACH	_____.	_____.
0292	611.0610 Inlet Covers Type BW	2.000 EACH	_____.	_____.
0294	611.0612 Inlet Covers Type C	20.000 EACH	_____.	_____.
0296	611.0639 Inlet Covers Type H-S	111.000 EACH	_____.	_____.
0298	611.0642 Inlet Covers Type MS	63.000 EACH	_____.	_____.
0300	611.0660 Inlet Covers Type WM	87.000 EACH	_____.	_____.
0302	611.0666 Inlet Covers Type Z	119.000 EACH	_____.	_____.
0304	611.1004 Catch Basins 4-FT Diameter	51.000 EACH	_____.	_____.
0306	611.1005 Catch Basins 5-FT Diameter	23.000 EACH	_____.	_____.
0308	611.1006 Catch Basins 6-FT Diameter	3.000 EACH	_____.	_____.
0310	611.1230 Catch Basins 2x3-FT	47.000 EACH	_____.	_____.
0312	611.2003 Manholes 3-FT Diameter	2.000 EACH	_____.	_____.
0314	611.2004 Manholes 4-FT Diameter	43.000 EACH	_____.	_____.



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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0316	611.2005 Manholes 5-FT Diameter	25.000 EACH	_____.	_____.
0318	611.2006 Manholes 6-FT Diameter	22.000 EACH	_____.	_____.
0320	611.2007 Manholes 7-FT Diameter	4.000 EACH	_____.	_____.
0322	611.2008 Manholes 8-FT Diameter	3.000 EACH	_____.	_____.
0324	611.3003 Inlets 3-FT Diameter	77.000 EACH	_____.	_____.
0326	611.3004 Inlets 4-FT Diameter	89.000 EACH	_____.	_____.
0328	611.3225 Inlets 2x2.5-FT	42.000 EACH	_____.	_____.
0330	611.3901 Inlets Median 1 Grate	51.000 EACH	_____.	_____.
0332	611.3902 Inlets Median 2 Grate	6.000 EACH	_____.	_____.
0334	611.8110 Adjusting Manhole Covers	5.000 EACH	_____.	_____.
0336	611.8115 Adjusting Inlet Covers	2.000 EACH	_____.	_____.
0338	611.8120.S Cover Plates Temporary	14.000 EACH	_____.	_____.
0340	612.0106 Pipe Underdrain 6-Inch	4,459.000 LF	_____.	_____.
0342	612.0406 Pipe Underdrain Wrapped 6-Inch	366.000 LF	_____.	_____.
0344	614.0010 Barrier System Grading Shaping Finishing	2.000 EACH	_____.	_____.
0346	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.	_____.





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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0348	614.0220 Steel Thrie Beam Bullnose Terminal	2.000 EACH	_____.	_____.
0350	614.0230 Steel Thrie Beam	87.500 LF	_____.	_____.
0352	616.0204 Fence Chain Link 4-FT	2,245.000 LF	_____.	_____.
0354	616.0329 Gates Chain Link (width) 01. 12-Ft	3.000 EACH	_____.	_____.
0356	616.0700.S Fence Safety	425.000 LF	_____.	_____.
0358	619.1000 Mobilization	1.000 EACH	_____.	_____.
0360	620.0300 Concrete Median Sloped Nose	1,546.000 SF	_____.	_____.
0362	624.0100 Water	949.000 MGAL	_____.	_____.
0364	625.0100 Topsoil	5,549.000 SY	_____.	_____.
0366	625.0500 Salvaged Topsoil	12,552.000 SY	_____.	_____.
0368	627.0200 Mulching	18,511.000 SY	_____.	_____.
0370	628.1104 Erosion Bales	64.000 EACH	_____.	_____.
0372	628.1504 Silt Fence	7,835.000 LF	_____.	_____.
0374	628.1520 Silt Fence Maintenance	7,835.000 LF	_____.	_____.
0376	628.1905 Mobilizations Erosion Control	6.000 EACH	_____.	_____.
0378	628.1910 Mobilizations Emergency Erosion Control	10.000 EACH	_____.	_____.
0380	628.2027 Erosion Mat Class II Type C	4,050.000 SY	_____.	_____.



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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0382	628.6005 Turbidity Barriers	410.000 SY	_____.	_____.
0384	628.7005 Inlet Protection Type A	140.000 EACH	_____.	_____.
0386	628.7010 Inlet Protection Type B	3.000 EACH	_____.	_____.
0388	628.7015 Inlet Protection Type C	269.000 EACH	_____.	_____.
0390	628.7020 Inlet Protection Type D	230.000 EACH	_____.	_____.
0392	628.7504 Temporary Ditch Checks	840.000 LF	_____.	_____.
0394	628.7555 Culvert Pipe Checks	17.000 EACH	_____.	_____.
0396	628.7560 Tracking Pads	8.000 EACH	_____.	_____.
0398	628.7570 Rock Bags	200.000 EACH	_____.	_____.
0400	630.0170 Seeding Mixture No. 70	11.900 LB	_____.	_____.
0402	630.0171 Seeding Mixture No. 70A	10.350 LB	_____.	_____.
0404	630.0200 Seeding Temporary	499.910 LB	_____.	_____.
0406	631.0300 Sod Water	1,168.000 MGAL	_____.	_____.
0408	631.1000 Sod Lawn	52,124.000 SY	_____.	_____.
0410	637.2210 Signs Type II Reflective H	1,245.090 SF	_____.	_____.
0412	637.2215 Signs Type II Reflective H Folding	142.200 SF	_____.	_____.
0414	637.2230 Signs Type II Reflective F	621.490 SF	_____.	_____.



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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0416	638.2102 Moving Signs Type II	23.000 EACH	_____.	_____.
0418	638.4000 Moving Small Sign Supports	7.000 EACH	_____.	_____.
0420	640.1303.S Pond Liner Clay	835.000 CY	_____.	_____.
0422	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0424	643.0300 Traffic Control Drums	236,650.000 DAY	_____.	_____.
0426	643.0410 Traffic Control Barricades Type II	1,900.000 DAY	_____.	_____.
0428	643.0420 Traffic Control Barricades Type III	26,000.000 DAY	_____.	_____.
0430	643.0500 Traffic Control Flexible Tubular Marker Posts	80.000 EACH	_____.	_____.
0432	643.0600 Traffic Control Flexible Tubular Marker Bases	80.000 EACH	_____.	_____.
0434	643.0705 Traffic Control Warning Lights Type A	53,750.000 DAY	_____.	_____.
0436	643.0715 Traffic Control Warning Lights Type C	12,600.000 DAY	_____.	_____.
0438	643.0800 Traffic Control Arrow Boards	1,000.000 DAY	_____.	_____.
0440	643.0900 Traffic Control Signs	39,050.000 DAY	_____.	_____.
0442	643.0920 Traffic Control Covering Signs Type II	10.000 EACH	_____.	_____.
0444	643.1000 Traffic Control Signs Fixed Message	380.000 SF	_____.	_____.
0446	643.1050 Traffic Control Signs PCMS	280.000 DAY	_____.	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0448	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0450	644.1410 Temporary Pedestrian Surface Asphalt	7,302.000 SF	_____.	_____.
0452	645.0111 Geotextile Type DF Schedule A	3,801.000 SY	_____.	_____.
0454	645.0120 Geotextile Type HR	592.000 SY	_____.	_____.
0456	645.0140 Geotextile Type SAS	7,524.000 SY	_____.	_____.
0458	645.0220 Geogrid Type SR	1,740.000 SY	_____.	_____.
0460	646.1005 Marking Line Paint 4-Inch	63,950.000 LF	_____.	_____.
0462	646.1020 Marking Line Epoxy 4-Inch	68,290.000 LF	_____.	_____.
0464	646.3005 Marking Line Paint 8-Inch	415.000 LF	_____.	_____.
0466	646.3020 Marking Line Epoxy 8-Inch	10,158.000 LF	_____.	_____.
0468	646.5005 Marking Arrow Paint	2.000 EACH	_____.	_____.
0470	646.5020 Marking Arrow Epoxy	107.000 EACH	_____.	_____.
0472	646.5120 Marking Word Epoxy	21.000 EACH	_____.	_____.
0474	646.5305 Marking Railroad Crossing Paint	4.000 EACH	_____.	_____.
0476	646.5320 Marking Railroad Crossings Epoxy	8.000 EACH	_____.	_____.
0478	646.6105 Marking Stop Line Paint 18-Inch	55.000 LF	_____.	_____.
0480	646.6120 Marking Stop Line Epoxy 18-Inch	1,161.000 LF	_____.	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0482	646.7120 Marking Diagonal Epoxy 12-Inch	602.000 LF	_____	_____
0484	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	5,534.000 LF	_____	_____
0486	646.8120 Marking Curb Epoxy	490.000 LF	_____	_____
0488	646.8220 Marking Island Nose Epoxy	48.000 EACH	_____	_____
0490	646.9000 Marking Removal Line 4-Inch	3,200.000 LF	_____	_____
0492	646.9100 Marking Removal Line 8-Inch	1,050.000 LF	_____	_____
0494	646.9300 Marking Removal Special Marking	5.000 EACH	_____	_____
0496	649.0105 Temporary Marking Line Paint 4-Inch	46,810.000 LF	_____	_____
0498	649.0205 Temporary Marking Line Paint 8-Inch	1,140.000 LF	_____	_____
0500	649.0505 Temporary Marking Arrow Paint	2.000 EACH	_____	_____
0502	649.0805 Temporary Marking Stop Line Paint 18-Inch	44.000 LF	_____	_____
0504	650.4000 Construction Staking Storm Sewer	517.000 EACH	_____	_____
0506	650.4500 Construction Staking Subgrade	16,244.000 LF	_____	_____
0508	650.5000 Construction Staking Base	16,244.000 LF	_____	_____
0510	650.5500 Construction Staking Curb Gutter and Curb & Gutter	68,075.000 LF	_____	_____
0512	650.6500 Construction Staking Structure Layout (structure) 01. B-67-374	LS	LUMP SUM	_____



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0514	650.6500 Construction Staking Structure Layout (structure) 02. B-67-375	LS	LUMP SUM	_____.
0516	650.6500 Construction Staking Structure Layout (structure) 03. R-67-152	LS	LUMP SUM	_____.
0518	650.6500 Construction Staking Structure Layout (structure) 04. R-67-153	LS	LUMP SUM	_____.
0520	650.6500 Construction Staking Structure Layout (structure) 05. R-67-154	LS	LUMP SUM	_____.
0522	650.6500 Construction Staking Structure Layout (structure) 06. B-67-256	LS	LUMP SUM	_____.
0524	650.8500 Construction Staking Electrical Installations (project) 01. 2759-03-70	LS	LUMP SUM	_____.
0526	650.9000 Construction Staking Curb Ramps	111.000 EACH	_____.	_____.
0528	650.9910 Construction Staking Supplemental Control (project) 01. 2759-03-70	LS	LUMP SUM	_____.
0530	650.9920 Construction Staking Slope Stakes	16,244.000 LF	_____.	_____.
0532	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	1,388.000 LF	_____.	_____.
0534	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	3,671.000 LF	_____.	_____.
0536	652.0615 Conduit Special 3-Inch	1,102.000 LF	_____.	_____.
0538	652.0625 Conduit Special 4-Inch	140.000 LF	_____.	_____.
0540	653.0140 Pull Boxes Steel 24x42-Inch	50.000 EACH	_____.	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0542	653.0905 Removing Pull Boxes	62.000 EACH	_____.	_____.
0544	654.0101 Concrete Bases Type 1	21.000 EACH	_____.	_____.
0546	654.0102 Concrete Bases Type 2	9.000 EACH	_____.	_____.
0548	654.0105 Concrete Bases Type 5	9.000 EACH	_____.	_____.
0550	654.0110 Concrete Bases Type 10	1.000 EACH	_____.	_____.
0552	654.0113 Concrete Bases Type 13	12.000 EACH	_____.	_____.
0554	654.0217 Concrete Control Cabinet Bases Type 9 Special	3.000 EACH	_____.	_____.
0556	655.0230 Cable Traffic Signal 5-14 AWG	2,253.000 LF	_____.	_____.
0558	655.0240 Cable Traffic Signal 7-14 AWG	5,064.000 LF	_____.	_____.
0560	655.0260 Cable Traffic Signal 12-14 AWG	2,347.000 LF	_____.	_____.
0562	655.0270 Cable Traffic Signal 15-14 AWG	4,462.000 LF	_____.	_____.
0564	655.0320 Cable Type UF 2-10 AWG Grounded	5,893.000 LF	_____.	_____.
0566	655.0515 Electrical Wire Traffic Signals 10 AWG	8,183.000 LF	_____.	_____.
0568	655.0610 Electrical Wire Lighting 12 AWG	4,563.000 LF	_____.	_____.
0570	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. CTH M (North Ave) & Calhoun Rd	LS	LUMP SUM	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0572	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. CTH M (North Ave) & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0574	656.0200 Electrical Service Meter Breaker Pedestal (location) 03. CTH M (North Ave) & N 124th St	LS	LUMP SUM	_____.
0576	657.0100 Pedestal Bases	23.000 EACH	_____.	_____.
0578	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	15.000 EACH	_____.	_____.
0580	657.0305 Poles Type 2	1.000 EACH	_____.	_____.
0582	657.0310 Poles Type 3	9.000 EACH	_____.	_____.
0584	657.0322 Poles Type 5-Aluminum	9.000 EACH	_____.	_____.
0586	657.0350 Poles Type 10	1.000 EACH	_____.	_____.
0588	657.0360 Poles Type 13	12.000 EACH	_____.	_____.
0590	657.0405 Traffic Signal Standards Aluminum 3.5-FT	8.000 EACH	_____.	_____.
0592	657.0420 Traffic Signal Standards Aluminum 13-FT	2.000 EACH	_____.	_____.
0594	657.0425 Traffic Signal Standards Aluminum 15-FT	4.000 EACH	_____.	_____.
0596	657.0430 Traffic Signal Standards Aluminum 10-FT	9.000 EACH	_____.	_____.
0598	657.0530 Monotube Arms 30-FT	1.000 EACH	_____.	_____.
0600	657.0540 Monotube Arms 40-FT	3.000 EACH	_____.	_____.





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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0602	657.0545 Monotube Arms 45-FT	3.000 EACH	_____.	_____.
0604	657.0550 Monotube Arms 50-FT	2.000 EACH	_____.	_____.
0606	657.0555 Monotube Arms 55-FT	4.000 EACH	_____.	_____.
0608	657.0609 Luminaire Arms Single Member 4-Inch Clamp 6-FT	9.000 EACH	_____.	_____.
0610	657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT	16.000 EACH	_____.	_____.
0612	657.0810 Luminaire Arms Steel 10-FT	13.000 EACH	_____.	_____.
0614	658.0173 Traffic Signal Face 3S 12-Inch	44.000 EACH	_____.	_____.
0616	658.0174 Traffic Signal Face 4S 12-Inch	23.000 EACH	_____.	_____.
0618	658.0175 Traffic Signal Face 5S 12-Inch	4.000 EACH	_____.	_____.
0620	658.0416 Pedestrian Signal Face 16-Inch	28.000 EACH	_____.	_____.
0622	658.0500 Pedestrian Push Buttons	34.000 EACH	_____.	_____.
0624	658.5069 Signal Mounting Hardware (location) 01. CTH M ( North Ave) & Calhoun Rd	LS	LUMP SUM	_____.
0626	658.5069 Signal Mounting Hardware (location) 02. CTH M ( North Ave) & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0628	658.5069 Signal Mounting Hardware (location) 03. CTH M ( North Ave) & Lilly Rd	LS	LUMP SUM	_____.
0630	658.5069 Signal Mounting Hardware (location) 04. CTH M ( North Ave) & N 124th St	LS	LUMP SUM	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0632	659.1125 Luminaires Utility LED C	38.000 EACH	_____.	_____.
0634	661.0200 Temporary Traffic Signals for Intersections (location) 01. CTH M ( North Ave) & Calhoun Rd	LS	LUMP SUM	_____.
0636	661.0200 Temporary Traffic Signals for Intersections (location) 02. CTH M & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0638	661.0200 Temporary Traffic Signals for Intersections (location) 04. CTH M ( North Ave) & N 124th St	LS	LUMP SUM	_____.
0640	690.0150 Sawing Asphalt	31,823.000 LF	_____.	_____.
0642	690.0250 Sawing Concrete	404.000 LF	_____.	_____.
0644	715.0415 Incentive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0646	715.0502 Incentive Strength Concrete Structures	4,100.000 DOL	1.00000	4,100.00
0648	740.0440 Incentive IRI Ride	24,000.000 DOL	1.00000	24,000.00
0650	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	4,800.000 HRS	5.00000	24,000.00
0652	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	9,000.000 HRS	5.00000	45,000.00
0654	SPV.0035 Special 01. Filter Aggregate Layer	102.000 CY	_____.	_____.
0656	SPV.0035 Special 02. Engineered Soil	1,038.000 CY	_____.	_____.
0658	SPV.0035 Special 03. Storage Layer	1,243.000 CY	_____.	_____.



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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0660	SPV.0060 Special 01. Sediment Filter Bag	10.000 EACH	_____.	_____.
0662	SPV.0060 Special 02. Sump Pump Connection	30.000 EACH	_____.	_____.
0664	SPV.0060 Special 03. Relocate Existing Lighting Unit	2.000 EACH	_____.	_____.
0666	SPV.0060 Special 04. Traffic Signal Controller & Cabinet	3.000 EACH	_____.	_____.
0668	SPV.0060 Special 05. Existing Pipe Connections to Structures	27.000 EACH	_____.	_____.
0670	SPV.0060 Special 06. Reconstruct Water Manhole	1.000 EACH	_____.	_____.
0672	SPV.0060 Special 07. Water Valve Extension Removal	21.000 EACH	_____.	_____.
0674	SPV.0060 Special 08. 1.25-Inch Water Service Offset	4.000 EACH	_____.	_____.
0676	SPV.0060 Special 09. 2-Inch Water Service Offset	1.000 EACH	_____.	_____.
0678	SPV.0060 Special 10. 4-Inch Water Main Offset	2.000 EACH	_____.	_____.
0680	SPV.0060 Special 11. 6-Inch Water Main Offset	3.000 EACH	_____.	_____.
0682	SPV.0060 Special 12. 8-Inch Water Main Offset	3.000 EACH	_____.	_____.
0684	SPV.0060 Special 13. 12-Inch Water Main Offset	18.000 EACH	_____.	_____.
0686	SPV.0060 Special 14. Adjust Hydrant	15.000 EACH	_____.	_____.
0688	SPV.0060 Special 15. Hydrant Relocation	18.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0690	SPV.0060 Special 16. Adjust Water Valve Box	87.000 EACH	_____.	_____.
0692	SPV.0060 Special 17. Adjust Curb Stop Box	28.000 EACH	_____.	_____.
0694	SPV.0060 Special 18. Meter Box Cover	6.000 EACH	_____.	_____.
0696	SPV.0060 Special 19. Adjust Sanitary Sewer Manhole	21.000 EACH	_____.	_____.
0698	SPV.0060 Special 20. Reconstruct Sanitary Sewer Manhole	45.000 EACH	_____.	_____.
0700	SPV.0060 Special 21. Sanitary Manhole Frame & Casting	6.000 EACH	_____.	_____.
0702	SPV.0060 Special 22. Sanitary Manhole Seal	70.000 EACH	_____.	_____.
0704	SPV.0060 Special 23. Posts Tubular Steel, 1 3/4" x 1 3/4" - 8-FT	4.000 EACH	_____.	_____.
0706	SPV.0060 Special 24. Posts Tubular Steel, 1 3/4" x 1 3/4" - 10-FT	14.000 EACH	_____.	_____.
0708	SPV.0060 Special 25. Posts Tubular Steel, 1 3/4" x 1 3/4" - 11-FT	172.000 EACH	_____.	_____.
0710	SPV.0060 Special 26. Posts Tubular Steel, 1 3/4" x 1 3/4" - 12-FT	76.000 EACH	_____.	_____.
0712	SPV.0060 Special 27. Posts Tubular Steel, 1 3/4" x 1 3/4" - 14-FT	20.000 EACH	_____.	_____.
0714	SPV.0060 Special 28. Section Corner Monuments	6.000 EACH	_____.	_____.
0716	SPV.0060 Special 29. Concrete Base Spread Footing Type 1	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0718	SPV.0060 Special 30. Concrete Base Spread Footing Type 2	1.000 EACH	_____.	_____.
0720	SPV.0060 Special 31. Manhole 6-FT Diameter with Restrictor Plate	2.000 EACH	_____.	_____.
0722	SPV.0060 Special 32. Manhole 8-FT Diameter with Restrictor Plate	1.000 EACH	_____.	_____.
0724	SPV.0060 Special 33. New Pipe Connection to Existing Structure	6.000 EACH	_____.	_____.
0726	SPV.0090 Special 01. Concrete Curb and Gutter 66-Inch	26,191.000 LF	_____.	_____.
0728	SPV.0090 Special 02. 6-Inch PVC Water Main	203.000 LF	_____.	_____.
0730	SPV.0090 Special 03. Excavate and Install Polystyrene Insulation 4-Inch Thickness	750.000 LF	_____.	_____.
0732	SPV.0090 Special 04. Split Rail Fence	110.000 LF	_____.	_____.
0734	SPV.0090 Special 05. Timber Fence	230.000 LF	_____.	_____.
0736	SPV.0090 Special 06. Remove and Salvage Type F Tubular Steel Railing	70.000 LF	_____.	_____.
0738	SPV.0105 Special 01. Vehicular Video Detection System CTH M (North Ave) & Calhoun Rd	LS	LUMP SUM	_____.
0740	SPV.0105 Special 02. Vehicular Video Detection System CTH M (North Ave) & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0742	SPV.0105 Special 03. Vehicular Video Detection System CTH M (North Ave) & Lilly Rd	LS	LUMP SUM	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0744	SPV.0105 Special 04. Reinstall Vehicular Video Detection System CTH M (North Ave) & N 124th St	LS	LUMP SUM	_____.
0746	SPV.0105 Special 05. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Calhoun Rd	LS	LUMP SUM	_____.
0748	SPV.0105 Special 06. Modify and Reinstall Emergency Vehicle Preemption System, CTH M & CTH YY	LS	LUMP SUM	_____.
0750	SPV.0105 Special 07. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & Lilly Rd	LS	LUMP SUM	_____.
0752	SPV.0105 Special 08. Reinstall Emergency Vehicle Preemption System CTH M (North Ave) & N 124th St	LS	LUMP SUM	_____.
0754	SPV.0105 Special 09. Railroad Preemption System, CTH M (North Ave) & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0756	SPV.0105 Special 10. Temporary Vehicle Detection System, CTH M (North Ave) & Calhoun Rd	LS	LUMP SUM	_____.
0758	SPV.0105 Special 11. Temporary Vehicle Detection System, CTH M (North Ave) & CTH YY (Pilgrim Rd)	LS	LUMP SUM	_____.
0760	SPV.0105 Special 13. Maintaining Temporary Drainage, STA. 49+19	LS	LUMP SUM	_____.
0762	SPV.0105 Special 14. Removing Roadway Sign	LS	LUMP SUM	_____.
0764	SPV.0135 Special 01. Vibration Monitoring	1.000 MON	_____.	_____.
0766	SPV.0165 Special 01. Wall Modular Block Gravity Landscape, Sta. 98+50 LT	124.000 SF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0768	SPV.0165 Special 02. Wall Modular Block Gravity Landscape, Sta. 99+40 LT	233.000 SF	_____.	_____.
0770	SPV.0165 Special 03. Wall Modular Block Gravity Landscape, Sta. 131+60 LT	281.000 SF	_____.	_____.
0772	SPV.0165 Special 04. Wall Modular Block Gravity Landscape, Sta. 148+00 LT	203.000 SF	_____.	_____.
0774	SPV.0165 Special 05. Wall Modular Block Gravity Landscape, Sta. 214+00 RT	48.000 SF	_____.	_____.
0776	SPV.0180 Special 01. Hydroseeding	47,750.000 SY	_____.	_____.
0778	SPV.0180 Special 02. Polystyrene Insulation 4-Inch Thickness	261.420 SY	_____.	_____.
0780	SPV.0200 Special 01. Rebuild Sanitary Sewer Manhole	26.800 VF	_____.	_____.
<b>Section: 0001</b>			<b>Total:</b>	_____.
			<b>Total Bid:</b>	_____.

**PLEASE ATTACH SCHEDULE OF ITEMS HERE**





## Wisconsin Department of Transportation

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March 2, 2020

**Division of Transportation Systems  
Development**

Bureau of Project Development  
4822 Madison Yards Way, 4<sup>th</sup> Floor South  
Madison, WI 53705

Telephone: (608) 266-1631  
Facsimile (FAX): (608) 266-8459

### **NOTICE TO ALL CONTRACTORS:**

#### **Federal Wage Rate Addendum #01**

#### **Letting of March 10, 2020**

Attached is a copy of the revised WI 10 Highway Davis Bacon Prevailing Wage Rates that are included in proposals 01 – 03, 05 – 14, 18 – 23, and 25 – 41; WI 8 Heavy (Sewer & Water Line & Tunnel) Davis Bacon Prevailing Wage Rates that are included in proposals 05 and 39; and WI 15 Heavy Davis Bacon Prevailing Wage Rates that are included in proposal 22. These wage rates are effective for all proposals they are included in in the March 10, 2020 letting. The updated wage rates are dated February 28, 2020 and are effective on or after March 9, 2020.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

"General Decision Number: WI20200010 02/28/2020

Superseded General Decision Number: WI20190010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/28/2020

BRWI0001-002 06/03/2019

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.80	24.28

-----  
BRWI0002-002 06/01/2019

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.94	23.30

-----  
BRWI0002-005 06/01/2019

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,  
CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,  
FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE,  
LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,  
OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK,  
SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA,  
WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37

-----  
BRWI0003-002 06/03/2019

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90

-----  
BRWI0004-002 06/01/2019

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.43	25.10

-----  
BRWI0006-002 06/01/2019

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,  
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.06	23.02
-----		
BRWI0007-002 06/03/2019		

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.57	24.22
-----		
BRWI0008-002 06/01/2019		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.93	24.22
-----		
BRWI0011-002 06/03/2019		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90
-----		
BRWI0019-002 06/03/2019		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.40	24.68
-----		
BRWI0034-002 06/03/2019		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
-----		
CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39

-----  
 CARP0252-002 06/01/2016

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIVER.....	\$ 34.12	18.00

-----  
 CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

-----  
 CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

-----  
CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

-----  
CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

-----  
ELEC0014-002 06/03/2019

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK  
(except Maryville, Colby, Unity, Sherman, Fremont, Lynn &  
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

	Rates	Fringes
Electricians:.....	\$ 35.59	20.87

-----  
ELEC0014-007 06/03/2019

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer		
Installer/Technician.....	\$ 27.25	14.34

Low voltage construction, installation, maintenance and  
removal of teledata facilities (voice, data, and video)  
including outside plant, telephone and data inside wire,  
interconnect, terminal equipment, central offices, PABX,  
fiber optic cable and equipment, micro waves, V-SAT,

bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

-----  
ELEC0127-002 06/01/2019

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 40.49	30%+12.07

-----  
ELEC0158-002 06/03/2019

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),  
MARINETTE(Wausaukee 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

	Rates	Fringes
Electricians:.....	\$ 33.52	29.75%+10.26

-----  
ELEC0159-003 06/01/2019

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and  
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

	Rates	Fringes
Electricians:.....	\$ 40.30	22.24

-----  
ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern,  
Florence and Homestead) AND MARINETTE COUNTY (Township of  
Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over		
\$180,000.....	\$ 32.38	18.63

Electrical contracts under  
 \$180,000.....\$ 30.18                      18.42

-----  
 ELEC0242-005 05/16/2018

DOUGLAS COUNTY

Rates                      Fringes

Electricians:.....\$ 36.85                      26.17

-----  
 ELEC0388-002 06/03/2019

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Rates                      Fringes

Electricians:.....\$ 33.56                      26%+11.01

-----  
 ELEC0430-002 01/01/2020

RACINE COUNTY (Except Burlington Township)

Rates                      Fringes

Electricians:.....\$ 40.30                      22.19

-----  
 ELEC0494-005 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates                      Fringes

Electricians:.....\$ 41.03                      25.11

-----  
 ELEC0494-006 06/01/2019

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Rates                      Fringes



Electricians:.....\$ 34.73 22.27

-----  
ELEC0494-013 06/01/2019

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Sound & Communications

Installer.....\$ 20.53 18.13  
Technician.....\$ 30.18 19.58

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

-----  
ELEC0577-003 06/01/2019

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, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

Rates Fringes

Electricians:.....\$ 33.15 28.50%+10.00

-----  
ELEC0890-003 06/01/2019

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE,  
 RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.91	25.95%+10.83

-----  
 \* ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60

-----  
 ENGI0139-005 06/03/2019

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.17	23.03
Group 2.....	\$ 40.67	23.03
Group 3.....	\$ 40.17	23.03
Group 4.....	\$ 39.91	23.03
Group 5.....	\$ 39.62	23.03
Group 6.....	\$ 33.72	23.03

HAZARDOUS WASTE PREMIUMS:  
 EPA Level ""A"" protection - \$3.00 per hour  
 EPA Level ""B"" protection - \$2.00 per hour  
 EPA Level ""C"" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

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.

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 jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs;

pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (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 & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator 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 Tender.

GROUP 6: Off-road material hauler with or without ejector.

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IRON0008-002 06/01/2019

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,  
 MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO  
 COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 35.07	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor  
 Day, Thanksgiving Day & Christmas Day.

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 IRON0008-003 06/01/2019

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3),  
 WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.12	27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor  
 Day, Thanksgiving Day & Christmas Day.

-----  
 IRON0383-001 06/01/2019

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST,  
 GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA,  
 JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON,  
 MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern  
 area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA,  
 WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 35.50	26.57

-----  
 IRON0498-005 06/01/2019

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and  
 WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 40.25	40.53

-----  
IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,  
PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU  
COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40

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IRON0512-021 06/03/2019

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,  
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40

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LAB00113-002 06/03/2019

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 29.02	21.92
Group 2.....	\$ 29.17	21.92
Group 3.....	\$ 29.37	21.92
Group 4.....	\$ 29.52	21.92
Group 5.....	\$ 29.67	21.92
Group 6.....	\$ 25.51	21.92

LABORERS CLASSIFICATIONS

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, and  
Utility Man); Batch Truck Dumper or Cement Handler;  
Bituminous Worker (Dumper, Ironer, Smoother, and Tamper);  
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler  
(Pavement); Vibrator or Tamper Operator (Mechanical Hand  
Operated); Chain Saw Operator; Demolition Burning Torch  
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/03/2019

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.27	21.92
Group 2.....	\$ 28.37	21.92
Group 3.....	\$ 28.42	21.92
Group 4.....	\$ 28.62	21.92
Group 5.....	\$ 28.47	21.92
Group 6.....	\$ 25.36	21.92

LABORERS CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

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LAB00113-011 06/03/2019

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.08	21.92
Group 2.....	\$ 28.23	21.92
Group 3.....	\$ 28.43	21.92
Group 4.....	\$ 28.40	21.92
Group 5.....	\$ 28.73	21.92
Group 6.....	\$ 25.22	21.92

LABORERS CLASSIFICATIONS:

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

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LAB00140-002 06/03/2019

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.84	17.54
Group 2.....	\$ 32.94	17.54
Group 3.....	\$ 32.99	17.54
Group 4.....	\$ 33.19	17.54
Group 5.....	\$ 33.04	17.54
Group 6.....	\$ 29.47	17.54

LABORER CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Socialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

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LAB00464-003 06/03/2019

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 33.12	17.54
Group 2.....	\$ 33.22	17.54
Group 3.....	\$ 33.27	17.54
Group 4.....	\$ 33.47	17.54
Group 5.....	\$ 33.32	17.54
Group 6.....	\$ 29.47	17.54



LABORERS CLASSIFICATIONS:

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

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 PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

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 PAIN0108-002 06/01/2019

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 36.08	20.36
Spray & Sandblast.....	\$ 37.08	20.36

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PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

-----  
PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

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PAIN0781-002 06/01/2019

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 33.30	23.86
Brush.....	\$ 32.95	23.86
Spray & Sandblast.....	\$ 33.70	23.86

-----  
PAIN0802-002 06/01/2019

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 30.93	18.44

PREMIUM PAY:

    Structural Steel, Spray, Bridges = \$1.00 additional per hour.

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PAIN0802-003 06/01/2019

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN

LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,  
 MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,  
 OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,  
 WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 30.93	18.58
-----		
PAIN0934-001 06/01/2017		

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95
-----		
PAIN1011-002 06/02/2019		

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 25.76	13.33
-----		
PLAS0599-010 06/01/2017		

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN  
 COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET,  
 CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE,  
 FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE,  
 LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE,

MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK,  
 PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR,  
 VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD  
 COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA  
 CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPPEALEAU, AND  
 VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK  
 COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

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 TEAM0039-001 06/01/2019

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 29.57	22.03
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 29.72	22.03
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WELL DRILLER.....	\$ 16.52	3.70
-----		

WELDERS - Receive rate prescribed for craft performing  
 operation to which welding is incidental.

=====  
 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
 for Federal Contractors applies to all contracts subject to the  
 Davis-Bacon Act for which the contract is awarded (and any  
 solicitation was issued) on or after January 1, 2017. If this  
 contract is covered by the EO, the contractor must provide  
 employees with 1 hour of paid sick leave for every 30 hours  
 they work, up to 56 hours of paid sick leave each year.  
 Employees must be permitted to use paid sick leave for their  
 own illness, injury or other health-related needs, including  
 preventive care; to assist a family member (or person who is  
 like family to the employee) who is ill, injured, or has other  
 health-related needs, including preventive care; or for reasons  
 resulting from, or to assist a family member (or person who is  
 like family to the employee) who is a victim of, domestic

violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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 (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and

non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.)

and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

"General Decision Number: WI20200008 02/28/2020

Superseded General Decision Number: WI20190008

State: Wisconsin

Construction Types: Heavy (Sewer and Water Line and Tunnel)

Counties: Wisconsin Statewide.

TUNNEL, SEWER & WATER LINE CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/28/2020

BRWI0001-002 06/03/2019

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES



	Rates	Fringes
BRICKLAYER.....	\$ 33.80	24.28
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BRWI0002-002 06/01/2019		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.94	23.30
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BRWI0002-005 06/01/2019		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37
-----		
BRWI0003-002 06/03/2019		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90
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BRWI0004-002 06/01/2019		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.43	25.10
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BRWI0006-002 06/01/2019		

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

Rates	Fringes
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BRICKLAYER.....\$ 35.06 23.02

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BRWI0007-002 06/03/2019

GREEN, LAFAYETTE, AND ROCK COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.57 24.22

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BRWI0008-002 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

BRICKLAYER.....\$ 38.93 24.22

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BRWI0009-001 06/03/2019

GREEN LAKE, MARQUETTE, OUTAGAMIE, SHAWANO, WAUPACA, WASHARA,  
AND WINNEBAGO COUNTIES

Rates Fringes

BRICKLAYER.....\$ 34.18 23.90

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BRWI0011-002 06/03/2019

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 34.18 23.90

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BRWI0013-002 06/03/2019

DANE, GRANT, IOWA, AND RICHLAND COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.56 24.23

-----  
BRWI0019-002 06/03/2019

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,  
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.40	24.68
-----		
BRWI0021-002 06/03/2019		

DODGE AND JEFFERSON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.75	24.02
-----		
BRWI0034-002 06/03/2019		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
-----		
CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39
-----		
CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Rates	Fringes
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CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIVER.....	\$ 34.12	18.00

-----  
 CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

-----  
 CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

-----  
 CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

-----  
 CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

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 \* CARP2337-003 06/01/2019

	Rates	Fringes
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MILLWRIGHT

Zone A.....	\$ 33.58	21.53
Zone B.....	\$ 33.58	21.53

ZONE DEFINITIONS

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON COUNTIES

ZONE B: KENOSHA & RACINE COUNTIES

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ELEC0014-002 06/03/2019

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK  
(except Maryville, Colby, Unity, Sherman, Fremont, Lynn &  
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

	Rates	Fringes
Electricians:.....	\$ 35.59	20.87

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ELEC0127-002 06/01/2019

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 40.49	30%+12.07

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ELEC0158-002 06/03/2019

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),  
MARINETTE(Wausaukee 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

	Rates	Fringes
Electricians:.....	\$ 33.52	29.75%+10.26

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ELEC0159-003 06/01/2019

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and

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

	Rates	Fringes
Electricians:.....	\$ 40.30	22.24
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ELEC0219-004 06/01/2016		

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over		
\$180,000.....	\$ 32.38	18.63
Electrical contracts under		
\$180,000.....	\$ 30.18	18.42
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ELEC0242-005 05/16/2018		

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17
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ELEC0388-002 06/03/2019		

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.56	26%+11.01
-----		
ELEC0430-002 01/01/2020		

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 40.30	22.19
-----		
ELEC0494-005 06/01/2019		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 41.03	25.11
-----		
ELEC0494-006 06/01/2019		

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.73	22.27
-----		
ELEC0577-003 06/01/2019		

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, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.15	28.50%+10.00
-----		
ELEC0890-003 06/01/2019		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.91	25.95%+10.83
-----		
ENGI0139-003 06/03/2019		

REMAINING COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.52	22.45
Group 2.....	\$ 40.27	22.45
Group 3.....	\$ 38.97	22.45
Group 4.....	\$ 38.44	22.45
Group 5.....	\$ 36.37	22.45
Group 6.....	\$ 34.84	22.45

HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" Protection: \$3.00 per hour  
EPA Level ""B"" Protection: \$2.00 per hour  
EPA Level ""C"" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic



and Welder; Off Road Material Haulers.

GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweepers; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer

GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freeze Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3"; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

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 ENGI0139-007 06/03/2019

DODGE, FOND DU LAC, JEFFERSON, KENOSHA, MILWAUKEE, OZAUKEE, RACINE, SHEBOYGAN, WALWORTH, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.19	22.20
Group 2.....	\$ 40.41	22.20
Group 3.....	\$ 39.46	22.20
Group 4.....	\$ 38.41	22.20
Group 5.....	\$ 37.01	22.20

HAZARDOUS WASTE PREMIUMS:  
 EPA Level "A" Protection: \$3.00 per hour  
 EPA Level "B" Protection: \$2.00 per hour  
 EPA Level "C" Protection: \$1.00 per hour

## POWER EQUIPMENT OPERATORS CLASSIFICATIONS

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; Backhoes (Excavators) 130,000 lbs and over; Caisson Rigs and Pile Drivers

GROUP 2: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or under; or Cranes, Tower Cranes, and Derricks with boom, lead, and/or jib lengths measuring 175 feet or under; Backhoes (Excavators) under 130,000 lbs; Skid Rigs; Dredge Operator; Traveling Crane (Bridge type); Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Pumps and Boring Machines (directional)

GROUP 3: Material Hoists; Stack Hoists; Tractor or Truck mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane, 5 tons or under; Manhoist; Tractor over 40 hp; Bulldozer over 40 hp; Endloader over 40 hp; Forklift, 25 ft and over; Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Mechanic and Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Percussion Drill Operator; Rotary Drill Operator; Blaster; Air Track Drill; Trencher (wheel type or chain type having over 8 inch bucket); Elevator; Milling Machine and Boring Machine (horizontal or vertical); Backhoe Mounted Compactor

GROUP 4: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machine (road type); Roller, Rubber Tire; Concrete Batch Hopper; Concrete Conveyor System; Concrete Mixers (14S or over); Screw type Pumps and Gypsum Pumps; Grout Pumps; Tractor, Bulldozer, End Loader, under 40 hp; Pumps (well points); Trencher (chain type 8 inch or smaller bucket); Industrial Locomotives; Roller under 5 tons; Fireman (Piledrivers and Derricks); Robotic Tool Carrier with or without attachments.

GROUP 5: Hoists (Automatic); Forklift, 12 ft to 25 ft; Tamper-Compactors, riding type; A-Frame and Winch Trucks; Concrete Auto Breaker; Hydrohammer, small; Brooms and Sweepers; Hoist (Tuggers); Stump Chipper, large; Boats (Tug, Safety, Work Barges and Launch); Shouldering Machine Operator; Screed Operator; Farm or Industrial Tractor; Post Hole Digger; Stone Crushers and Screening Plants; Firemen (Asphalt Plants); Air Compressor (400 CFM or over); Augers (vertical and horizontal); Generators, 150 KW and over; Air, Electric Hydraulic Jacks (Slipform); Prestress

Machines; Skid Steer Loader with or without attachments; Boiler operators (temporary heat); Forklift, 12 ft and under; Screed Operator Milling Machine; Refrigeration Plant/Freeze Machine; Power Pack Vibratory/Ultra Sound Driver and Extractor; Generators under 150 KW; Combination small equipment operator; Compressors under 400 CFM; Welding Machines; Heaters, Mechanical; Pumps; Winches, Small Electric; Oiler and Greaser; Conveyor; High pressure utility locating machine (daylighting machine).

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 IRON0008-002 06/01/2019

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 35.07	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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 IRON0008-003 06/01/2019

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.12	27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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 IRON0383-001 06/01/2019

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 35.50	26.57
-----		
IRON0498-005 06/01/2019		

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and  
WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 40.25	40.53
-----		
IRON0512-008 06/03/2019		

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,  
PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU  
COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40
-----		
IRON0512-021 06/03/2019		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,  
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40
-----		
LAB00113-004 06/03/2019		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Open Cut)		
Group 1.....	\$ 15.45	20.81
Group 2.....	\$ 17.72	20.81
Group 3.....	\$ 21.26	20.81
Group 4.....	\$ 30.63	20.81
Group 5.....	\$ 30.77	20.81
Group 6.....	\$ 30.83	20.81
Group 7.....	\$ 33.04	20.81
Group 8.....	\$ 35.86	20.81

Group 9.....\$ 36.50 20.81

LABORERS CLASSIFICATIONS [OPEN CUT]

GROUP 1: Yard Laborer

GROUP 2: Landscaper

GROUP 3: Flag Person

GROUP 4: Paving Laborer

GROUP 5: General Laborer on Surface; Top Man

GROUP 6: Mud Mixer

GROUP 7: Mucker; Form Stripper; Bottom Digger and Misc;  
Bottom Man and Welder on Surface

GROUP 8: Concrete Manhole Builder; Caisson Worker; Miner;  
Pipe Layer; Rock Driller and Joint Man; Timber Man and  
Concrete Brusher; Bracer in Trench Behind Machine & Tight  
Sheeting; Concrete Formsetter and Shoveler; Jackhammer  
Operator

GROUP 9: Blaster

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LAB00113-005 06/03/2019

SEWER, TUNNEL & UNDERGROUND

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
Laborers:		
Group 1.....	\$ 22.12	20.81
Group 2.....	\$ 28.05	20.81
Group 3.....	\$ 30.61	20.81
Group 4.....	\$ 32.38	20.81

TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30  
lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS

GROUP 1: Flagperson

GROUP 2: Top Man, General Laborer, Wellpoint Installation, Wire Mesh and Reinforcement, Concrete Worker, Form Stripper, Strike-off Work

GROUP 3: Machine and Equipment Operator, Sheeting, Form Setting, Patch Finisher, Bottom Man, Joint Sawyer, Gunnite Man, Manhole Builder, Welder-Torchman, Blaster, Caulker, Bracer, Bull Float, Conduit Worker, Mucker and Car Pusher, Raker and Luteman, Hydraulic Jacking of Shields, Shield Drivers, Mining Machine, Lock Tenders, Mucking Machine Operator, Motor Men & Gauge Tenders and operation of incidental Mechanical Equipment and all Power Driven Tools

GROUP 4: Pipelayer, Miner and Laser Operator

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LAB00113-008 06/03/2019

MILWAUKEE, OZAUKEE, WASHINGTON & WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Tunnel-Free Air)		
Group 1.....	\$ 21.26	20.81
Group 2.....	\$ 30.77	20.81
Group 3.....	\$ 30.83	20.81
Group 4.....	\$ 33.04	20.81
Group 5.....	\$ 33.18	20.81
Group 6.....	\$ 35.86	20.81
Group 7.....	\$ 36.50	20.81

LABORERS CLASSIFICATIONS [TUNNEL - FREE AIR]:

GROUP 1: Flagperson

GROUP 2: General Laborer on surface; Tower Man

GROUP 3: Saw Man; Top Man

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey; Welder (rate on surface)

GROUP 6: Concrete Manhole Builder; Mucking Machine; Miner; Mining Machine; Welder; Rock Driller; Concrete Buster; Jack Hammer Operator; Caisson Worker; Pipelayer and Joint Man; Bracerman

GROUP 7: Blaster

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\* LAB00113-009 06/03/2019

MILWAUKEE, OZAUKEE, WASHINGTON & WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Tunnel -		
*COMPRESSED AIR 0 - 15 lbs.)		
Group 1.....	\$ 21.26	20.81
Group 2.....	\$ 30.77	20.81
Group 3.....	\$ 33.58	20.81
Group 4.....	\$ 34.38	20.81
Group 5.....	\$ 34.50	20.81
Group 6.....	\$ 37.20	20.81
Group 7.....	\$ 37.82	20.81

LABORERS CLASSIFICATIONS [TUNNEL - COMPRESSED AIR]:

- \*Compressed Air 15 - 30 lbs add \$2.00 to all classifications
- \*Compressed Air over 30 lbs add \$3.00 to all classifications

GROUP 1: Flagperson

GROUP 2: General Laborer on surface

GROUP 3: Lock Tender on surface

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey

GROUP 6: Mucking Machine; Miner; Mining Machine; Welder & Rock Driller; Lock Tender in tunnel; Concrete Buster; Jack Hammer Operator; Caisson Worker; Pielayer and Joint Man; Bracerman; Nozzle Man on Gunite; Timber Man; Concrete Brusher

GROUP 7: Blaster

NOTE: Hazardous & Toxic Waste Removal: add \$0.15 per hour.

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LAB00140-005 06/04/2018

ADAMS, ASHLAND, BARRON, BROWN, BUFFALO, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, JACKSON, JEFFERSON, JUNEAU, LACROSSE, LAFAYETTE, LANGLADE,

LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, ST CROIX, SAUK, SAWYER, SHAWANO, SHEBOYGAN, TAYLOR, TREMPPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER (SEWER & WATER)		
Group 1.....	\$ 27.41	17.20
Group 2.....	\$ 29.26	17.20
Group 3.....	\$ 29.46	17.20
Group 4.....	\$ 30.21	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORER CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawyer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Drivers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

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LAB00464-002 06/04/2018

DANE AND DOUGLAS COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.31	17.20
Group 2.....	\$ 29.51	17.20
Group 3.....	\$ 29.71	17.20
Group 4.....	\$ 30.46	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0 - 15 lbs add



\$1.00, 15- 30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer; Wellpoint Installation; Concrete Worker; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawyer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Drivers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

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LAB01091-010 06/04/2018

BAYFIELD, BURNETT, IRON, SAWYER, AND WASHBURN COUNTIES

	Rates	Fringes
Laborers: (SEWER & WATER)		
Group 1.....	\$ 27.10	17.20
Group 2.....	\$ 29.16	17.20
Group 3.....	\$ 29.36	17.20
Group 4.....	\$ 30.11	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR:

0 - 15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: Laborers, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawyer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Drivers; Mining Machine; Lock Tenders;

Mucking Machine Operators; Motor Men and Gauge Tenders;  
 Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

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 PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN  
 COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET,  
 CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE,  
 FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE,  
 LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE,  
 MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK,  
 PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR,  
 VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD  
 COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA  
 CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND  
 VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK  
 COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

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 TEAM0039-001 06/01/2019

	Rates	Fringes
TRUCK DRIVER		

1 & 2 Axles.....	\$ 29.57	22.03
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 29.72	22.03
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WELL DRILLER.....	\$ 16.52	3.70
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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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 (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the

interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

"General Decision Number: WI20200015 02/28/2020

Superseded General Decision Number: WI20190015

State: Wisconsin

Construction Type: Heavy

Counties: Wisconsin Statewide.

HEAVY CONSTRUCTION PROJECTS (Excluding Tunnel, Sewer, and Water Lines).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/28/2020

BOIL0107-001 01/01/2017

	Rates	Fringes
BOILERMAKER		
Boilermaker.....	\$ 35.65	29.89

Small Boiler Repair (under  
25,000 lbs/hr).....\$ 26.91 16.00

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BRWI0001-002 06/03/2019

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND  
VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.80	24.28

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BRWI0002-002 06/01/2019

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.94	23.30

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BRWI0002-005 06/01/2019

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,  
CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,  
FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE,  
LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,  
OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK,  
SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA,  
WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37

-----  
BRWI0003-002 06/03/2019

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90

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BRWI0004-002 06/01/2019

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
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BRICKLAYER.....\$ 38.43 25.10

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BRWI0006-002 06/01/2019

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,  
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.06 23.02

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BRWI0007-002 06/03/2019

GREEN, LAFAYETTE, AND ROCK COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.57 24.22

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BRWI0008-002 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

BRICKLAYER.....\$ 38.93 24.22

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BRWI0009-001 06/03/2019

GREEN LAKE, MARQUETTE, OUTAGAMIE, SHAWANO, WAUPACA, WASHARA,  
AND WINNEBAGO COUNTIES

Rates Fringes

BRICKLAYER.....\$ 34.18 23.90

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BRWI0011-002 06/03/2019

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 34.18 23.90

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BRWI0013-002 06/03/2019

DANE, GRANT, IOWA, AND RICHLAND COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
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BRWI0019-002 06/03/2019		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,  
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.40	24.68
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BRWI0021-002 06/03/2019		

DODGE AND JEFFERSON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.75	24.02
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BRWI0034-002 06/03/2019		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
-----		
CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys  
35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39
-----		
CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO,  
BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA,  
CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except  
area bordering Michigan State Line), FOND DU LAC, FOREST,  
GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON,  
JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN,  
MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE,  
MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E.

of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00
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CARP0252-010 06/01/2016		

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00
-----		
CARP0264-003 06/01/2016		

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11
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CARP0361-004 05/01/2018		

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43
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CARP2337-001 06/01/2016		

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

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\* CARP2337-003 06/01/2019

	Rates	Fringes
MILLWRIGHT		
Zone A.....	\$ 33.58	21.53
Zone B.....	\$ 33.58	21.53

ZONE DEFINITIONS

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON COUNTIES

ZONE B: KENOSHA & RACINE COUNTIES

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ELEC0014-002 06/03/2019

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK  
(except Maryville, Colby, Unity, Sherman, Fremont, Lynn &  
Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA  
CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST  
CROIX, SAWYER, TAYLOR, TREMPPEALEAU, VERNON, AND WASHBURN  
COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.59	20.87

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ELEC0014-007 06/03/2019

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer		
Installer/Technician.....	\$ 27.25	14.34

Low voltage construction, installation, maintenance and  
removal of teledata facilities (voice, data, and video)  
including outside plant, telephone and data inside wire,  
interconnect, terminal equipment, central offices, PABX,  
fiber optic cable and equipment, micro waves, V-SAT,  
bypass, CATV, WAN (wide area networks), LAN (local area

networks), and ISDN (integrated systems digital network).

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ELEC0127-002 06/01/2019

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 40.49	30%+12.07

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ELEC0158-002 06/03/2019

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),  
MARINETTE(Wausuakee 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

	Rates	Fringes
Electricians:.....	\$ 33.52	29.75%+10.26

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ELEC0159-003 06/01/2019

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and  
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

	Rates	Fringes
Electricians:.....	\$ 40.30	22.24

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ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern,  
Florence and Homestead) AND MARINETTE COUNTY (Township of  
Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under		

\$180,000.....\$ 30.18 18.42

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ELEC0242-005 05/16/2018

DOUGLAS COUNTY

Rates Fringes

Electricians:.....\$ 36.85 26.17

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ELEC0388-002 06/03/2019

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Rates Fringes

Electricians:.....\$ 33.56 26%+11.01

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ELEC0430-002 01/01/2020

RACINE COUNTY (Except Burlington Township)

Rates Fringes

Electricians:.....\$ 40.30 22.19

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ELEC0494-005 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Electricians:.....\$ 41.03 25.11

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ELEC0494-006 06/01/2019

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Rates Fringes

Electricians:.....\$ 34.73 22.27

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ELEC0494-013 06/01/2019

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 20.53	18.13
Technician.....	\$ 30.18	19.58

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

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ELEC0577-003 06/01/2019

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, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.15	28.50%+10.00

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ELEC0890-003 06/01/2019

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE,

RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.91	25.95%+10.83
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* ELEC0953-001 06/02/2019		

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60
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ENGI0139-001 06/03/2019		

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 46.66	22.20
Group 2.....	\$ 46.16	22.20
Group 3.....	\$ 45.66	22.20
Group 4.....	\$ 44.97	22.20
Group 5.....	\$ 41.79	22.20
Group 6.....	\$ 36.64	22.20

HAZARDOUS WASTE PREMIUMS:  
 EPA Level ""A"" Protection: \$3.00 per hour  
 EPA Level ""B"" Protection: \$2.00 per hour  
 EPA Level ""C"" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with or w/o attachments with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Self-Erecting Tower Cranes over 4000 lbs lifting capacity; All Cranes with Boom Dollies; Boring Machines (directional); Master Mechanic.



\$0.50 additional per hour per 100 tons or 100 ft of boom over 200 ft or lifting capacity of crane over 200 tons to a maximum of 300 tons or 300 ft. Thereafter an increase of \$0.01 per ft or ton, whichever is greater.

GROUP 2: Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; or Cranes, Tower Cranes Portable Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leadsand/or jib lengths measuring 175 feet or less; Backhoes (excavators) 130,000 lbs and over; Caisson Rigs; Pile Drivers; Boring Machines (vertical or horizontal), Versi-Lift, Tri-Lift, Gantry 20,000 lbs & over.

GROUP 3: Backhoe (excavator) under 130,000 lbs; Self-erecting Tower Crane 4000 lbs & under lifting capacity; Traveling Crane (bridge type); Skid Rigs; Dredge Operator; Mechanic; Concrete Paver (over 27E); Concrete Spreader and Distributor; Forklift/ Telehandler (machinery- moving / steel erection); Hydro Blaster, 10,000 psi and over

GROUP 4: Material Hoists; Stack Hoists; Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 5 tons or under (tractor or truck mounted); Hoist (tuggers 5 tons & over); Hydro-Excavators/Daylighters; Concrete Pumps Rotec type Conveyors; Tractor/Bulldozer/End Loader (over 40 hp); Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Rotary Drill Operator and Blaster; Percussion Drill Operator; Air Track Drill and/or Hammers; Gantrys (under 20,000 lbs); Tencher (wheel type or chain type having 8 inch or larger bucket); Milling Machine; Off-Road Material Haulers.

GROUP 5: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machines (road type); Rubber Tired Roller; Concrete Batch Hopper; Concrete Conveyor Systems; Grout Pumps; Concrete Mixers (14S or over); Screw Type Pumps and Gypsum Pumps; Tractor, Bulldozer, End Loader (under 40 hp); Trencher (chain type, bucket under 8 inch); Industrial Locomotives; Rollers under 5 tons; Stump Grinder/Chipper (Large); Timber Equipment; Firemen (pile drivers and derricks); Personnel Hoist, Telehandler over 8000 lbs; Robotic Tool Carrier with or without attachments

GROUP 6: Tampers - Compactors (riding type); Assistant Engineer; A-Frames and Winch Trucks; Concrete Auto Breaker; Hydrohammers (small); Brooms and Sweepers; Hoist (tuggers under 5 tons); Boats (Tug, Safety, Work Barges, Launch);

Shouldering Machine Operator; Prestress Machines; Screed Operator; Stone Crushers and Screening Plants; Screed Operators (milling machine), Farm or Industrial Tractor Mounted Equipment; Post Hole Digger; Fireman (asphalt plants); Air Compressors over 400 CFM; Generators, over 150 KW; Augers (vertical and horizontal); Air, Electric, Hydraulic Jacks (slipform); Skid Steer Loaders (with or without attachments); Boiler Operators (temporary heat); Refrigeration Plant/Freeze Machines; Power Pack Vibratory/Ultra Sound Drivers and Extractors; Welding Machines; Heaters (mechanical); Pumps; Winches (small electric); Oiler and Greaser; Rotary Drill Tender; Conveyor; Forklifts/Telehandler 8000 lbs & under; Elevators: Automatic Hoists; Pumps (well points); Combination Small Equipment Operators

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 ENGI0139-003 06/03/2019

REMAINING COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.52	22.45
Group 2.....	\$ 40.27	22.45
Group 3.....	\$ 38.97	22.45
Group 4.....	\$ 38.44	22.45
Group 5.....	\$ 36.37	22.45
Group 6.....	\$ 34.84	22.45

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" Protection: \$3.00 per hour  
 EPA Level "B" Protection: \$2.00 per hour  
 EPA Level "C" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs;

Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers.

GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweepers; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer

GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freeze Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3"; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

IRON0008-002 06/01/2019

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 35.07	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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IRON0008-003 06/01/2019

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.12	27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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IRON0383-001 06/01/2019

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 35.50	26.57

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IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40
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IRON0512-021 06/03/2019		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,  
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40
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LABO0113-002 06/03/2019		

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 29.02	21.92
Group 2.....	\$ 29.17	21.92
Group 3.....	\$ 29.37	21.92
Group 4.....	\$ 29.52	21.92
Group 5.....	\$ 29.67	21.92
Group 6.....	\$ 25.51	21.92

LABORERS CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/03/2019

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.27	21.92
Group 2.....	\$ 28.37	21.92
Group 3.....	\$ 28.42	21.92
Group 4.....	\$ 28.62	21.92
Group 5.....	\$ 28.47	21.92
Group 6.....	\$ 25.36	21.92

LABORERS CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

-----  
LAB00113-011 06/03/2019

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.08	21.92
Group 2.....	\$ 28.23	21.92

Group 3.....	\$ 28.43	21.92
Group 4.....	\$ 28.40	21.92
Group 5.....	\$ 28.73	21.92
Group 6.....	\$ 25.22	21.92

LABORERS CLASSIFICATIONS:

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

-----  
LAB00140-002 06/03/2019

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.84	17.54
Group 2.....	\$ 32.94	17.54
Group 3.....	\$ 32.99	17.54

Group 4.....	\$ 33.19	17.54
Group 5.....	\$ 33.04	17.54
Group 6.....	\$ 29.47	17.54

LABORER CLASSIFICATIONS

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, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

-----  
LAB00464-003 06/03/2019

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 33.12	17.54
Group 2.....	\$ 33.22	17.54
Group 3.....	\$ 33.27	17.54
Group 4.....	\$ 33.47	17.54
Group 5.....	\$ 33.32	17.54
Group 6.....	\$ 29.47	17.54

LABORERS CLASSIFICATIONS:

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, and Utility Man); Batch Truck Dumper or Cement Handler;



Bituminous Worker (Dumper, Ironer, Smoother, and Tamper);  
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler  
(Pavement); Vibrator or Tamper Operator (Mechanical Hand  
Operated); Chain Saw Operator; Demolition Burning Torch  
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter  
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

-----  
PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

-----  
PAIN0108-002 06/01/2019

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 36.08	20.36
Spray & Sandblast.....	\$ 37.08	20.36

-----  
PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,  
SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
--	-------	---------

PAINTER.....\$ 24.11 12.15

-----  
PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPPEALEAU, AND  
VERNON COUNTIES

Rates Fringes

PAINTER.....\$ 22.03 12.45

-----  
PAIN0781-002 06/01/2019

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Painters:

Bridge.....\$ 33.30 23.86

Brush.....\$ 32.95 23.86

Spray & Sandblast.....\$ 33.70 23.86

-----  
PAIN0802-002 06/01/2019

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,  
ROCK, AND SAUK COUNTIES

Rates Fringes

PAINTER

Brush.....\$ 30.93 18.44

PREMIUM PAY:

Structural Steel, Spruce, Bridges = \$1.00 additional per  
hour.

-----  
PAIN0802-003 06/01/2019

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN  
LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,  
MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,  
OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,  
WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

Rates Fringes

Painter.....	\$ 30.93	18.58
--------------	----------	-------

-----  
PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

-----  
PAIN1011-002 06/02/2019

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 25.76	13.33

-----  
PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

-----  
PLUM0011-003 05/07/2018

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, SAWYER, AND WASHBURN COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 40.63	20.72

-----  
PLUM0075-002 06/01/2016

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 40.27	21.47

-----  
PLUM0075-004 06/01/2016

DODGE (Watertown), GREEN, JEFFERSON, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 40.52	21.47

-----  
PLUM0075-009 06/01/2016

COLUMBIA, DANE, IOWA, MARQUETTE, RICHLAND AND SAUK COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 38.82	20.12

-----  
PLUM0111-007 05/28/2018

MARINETTE COUNTY (Niagara only)

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 33.33	24.48
-----		
PLUM0118-002 06/01/2019		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
Plumber and Steamfitter.....	\$ 42.95	23.60
-----		
PLUM0400-003 06/04/2018		

ADAMS, BROWN, CALUMET, DODGE (except Watertown), DOOR, FOND DU LAC, GREEN LAKE, KEWAUNEE, MANITOWOC, MARINETTE (except Niagara), MENOMINEE, OCONTO, OUTAGAMIE, SHAWANO, SHEBOYGAN, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 36.74	19.06
-----		
PLUM0434-002 06/03/2018		

BARON, BUFFALO, CHIPPEWA, CLARK, CRAWFORD, DUNN, EAU CLAIRE, FLORENCE, FOREST, GRANT, JACKSON, JUNEAU, LA CROSSE, LANGLADE, LINCOLN, MARATHON, MONROE, ONEIDA, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RUSK, ST. CROIX, TAYLOR, TREMPPEALEAU, VERNON, VILAS, AND WOOD COUNTIES

	Rates	Fringes
PIPEFITTER.....	\$ 40.15	18.57
-----		
PLUM0601-003 06/03/2019		

DODGE (Watertown), GREEN, JEFFERSON, LAFAYETTE, MILWAUKEE, OZAUKEE, ROCK, WASHINGTON AND WAUKESHA COUNTIES

	Rates	Fringes
PIPEFITTER.....	\$ 46.89	25.29
-----		
PLUM0601-009 06/04/2017		

COLUMBIA, DANE, IOWA, MARQUETTE, RICHLAND AND SAUK COUNTIES

	Rates	Fringes
PIPEFITTER.....	\$ 47.08	20.89

-----  
TEAM0039-002 06/01/2019

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axle Trucks.....	\$ 29.57	22.03
3 or more axles; Euclids or Dumptor, Articulated Truck, Mechanic.....	\$ 29.72	22.03

-----  
SUWI2011-001 11/16/2011

	Rates	Fringes
WELL DRILLER.....	\$ 16.52	

-----  
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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 (29CFR 5.5 (a) (1) (ii)).

-----  
The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor



200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"





# Wisconsin Department of Transportation

## Division of Transportation Systems Development

Bureau of Project Development  
4822 Madison Yards Way, 4<sup>th</sup> Floor South  
Madison, WI 53705

March 3, 2020

Telephone: (608) 266-1631  
Facsimile (FAX): (608) 266-8459

### NOTICE TO ALL CONTRACTORS:

**Proposal #13: 2759-03-70, WISC 2020 074**  
**North Avenue**  
**N. Calhoun Road to E County Line**  
**CTH M**  
**Waukesha County**

### Letting of March 10, 2020

This is Addendum No. 01, which provides for the following:

#### Special Provisions:

Revised Special Provisions	
Article No.	Description
3	Prosecution and Progress
33	Excavation Below Subgrade

#### Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	5,534	-200	5,334

#### Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
39	Pond Outfall Structure Detail (Revision to restrictor diameter and invert elevation)

<b>Added Plan Sheets</b>	
<b>Plan Sheet</b>	<b>Plan Sheet Title (brief description of why sheet was added)</b>
511A	Miscellaneous Quantities (missing Traffic Control Pavement Marking table)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

**ADDENDUM NO. 01**

**2759-03-70**

**March 3, 2020**

**Special Provisions**

**3. Prosecution and Progress.**

*Add the following to end of section titled **General**:*

**Mound Zion Cemetery**

Do not perform any work within the catalogued burial site limits of the Mound Zion Cemetery prior to receiving authorization from the Wisconsin Historical Society. Contractor shall notify the engineer one year prior to any planned work within the burial site limits. The engineer will notify WisDOT Cultural Resource Team to petition the Wisconsin Historical Society for authorization to work within the burial site limits.

*Remove the following section:*

*Supplement standard specification 108.10 with the following:*

The department will not grant time extensions for the following:

Severe weather as specified in standard specification 108.10.2.2.

Labor disputes that are not industry wide.

Delays in material deliveries.

**33. Excavation Below Subgrade**

*Replace the third paragraph with the following:*

Excavation below subgrade found necessary and required after the completion of the rough grading operations shall be according to the pertinent requirements of standard spec 205.3.4.

*Replace the fourth paragraph with the following:*

Paragraph 1.1 of standard spec 205.5.2.3.3 (1) 1 shall be changed to read as follows:

“Excavation Below Subgrade performed either before or after rough grading operations are complete will be paid for at the Contract unit price for Excavation Common.”

**Schedule of Items**

Attached, dated March 3, 2020, are the revised Schedule of Items Page 17.

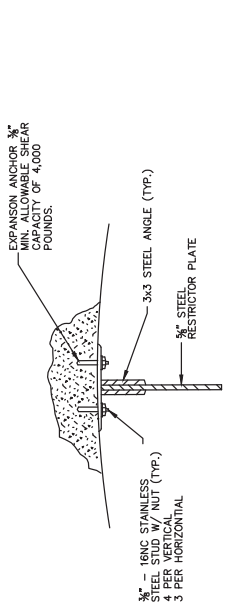
**Plan Sheets**

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:

Revised: 39

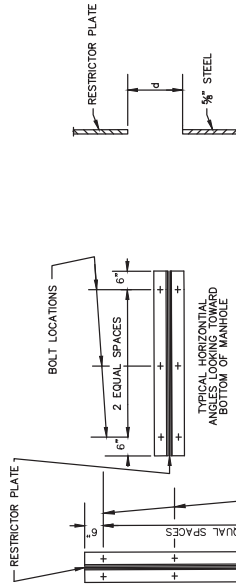
Added: 511A,

END OF ADDENDUM



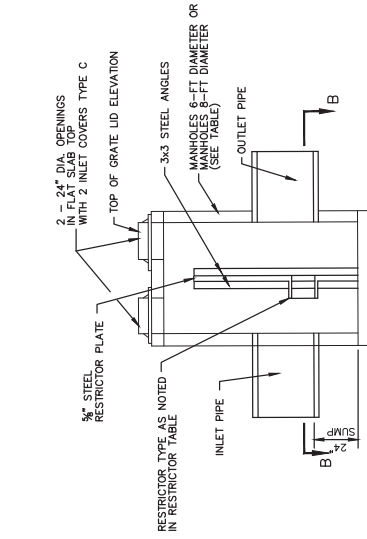
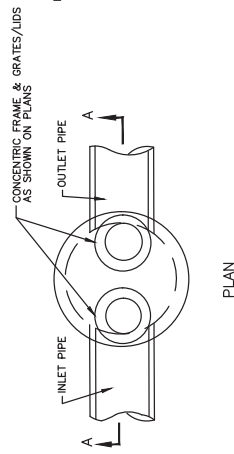
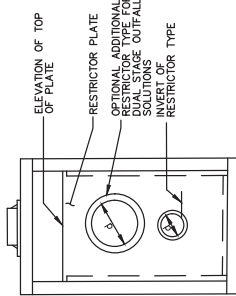
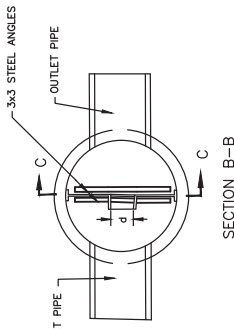
ANGLE FASTENER DETAIL

- NOTES:
1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC-SP-13.
  2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
  3. BASIS OF PAYMENT: RESTRICTOR PLATE MANHOLE 6' FT OR RESTRICTOR PLATE MANHOLE 5'-FT EACH



- NOTE:
1. ANGLES SHALL BE 3x3x $\frac{3}{8}$
  2. VERTICAL ANGLES SHALL EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
  3. HORIZONTAL ANGLES SHALL EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

STEEL ANGLE BOLTING DETAILS



Addendum No. 01  
ID 2759-03-70  
Revised Sheet 39  
March 3, 2020

POND\_OUTFALL\_STRUCTURE\_DETAIL

STRUCTURE NUMBER	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW	TOP OF GRATE LID ELEVATION	100-YR WATER SURFACE ELEVATION
200.15	6'	SOLID LID	ORIFICE	2	819.50	824.20	825.20	824.30
204.02	6'	SOLID LID	ORIFICE	2	818.50	823.50	824.50	822.03
504.02	8'	SOLID LID	ORIFICE	2X32	754.10	758.60	759.60	759.00

TRAFFIC CONTROL PAVEMENT MARKING

CATEGORY	LOCATION	646.1005		646.3005		646.5005		646.5305		646.6105		649.0105		649.0205		649.0505		649.0805	
		MARKING LINE PAINT 4-INCH	WHITE LF	MARKING LINE PAINT 8-INCH	WHITE LF	MARKING ARROW PAINT	TYPE2 EACH	MARKING RAILROAD CROSSING PAINT	MARKING STOP LINE PAINT 18-INCH	TEMPORARY MARKING LINE PAINT 4-INCH	YELLOW LF	WHITE LF	TEMPORARY MARKING LINE PAINT 8-INCH	WHITE LF	TEMPORARY MARKING ARROW PAINT	TYPE2 EACH	TEMPORARY MARKING STOP LINE PAINT 18-INCH	TEMPORARY MARKING STOP LINE PAINT 18-INCH	
0010	STAGE1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	STAGE2	10,600	10,600	140	140	1	2	55	960	2,450	490	300	300	--	--	--	--	--	--
	STAGE3	950	250	150	150	1	2	--	11,000	6,300	200	--	--	1	44	--	--	--	--
	STAGE5	--	800	--	--	--	--	--	1,250	300	--	--	--	--	--	--	--	--	--
	STAGE6	21,200	19,550	125	125	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	STAGE7	--	--	--	--	--	--	--	19,950	4,600	150	150	1	--	--	--	--	--	--
TOTAL		63,950	415	415	415	2	4	55	46,810	1,140	1,140	2	2	44	44				

Addendum No. 01  
 ID 2759-03-70  
 Added Sheet 511A  
 March 3, 2020



## Proposal Schedule of Items

Proposal ID: 20200310013 Project(s): 2759-03-70

Federal ID(s): WISC 2020074

SECTION: 0001

Roadway Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0482	646.7120 Marking Diagonal Epoxy 12-Inch	602.000 LF	_____.	_____.
0484	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	5,334.000 LF	_____.	_____.
0486	646.8120 Marking Curb Epoxy	490.000 LF	_____.	_____.
0488	646.8220 Marking Island Nose Epoxy	48.000 EACH	_____.	_____.
0490	646.9000 Marking Removal Line 4-Inch	3,200.000 LF	_____.	_____.
0492	646.9100 Marking Removal Line 8-Inch	1,050.000 LF	_____.	_____.
0494	646.9300 Marking Removal Special Marking	5.000 EACH	_____.	_____.
0496	649.0105 Temporary Marking Line Paint 4-Inch	46,810.000 LF	_____.	_____.
0498	649.0205 Temporary Marking Line Paint 8-Inch	1,140.000 LF	_____.	_____.
0500	649.0505 Temporary Marking Arrow Paint	2.000 EACH	_____.	_____.
0502	649.0805 Temporary Marking Stop Line Paint 18-Inch	44.000 LF	_____.	_____.
0504	650.4000 Construction Staking Storm Sewer	517.000 EACH	_____.	_____.
0506	650.4500 Construction Staking Subgrade	16,244.000 LF	_____.	_____.
0508	650.5000 Construction Staking Base	16,244.000 LF	_____.	_____.
0510	650.5500 Construction Staking Curb Gutter and Curb & Gutter	68,075.000 LF	_____.	_____.
0512	650.6500 Construction Staking Structure Layout (structure) 01. B-67-374	LS	LUMP SUM	_____.