

# HIGHWAY WORK PROPOSAL

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

Proposal Number:

Ø 8

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Dodge, Fond du Lac	6090-06-75	WISC 2015 572	Main Street, City of Waupun County Park Road to State Street	STH 49
Dodge, Fond du Lac	6090-06-76		Main Street, City of Waupun County Park Road - State Street Sanitary Sewer and Watermain	STH 49

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, \$ 100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: November 10, 2015 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time October 15, 2016	<b>SAMPLE</b> <b>NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal 3%	This contract is exempt from federal oversight.

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

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

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

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

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

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

Notary Seal

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

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

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

## For Department Use Only

Type of Work Excavation, select crushed material, geogrid, base aggregate dense, concrete pavement, HMA pavement, storm sewer, box culvert C-20-155, sanitary sewer, water main, curb and gutter, concrete sidewalk, traffic signals, pavement marking, permanent signing, street lighting.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.

- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the [www.bidx.com](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:  
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

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

- (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<sup>TM</sup> web site.
  2. Use Expedite<sup>TM</sup> software to enter a unit price for every item in the schedule of items.
  3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> 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<sup>TM</sup> web site reflecting the latest addenda posted on the department's web site at:  
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

Use Expedite<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> generated schedule of items is not the same on each page.
  2. The check code printed on the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
  3. The diskette or CD ROM is not submitted at the time and place the department designates.

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

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

# PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

## PRINCIPAL

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

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

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

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

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

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

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

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

## NOTARY FOR PRINCIPAL

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

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

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

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

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

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

**Notary Seal**

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

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

## NOTARY FOR SURETY

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

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

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

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

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

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

**Notary Seal**

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





# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

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

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



## March 2010

## LIST OF SUBCONTRACTORS

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

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

[illegible]

**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 6090-06-75, Main Street, City of Waupun, County Park Road to State Street, STH 49, and Project 6090-06-76, Main Street, City of Waupun, County Park Road – State Street Sanitary Sewer and Watermain, STH 49, Dodge and Fond du Lac Counties, 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, 2015 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 (20141107)

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

The work under this contract shall consist of grading, structures, select crushed material, geogrid, base aggregate dense, concrete pavement, concrete curb and gutter, concrete sidewalk, storm sewer, permanent signing, pavement marking, traffic signals, street lighting, sanitary sewer main and services, water main and services, 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. Mandatory Pre-Bid Meeting, EDC Utility Coordination.**

*Add the following to standard spec. 102.3.1:*

Prospective bidders are required to attend a mandatory pre-bid meeting to discuss the EDC (Every Day Counts) utility coordination initiative at the SW Region DOT office in Madison; 2101 Wright Street, Madison, WI 53704. The meeting will be held on October 21, 2015 at 1:30 PM. The Every Day Counts (EDC) project initiative for utility coordination will be discussed and the Utility Detail and Utility Conflict Matrix plan documents will be explained. A status update on utility relocations will be provided as available.

No meeting minutes will be prepared. Issues discovered at the meeting will be handled by addendum.

#### **4. 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 10 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.

Install portable changeable message signs to notify the public of the upcoming construction project two weeks before the anticipated highway closure and detour.

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

The schedule of operations shall conform to the following construction staging as described herein. The contractor is advised that there may be multiple mobilizations for such items as traffic control, signing and pavement marking items and other items related to the staging. The department will make no additional payment for said mobilizations.

##### **Tree Clearing**

All trees that require removal for construction must be cleared prior to 12:01 AM March 31, 2016.

If the contractor fails to complete all tree clearing prior to 12:01 AM March 31, 2016 the department will assess the contractor \$660 in interim liquidated damages for each calendar day that all trees are not cleared after 12:01 AM, March 31, 2016. An entire calendar day will be charged for any period of time within a calendar day that the work described above is not completed beyond 12:01 AM, March 31, 2016.

##### **Stage 1**

Stage 1 shall be completed prior to 12:01 AM August 7, 2016. For STH 49 / Main Street from Station 48+25 to Station 77+94, complete all concrete pavement, asphaltic pavements, concrete sidewalks, and driveways. Street lighting shall be complete and operational. Prep the sidewalk terrace and restoration areas behind the new sidewalk to receive topsoil but do not place topsoil prior to August 15, 2016.

If the contractor fails to complete Stage 1 work as described above prior to 12:01 AM August 7, 2016 the department will assess the contractor \$1,810 in interim liquidated damages for each calendar day that Stage 1 is not complete as described above after 12:01 AM, August 7, 2016. An entire calendar day will be charged for any period of time within a calendar day that the work described above is not completed beyond 12:01 AM, August 7, 2016.

Complete topsoil, seed, and erosion mat work after the Truck N Show parade on August 13, 2016 but no later than September 1, 2016. Complete permanent pavement marking, permanent signing, and traffic signal items prior to 12:01 AM September 1, 2016. Remove the road closure at Station 77+94 and on side streets between Station 48+25 and Station 77+94 and open STH 49/Main Street between Station 48+25 and Station 77+94 to traffic prior to 12:01 AM September 1, 2016. Maintain the detour route for STH 49. Do not remove the road closures until all permanent traffic control is complete, including pavement marking, signing, and traffic signals. The traffic signal system at Beaver Dam/Brandon Street shall be complete and operational.

If the contractor fails to complete the work necessary to open STH 49/Main Street between Station 48+25 and Station 77+94 to through traffic prior to 12:01 AM September 1, 2016, the department will assess the contractor \$660 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, September 1, 2016. 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.

Do not remove any of the pavement or sidewalks, or interfere with local traffic on Main Street from Station 13+40 to Station 48+25 prior to June 6, 2016.

## **Stage 2**

Stage 2 shall begin no earlier than June 6, 2016 and shall be completed prior to 12:01 AM October 16, 2016.

Do not temporarily divert Harris Creek prior to July 1, 2016.

Complete Stage 2 construction operations on STH 49 / Main Street from Station 13+40 to Station 48+25 to the stage necessary to reopen Main Street to through traffic, including all intersections, prior to 12:01 AM October 16, 2016. Do not remove the detour and reopen STH 49 / Main Street to through traffic until all permanent pavement marking, permanent signing, and traffic signal work is completed and operational.

If the contractor fails to complete the work necessary to reopen Main Street to through traffic, including all intersections to through traffic prior to 12:01 AM October 16, 2016, the department will assess the contractor \$1810 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, October 16, 2016. 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.

## **B Intersection Closures**

Complete the work necessary to reopen the County Park Road, West Street, and Beaver Dam / Brandon Street to through traffic as specified under the Traffic Section within a maximum of seven calendar days for each closure.

If the contractor fails to complete the work necessary to reopen the County Park Road, West Street, and Beaver Dam / Brandon Street to through traffic as specified under the

Traffic Section within a maximum of seven calendar days for each closure, the department will assess the contractor \$780 in interim liquidated damages for each calendar day that each intersection is not complete as described in the Traffic article, Section C. Intersection Closure. An entire calendar day will be charged for any period of time that an intersection remains closed beyond seven calendar days.

### **C Meetings and Coordination**

Prosecution and progress meetings will be held once a week. The contractor's superintendent or appointed representative shall attend and provide a written or linear schedule of the next week's operations that conforms to standard spec 108.4. Subcontractor's representatives for ongoing subcontract work or work beginning within the next two weeks shall also attend the meeting. Agenda items at the meeting will include a review of the contractor's linear schedule, an evaluation of progress, and revisions to the schedule if necessary.

A superintendent or designated representative from the prime contractor shall be on the job site during all controlling work operations, including periods limited to only subcontractor work operations, to serve as a primary contact person and to coordinate all work operations.

Coordinate with the City of Waupun to provide access for garbage collection. Contact Dick Flynn at (920) 324-7918.

The United States Postal Service (USPS) maintains a mail collection box at the intersection of Division and Main Street. The USPS will relocate this collection box prior to construction. Contact the Waupun Post Office at (920) 324-4111 ten working days prior to the start of construction to have the collection box removed.

The city of Waupun will remove and reinstall way finding signs and local ordinance signs, and will install the street name signs not shown in the plan, for the project. Contact Dick Flynn at (920) 324-7918 to arrange for installation prior to opening to traffic.

### **D Adjacent Properties and Access**

Place and compact select crushed material and base aggregate within 48 hours of excavation to subgrade. Provide a temporary 3:1 sloped wedge in areas adjacent to existing sidewalk that will have greater than a 6-inch drop from the sidewalk surface. Place and compact base aggregate dense to provide a ramp to driveway entrances at a maximum slope of 12% to the roadway base course elevation.

Protect all building faces from damage, dirt, and concrete. When doing work near buildings, put a shield (plywood, sheeting, etc.) up against the building to protect it. The cost of this work is included in the bid item that is being worked on at the time. The contractor is responsible for returning the building face to its original condition if any damage occurs or if any dirt or concrete has adhered to the building face.

Do not commence utility work, disrupt a utility, or commence sidewalk construction in front of an entrance without notifying the property owner or business a minimum of 48 hours in advance. Do not shut off utilities or entrances to businesses during the business open times unless approved by the engineer.

#### **E Environmental Protection - Fish Spawning**

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

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.

### **5. Traffic.**

#### **A General**

Close STH 49 to through traffic within the project limits while this project is under construction. A detour route will be utilized to route traffic around the project. The detour route for STH 49 follows CTH M to CTH TC to STH 49, as detailed on the plans. The alternate route for STH 68 to northbound STH 49 follows CTH A out of Fox Lake to northbound USH 151 to northbound STH 49, as detailed on the plans. The alternate route for STH 68 to southbound STH 49 follows Verhage Road to southbound STH 49.

The STH 49 detour route signing shall remain in place for traffic throughout the construction project, with only local traffic being accommodated by the staged traffic.

Furnish and install Alternate Business Access signs as detailed in the plans prior to closing STH 49.

Portable changeable message boards shall be placed on STH 68 and STH 49 as shown in the traffic control detail sheets two weeks prior to the anticipated start date for the detour route.

The City of Waupun will deactivate the existing signals at the intersection of Beaver Dam/ Brandon Street, during the time that STH 49 / Main Street is closed in Stage 1. Coordinate the signal deactivation with the city by contacting Dick Flynn at (920) 324-7918 at least three working days prior to closing the highway. The signals are to be deactivated when the road closure signing and traffic control devices are in place and the temporary all-way stop condition is established at these intersections.

#### **B Vehicle Access**

Maintain local vehicle traffic access to properties within the work zone that do not have alternate access available outside the work zone, at all times, except as allowed herein. Maintain ramped driveway access at a maximum slope of 12% on existing driveway surface, compacted base aggregate dense, or finished driveway surface. Vehicular access

to a property driveway may be closed for a maximum of 48 hours in total for installation of storm sewer, sanitary sewer, or water main. Vehicle access to a property driveway may be closed for a maximum of 48 hours in total for excavation to roadway subgrade. Vehicle access to a residential driveway may be closed for a maximum of 5 calendar days in total to complete concrete pavement at the driveway. Provide pavement gaps for businesses without alternate access as shown in the plan details. Notify the property resident a minimum of 72 hours in advance of closing driveway access.

Notify the property resident a minimum of 72 hours in advance of driveway reconstruction to verify closure or staged driveway construction methods. Residential driveways may be closed for a maximum of 10 calendar days to complete concrete curb and gutter, concrete driveway, and concrete sidewalk items at the driveway approach. Coordinate with each business for the best time to construct driveways and sidewalks so as not to interrupt business operations during open hours. Construct driveway approaches to commercial properties in stages if the property does not have an alternate access available so that at least one access is maintained to each business at all times.

Maintain access within the work zone for emergency service vehicles at all times. The access route for emergency vehicles shall be clear of obstructions or hazards, including material stockpiles, equipment, exposed utility structures, and open excavations. The access route shall be a minimum of 15' wide. Delineate hazards adjacent to the route with traffic control devices. An emergency vehicle access route across the Harris Creek box culvert and temporary diversion channel is not required.

For emergency vehicle access, furnish, construct, and maintain a ramp of compacted base aggregate dense between closed side streets or open cross streets and the work zone at all times, including down to excavated subgrade. The ramps shall be a minimum of 15' wide and delineated with traffic control drums. The maximum ramp slope shall be 12%.

Use drums, barricades, flexible tubular markers, and safety fence to direct vehicular traffic in the work zone if required by the engineer. Protect and delineate hazards such as open excavations, abrupt drop-offs, and exposed manholes, inlets, and hydrants, with wedged material, drums, barricades, and safety fence as shown in the plans, special provisions, or as directed by the engineer.

Do not store vehicles, equipment or materials on adjacent or intersecting streets beyond the project limits without specific approval of the engineer.

### **C Intersection Closure**

Maintain cross traffic at County Park Road, West Street, and Beaver Dam / Brandon Street at all times, except for allowed closures as follows:

County Park Road, West Street, and Beaver Dam / Brandon Street cross traffic may each be closed for a maximum number of times as follows:

- One time per intersection to complete all utility and storm sewer construction, subgrade construction, and base aggregate dense placement for a maximum of seven calendar days.
- One time per intersection for curb and gutter and concrete paving for a maximum of seven calendar days.

Intersection closures allow the contractor to pour the mainline concrete pavement through the intersection and to complete the adjacent handwork sections of the intersection area.

Only one of the above mentioned intersections may be closed at any given time. Harris Street and River / Elm Ave. must be open during closure of County Park Road, West Street, or Beaver Dam / Brandon Street. Failure to reopen closed intersections within the time period allowed or additional intersection closures not allowed above shall be subject to penalties specified under the article “Prosecution and Progress”.

Prior to closing County Park Road, West Street, or Beaver Dam / Brandon Street to cross traffic, move Alternate Business Access Signs, if necessary, to direct vehicles to alternate business access points if a business access is affected by the closure of these side streets. The plan details include an alternate business access signing plan for the closure of County Park Road.

Furnish and install traffic control detour signs for Beaver Dam / Brandon Street prior to each closure.

Furnish and operate two Portable Changeable Message Signs on County Park Road, West Street, and Beaver Dam / Brandon Streets seven calendar days in advance of each closure, notifying motorists of the closure. Continue to operate the Portable Changeable Message Signs on Beaver Dam / Brandon Street for the duration of the closure.

#### **D Pedestrian Access**

Maintain existing sidewalk and provide pedestrian access to residents and businesses on both sides of STH 49 between West Street and State Street at all times, except as permitted herein. Provide and maintain existing and temporary pedestrian crosswalk access as shown in the plans and included in this article. If the engineer determines that additional crosswalk locations are needed, provide them at locations as directed by the engineer. Existing and temporary sidewalk, pedestrian access, and crosswalks shall meet the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and shall consist of existing or finish pavement surface or Temporary Surface. Gravel or base course material is not acceptable. The contract includes work items for Temporary Crosswalk and Temporary Curb Ramps to provide this access. Use these items to maintain crosswalks as detailed in the plans or directed by the engineer.

Provide crosswalk access across all four legs of the Beaver Dam/Brandon Street and West Street intersections with STH 49 at all times, with the exception of temporary closures then pedestrian access shall be maintained at River/Elm Streets. Furnish and install Temporary Curb Ramps when existing or finished curb ramps are not in place. When



Beaver Dam/Brandon Street or West Street is closed to through traffic across STH 49, provide crosswalk access, including Temporary Curb Ramps as needed, across all four legs of the River Street/Elm Avenue intersection with STH 49. All crosswalk access shall be on existing pavement, finished pavement, or Temporary Surface. Furnish and install Temporary Curb Ramps when existing or finished curb ramps are not in place.

Provide a minimum of one crosswalk access across STH49 at the intersections of STH 49 with STH 68, Elm Avenue/River Street, and Hilyer Street or as directed by the engineer. Crosswalk access shall be maintained at all times except that access may be closed for STH 49 concrete pavement construction. All crosswalk access shall be on existing pavement, finished pavement, or Temporary Surface. Furnish and install Temporary Curb Ramps when existing or finished curb ramps are not in place.

Provide crosswalk access across STH 49 between the south parking lot and 810 W. Main Street (Station 42+25 to 43+50) at all times, except as permitted herein. This crosswalk may be closed Mondays, Tuesdays, or Wednesdays for utility construction, grading, and paving. Crosswalk access across STH 49 at West Street must be open when the crossing between Station 42+25 and 43+50 is closed. All crosswalk access shall be on existing pavement, finished pavement, or Temporary Surface. Furnish and install Temporary Curb Ramps when existing or finished curb ramps are not in place.

Provide temporary crosswalk access across closed side streets, outside the work zone, at all times as detailed in the plans and directed by the engineer. Furnish and install Temporary Curb Ramps at the crosswalk location.

Furnish and install Temporary Pedestrian Safety Fence along existing and temporary sidewalk surface where there are drop-offs greater than 6-inches within 1-foot of the sidewalk edge and a grass or turf buffer does not exist to delineate the edge of sidewalk for vision impaired pedestrians.

Furnish and install Fence Safety along existing and temporary sidewalk surface where there are drop-offs greater than 6-inches within 1-foot of the sidewalk edge and a grass or turf buffer does exist.

Traffic Control Drums or barrels shall not be used for guidance along pedestrian access routes.

If additional special pedestrian access needs are identified along the project, provide for that access as directed by the engineer.

Sidewalk closures for utility construction and sidewalk replacement is anticipated and shall be completed as follows:

Close sidewalk along STH 49 to complete utility service laterals crossing below the sidewalk and for excavation for subgrade that results in excavation within 2 feet of the existing sidewalk. Close sidewalk on only one side of STH 49 at any time and provide a

sidewalk detour to the sidewalk on the opposite side of STH 49 as detailed in the plans and specified in the Traffic Control Sidewalk Detour article of these special provisions. Reopen the closed sidewalk within 72 hours of the closure by replacing removed sidewalk sections with temporary surface material, and removing all sidewalk closure signs and barricades. Furnish and construct asphaltic surface temporary, concrete sidewalk, or other firm, stable, and slip resistant material that is approved by the engineer as a temporary surface for removed sidewalk sections. Compacted soils, sand, crushed stone, gravel, or asphaltic pavement millings are not acceptable temporary surface materials. The temporary surface width shall match the width of adjacent existing sidewalk and meet ADA guidelines for accessible routes. Backfill along the temporary sidewalk surface edges and compact to a minimum slope of 3:1 perpendicular to the sidewalk edge. Temporary surface material and construction for sidewalk replacement is considered incidental to the utility service lateral item that is installed.

Close sidewalk along STH 49 and along intersecting side streets for removal of existing and temporary sidewalk and for construction of new concrete sidewalk. Close sidewalk on only one side of STH 49 and on only one side of an intersecting side street at any time. Provide a sidewalk detour as detailed in the plans and specified in the Traffic Control Sidewalk Detour article of these special provisions. Open the sidewalk to pedestrian traffic after backfilling the sidewalk and completing proposed curb ramps. The maximum closure duration for sidewalk replacement is 72 hours. Backfill along the sidewalk edges with topsoil or other finish surfaces as detailed in the plans. A temporary material may be substituted for sidewalk backfill to the top sidewalk edge and compacted to a minimum slope of 3:1 perpendicular to the sidewalk edge.

#### **E Advance Notification**

Notify the City of Waupun Police Department, Fire Department, Waupun Public Works Director; Dick Flynn, Waupun Memorial Hospital, and Waupun Schools 48 hours in advance of closing STH 49 and all closures of intersecting side streets. Notifications must be given by 4:00 PM on Thursday for any such work to be done on the following Monday.

#### **F Wisconsin Lane Closure System Advance Notification**

Provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS). Advance notification is not required for closures and/restrictions on “ON” and “OFF” ramps from and to local streets.

New lane closures*	14 calendar days
Full roadway closures	14 calendar days
New ramp restrictions *	14 calendar days
Ramp closures	14 calendar days
Project start	14 calendar days
Construction stage changes	14 calendar days
Detours	14 calendar days
Lane closures**	3 business days
Ramp closures**	3 business days
Extending all closure types	3 business days

\* With height, weight, or width restrictions (available width, all lanes in one direction <16')

\*\* Without height, weight, or width restrictions (available width, all lanes in one direction >16')

## **6. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 49 or STH 68 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 27, 2016 to 6:00 AM Tuesday, May 31, 2016 for Memorial Day;
- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5, 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 6:00 AM Tuesday, September 6, 2016 for Labor Day.

107-005 (20050502)

## **7. Hauling Restrictions.**

At all times, conduct operations in a manner that will cause a minimum of inconvenience to the free flow of traffic on roadways carrying STH 49 and STH 68 traffic.

Use only City of Waupun designated truck routes for material haul roads. Haul roads are detailed in standard spec 618. Contact Dick Flynn, City of Waupun, (920) 324-7918, for information on the City of Waupun designated truck routes.

## **8. Utilities.**

This contract comes under the provisions of Administrative Rule Trans.220.

Reference the Utility Conflict Table for all work being done during construction and for the approximate number of days for the utility to complete their work.

Some of the utility work described in the utility conflict table is dependent on prior work being performed by the contractor at a specific site. Provide the engineer and the affected utility's Field Contact a good faith notice of when the utility is to start work at the site. Provide this notice 14 to 16 calendar days in advance of when the prior work will be completed and the site will be available to the utility. Follow-up with a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

**American Transmission Company (Electric)** has a 69kV overhead line within the project area. Maintain OSHA safe practices for working near high voltage equipment. Do not alter or remove any ATC facilities. Work will be completed prior to construction.

Field contact for ATC is Doug Vosberg, 5303 Fen Oak Drive, Madison, WI 53718, (608) 877-7650 office, (608) 438-7670 mobile or email [dvosberg@atcllc.com](mailto:dvosberg@atcllc.com).

**AT&T Wisconsin (Telephone)** has overhead and underground facilities located throughout the project limits. Work will be completed prior to and during construction.

Field Contact for AT&T is Chuck Bartelt, 70 E Division St., Fond du Lac, WI 54935, (920) 929-1013 office, (920) 410-5104 Mobile or email [cb1461@att.com](mailto:cb1461@att.com).

**Alliant Energy (Electric)** has overhead and underground facilities located throughout the project limits. Work will be completed prior to and during construction.

Field Contact for Alliant Energy – Electric is David Krohn, 883 W Scott St., Fond Du Lac, WI 54937, (920) 322-6772 office, (920) 948-0681 mobile or email [Davekrohn@alliantenergy.com](mailto:Davekrohn@alliantenergy.com).

**Alliant Energy (Gas)** has underground facilities located throughout the project limits. Work will be completed prior to construction.

Field Contact for Alliant Energy – Gas is David Krohn, 883 W Scott St., Fond Du Lac, WI 54937, (920) 322-6772 office, (920) 948-0681 mobile or email [Davekrohn@alliantenergy.com](mailto:Davekrohn@alliantenergy.com).

**Charter Communications** has overhead and underground facilities located throughout the project limits. Work will be completed prior to and during construction.

Field Contact for Charter is Tony Klatt, N3760 CTH DJ, Juneau, WI 53039, (920) 263-0062 mobile or email [tony.klatt@charter.com](mailto:tony.klatt@charter.com).

**City of Waupun Utilities (Electric)** has overhead and underground facilities located throughout the project limits. Work will be completed prior to and during construction.

Field Contact for City of Waupun – Electric is Randy Posthuma, 817 S Madison St., Waupun, WI 53963, (920) 324-7920 office, (920) 960-2636 mobile or email [rposthuma@wppienergy.org](mailto:rposthuma@wppienergy.org).

**City of Waupun Utilities (Sanitary Sewer and Water Main)** has underground facilities throughout the project limits.

Construction of new Sanitary Sewer and Water Main will be done as part of the contract 6090-06-76. Coordinate operations with the City of Waupun.

Field Contact for the City of Waupun is Steve Schramm, Treatment Facilities Supervisor, 817 S Madison St., Waupun, WI 53963, (920) 324-7920 office, (920) 210-0079 mobile or email [sschramm@wppienergy.org](mailto:sschramm@wppienergy.org)

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

Waupun Utilities personnel or its designated representatives will observe and inspect the construction of the sanitary sewer and water main under this contract. Compliance testing shall be performed by the contractor in the presence of Waupun Utilities personnel or its designated representatives. Final acceptance of the sanitary sewer and water main construction will be by the Waupun Utilities personnel.

## **10. General Sanitary Sewer and Water Main Construction.**

All sanitary sewer and water main construction work shall be done according to these special provisions and the "Standard Specifications for Sewer and Water Construction in Wisconsin", latest edition and all amendments to date thereto.

Construct the sanitary sewer and water main work 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.

Waupun Utilities or its designated representative will provide construction staking of the sanitary sewer and water main facilities. The contractor shall be responsible for the cost of any extra staking required and/or replacement of any stakes negligently disturbed. The contractor shall notify Waupun Utilities or its designated representative at least three working days prior to the need for construction staking. The following staking will be provided.

Sanitary Sewer: Set one offset hub for each manhole along with offset hubs at 0+25, 0+50, 1+00, 2+00, 3+00, etc. along the length of the pipe run between manhole structures. The offset distance shall be mutually agreed upon by the contractor and Waupun Utilities. Waupun Utilities or its designated representative will prepare a cut sheet for the contractor. The cut sheet shall show the elevations of the offset hubs relative to the corresponding manhole and pipe elevations.

Water Main: Set one offset hub for each hydrant, tee, cross, valve, horizontal bend point or vertical bend point. The offset distance shall be mutually agreed upon by the contractor and Waupun Utilities. Waupun Utilities or its designated representative will prepare a cut sheet for the contractor. The cut sheet shall show the elevations of the offset hubs relative to the corresponding structure elevations.

## **11. Municipality Acceptance of Street Lighting.**

The City of Waupun/Waupun Utilities personnel or its designated representatives will observe and inspect the construction of the street lighting system under this contract. Compliance testing shall be performed by the contractor in the presence of city/utility personnel or its designated representatives. Final acceptance of the street lighting construction will be by the City of Waupun.

## **12. Street Lighting General.**

The work includes labor, material, equipment, utilities, transportation, and equipment to install a complete street lighting system including in part; control cabinets, lighting controls, wiring, conduits, concrete light bases, poles, mast arms, luminaires and other related equipment, ready to use and acceptable to the City of Waupun. The contractor is expected to visit the site and review the existing electrical service equipment prior to submitting a bid for this work. The street lighting work shall include all wiring and equipment required to properly install a complete working system. The intent of the drawings and specifications is to obtain a complete street lighting system; tested, adjusted and ready for operation. Incidental data not usually shown or specified, but necessary for proper installation and operation, shall be included.

The work shall conform to the latest editions of the National Electrical Code. The contractor shall check, verify, and coordinate the work with drawings and specifications for other trades under this contract. All modifications, relocations or adjustments necessary to coordinate and complete work or to avoid interference with other trades shall be included. Information given herein and on drawings is as exact as could be secured but is not guaranteed. Do not scale drawings for exact dimensions.

The electrical supplier is Waupun Utilities, a municipally owned electric utility. The contractor is responsible for coordinating electrical service construction and equipment sizing with the Waupun Utilities office to ensure that their standards are met. Contact information is as follows:

Mr. Randy Posthuma, General Manager  
Waupun Utilities  
817 S. Madison Street  
P.O. Box 431  
Waupun, Wisconsin 53963-0431  
Telephone: (920) 324-7920  
Email: [rposthuma@wppienergy.org](mailto:rposthuma@wppienergy.org)

Prior to ordering any street lighting equipment, the contractor shall submit product literature and catalog cuts of materials and equipment to the Waupun Utilities to verify conformance with current local standards.

Lighting conduit shall be installed a minimum of 24-inches and a maximum of 36-inches below finished top of curb grade in the street terrace locations and have a minimum conduit cover of 6-inches below the sub-grade elevation at all roadway crossings. All

entrance and exit conduits to pole bases and the control cabinets shall be long radius sweep elbows.

All tests required by the Code shall be completed prior to energizing the circuits. The contractor shall be present at the time the circuits are energized. Any failures detected upon the application of electrical current shall be immediately corrected by the contractor.

### **13. Traffic Signals, General.**

Work under this contract shall be performed according to the plans and executed as specified in standard spec 651 through 678, and these special provisions.

Work items shall be considered incidental to construction if not specifically listed on the unit price schedule.

All underground conduit and concrete base forms shall be inspected by the owner or the representative before any trench is backfilled or concrete is poured. Any work completed without such inspection is subject to rejection as unacceptable work and shall be immediately removed and replaced or otherwise satisfactorily corrected by and at the expense of the contractor. It is the contractor's responsibility to arrange for inspections. There will not be any additional compensation to the contractor for delays and inconveniences associated with arranging and waiting for inspections.

### **14. General Requirement for Electrical.**

The approved products list is located at:

<http://www.dot.wisconsin.gov/business/engrserv/ap2014.htm>

### **15. Dust Abatement.**

*Add the following to standard spec 104.61:*

Dry brooming of the pavement will not be allowed.

When engaged in roadway cleaning operations, use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere.

### **16. 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.

107-001 (20060512)

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

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

108-060 (20141107)

## **18. 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 Brian Taylor at (608) 245-2630.

107-054 (20080901)

## **19. Environmental Protection, Aquatic Exotic Species Control.**

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

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

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

- Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;



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

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

## **20. Clearing and Grubbing.**

Remove and dispose of all trees in accordance with standard spec 201 as shown on the plans, and as follows.

No trees shall be removed without approval of the engineer

All trees that require removal for construction must be cleared prior to March 31, 2016.

## **21. Removing Retaining Wall and Steps, Item 204.9090.S.01.**

### **A Description**

This special provision describes removing rock retaining walls and steps behind existing sidewalk according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### **B (Vacant)**

### **C (Vacant)**

### **D Measurement**

The department will measure Removing Retaining Wall and Steps by the linear foot, measured along the base of the wall, completed according to the contract and accepted.

## **E Payment**

*Supplement standard spec 204.5 to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.01	Removing Retaining Wall and Steps	LF

Payment is full compensation for removing, hauling, and disposing of the retaining wall and steps tied to the wall. The department will pay for removing concrete steps and concrete sidewalk separately.

## **22. Removing Traffic Signal Equipment, WIS 49 and Beaver Dam Street / Brandon Street Intersection, Item 204.9105.S.01.**

### **A Description**

This special provision describes removing existing traffic signal equipment at the intersection of WIS 49 and Beaver Dam Street / Brandon Street according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

Arrange for the de-energizing of the traffic signals at WIS 49 and Beaver Dam Street / Brandon Street with the local electrical utility after establishing the detour, traffic control, and receiving approval from the engineer that the existing traffic signals can be removed.

Notify Dick Flynn at the City of Waupun at (920) 324-7918 at least three working days prior to the removal of the traffic signals to coordinate delivery of existing equipment. Complete the removal work as soon as possible following shut down of this equipment.

Remove all standards, poles, and arms from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signals heads, mast arms, luminaries, wiring/cabling and traffic signal mounting devices from each signal standard, pole or arm. Ensure that access handhole doors and hardware remain intact. Dispose of the underground signal cable, street lighting cable, detector lead-in cable and all wires, including loop wire. Complete removals of items to be salvaged for the city in a manner to avoid damage. The contractor will be responsible for damaged items.

Remove the signal cabinet from its footing.

Deliver the signal cabinet, signal heads, signal standards, mast arms, luminaire arms, transformer bases, poles, pull box covers, and traffic signal heads to the City of Waupun at 903 N. Madison Street, Waupun, Wisconsin. Contact Dick Flynn at the City of Waupun at (920) 324-7918 at least five working days prior to delivery.

**D Measurement**

The department will measure Removing Traffic Signal Equipment, (Location) as a single complete lump sum unit of work for the intersection, acceptably completed.

**E Payment**

*Supplement standard spec 204.5 to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9105.S.01	Removing Traffic Signal Equipment, WIS 49 and Beaver Dam Street / Brandon Street Intersection	LS

204-025 (20041005)

**23. Removing Overhead Sign Support Station 55+74 RT, Item 204.9105.S.02, Station 59+91 LT, Item 204.9105.S.03, Station 5'BD'+45 LT, Item 204.9105.S.04, Station 2'BD'+72 RT, Item 204.9105.S.05.**

**A Description**

This special provision describes removing overhead sign supports (location) according to the pertinent provisions of standard spec 204 and as hereinafter provided.

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

The department will measure Removing Overhead Sign Supports (Location) completed according to the contract and accepted, as a single complete lump sum unit of work.

**E Payment**

*Supplement standard spec 204.5 to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9105.S.02	Removing Overhead Sign Support Station 55+74 RT	LS
204.9105.S.03	Removing Overhead Sign Support Station 59+91 LT	LS
204.9105.S.04	Removing Overhead Sign Support Station 5'BD'+45 LT	LS
204.9105.S.05	Removing Overhead Sign Support Station 2'BD'+72 RT	LS

Payment is full compensation for removing, hauling, and disposing of the vertical and horizontal sign supports and the concrete base, including reinforcing steel and anchor bolts. The department will pay for removing signs separately under the Removing Signs Type II bid item as specified in standard spec 638.

204-025 (20041005)

## **24. Removing Care'n Cleaners Sign Station 47+16, Item 204.9105.S.06.**

### **A Description**

This special provision describes removing the Care'n Cleaners Sign according to the pertinent provisions of standard spec 204 and as hereinafter provided. The sign shall not be removed until the owner has installed the new sign. Coordination with business owner is required before removal.

### **B (Vacant)**

### **C (Vacant)**

### **D Measurement**

The department will measure Removing Care'n Cleaners Sign (Location), completed according to the contract and accepted, as a single complete lump sum unit of work.

### **E Payment**

*Supplement standard spec 204.5 to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9105.S.06	Removing Care'n Cleaners Sign Station 47+16	LS

Payment is full compensation for removing, hauling, and disposing of the vertical sign supports and the concrete base, including reinforcing steel and anchor bolts.  
204-025 (20041005)

## **25. Backfill Controlled Low Strength, Item 209.0200.S.**

### **A Description**

This special provision describes furnishing and placing a controlled low strength material designed for use as backfill in trenches for culverts, sewers, utilities, or similar structures, as backfill behind bridges abutments, or as fill for the abandonment of culverts, pipes, or tanks.

### **B Materials**

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

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

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

### **C Construction**

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

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

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

### **D Measurement**

The department will measure Backfill Controlled Low Strength in volume by the cubic yard of material placed and accepted. Such volume shall be computed from actual measurements of the dimensions of the area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
209.0200.S	Backfill Controlled Low Strength	CY

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

209-010 (20090901)

**26. Base Aggregate Dense ¾-Inch, Item 305.0110.**

*Add the following to standard spec 301.2.4.3:*

Furnish aggregate classified as crushed stone for ¾-Inch base when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

**27. Base Aggregate Dense 1¼-Inch, Item 305.0120.**

*Replace standard spec 305.2.2.1 with the following:*

Use 1 1/4 inch base that conforms to the following gradation requirements.

Percentage by weight passing	
Sieve Size	Percentage of Mass Passing
1 1/4 inch	95 – 100
1 inch	---
3/4 inch	70 – 90
3/8 inch	45 – 75
No. 4	30 – 60
No. 10	20 – 40
No. 40	7 – 25
No. 200	2 - 12 <sup>[1], [3]</sup>

<sup>[1]</sup> Limited to a maximum of 8% for base placed between old and new pavement.

<sup>[3]</sup> 3 - 10 percent passing when base is ≥ 50% crushed gravel

**28. QMP Base Aggregate.**

**A Description**

**A.1 General**

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

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

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

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

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

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

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

<sup>[2]</sup> For 3-inch material, obtain samples at load-out.

<sup>[3]</sup> If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
  4. Department verification testing is optional for quantities of 6000 tons or less.
- (3) Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

## **B Materials**

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

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



## B.2 Personnel

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

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

<sup>[1]</sup> Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

- (2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

## B.3 Laboratory

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

## B.4 Quality Control Documentation

### B.4.1 General

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

### B.4.2 Records

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

### B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number

on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.

- (2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
  1. Contractor individual QC tests.
  2. Department QV tests.
  3. Department IA tests.
  4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

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

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

## **B.6 Test Methods**

### **B.6.1 Gradation**

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

### **B.6.2 Fracture**

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

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

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

## **B.7 Corrective Action**

### **B.7.1 General**

- (1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit.

Document all corrective actions both in the project records and on the appropriate control chart.

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

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

## **B.8 Department Testing**

### **B.8.1 General**

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

## **B.8.2 Verification Testing**

### **B.8.2.1 General**

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

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

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

## **B.9 Dispute Resolution**

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

## **C (Vacant)**

## **D (Vacant)**

## **E Payment**

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

301-010 (20100709)

## **29. Bike Lane Concrete Pavement.**

Construct concrete pavement for bike lanes according to standard spec 415 including straightedging as specified in 415.3.11.5 and sawing of transverse joints as specified in 415.3.9.2(10). Finish all concrete pavement according to standard spec 415.3.11.6.2 (turf drag). Hand tooling of contraction joints is not allowed.

### **30. QMP Ride; Incentive IRI Ride, Item 440.4410.S.**

#### **A Description**

- (1) This special provision describes profiling pavements with a non-contact profiler, locating areas of localized roughness, and determining the International Roughness Index (IRI) for each wheel path segment.
- (2) Profile the final riding surface of all mainline pavements. Include auxiliary lanes in Category I and II segments; crossroads with county, state or U.S. highway designations greater than 1500 feet in continuous length; bridges, bridge approaches; and railroad crossings. Exclude roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections.
- (3) The engineer may direct straightedging under standard spec 415.3.10 for pavement excluded from localized roughness under C.5.2 (1); for bridges; and for roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections. Other surfaces being tested under this provision are exempt from straightedging requirements.

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

#### **C Construction**

##### **C.1 Quality Control Plan**

- (1) Submit a written quality control plan to the engineer at or before the pre-pave meeting. 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 all quality control personnel.
  2. The process by which quality control information and corrective action efforts will be disseminated to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
  3. The methods and timing used for monitoring and/or testing ride quality throughout the paving process. Also indicate the approximate timing of acceptance testing in relation to the paving operations.
  4. The segment locations of each profile run used for acceptance testing.
  5. Traffic Control Plan

##### **C.2 Personnel**

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

### **C.3 Equipment**

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

### **C.4 Testing**

#### **C.4.1 Run and Reduction Parameters**

- (1) Enter the equipment-specific department-approved filter settings and parameters given in the approved profilers list on the department's QMP ride web site.  
<http://roadwaystandards.dot.wi.gov/standards/qmp/profilers.pdf>

#### **C.4.2 Contractor Testing**

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

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



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

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

#### **C.4.3 Verification Testing**

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

#### **C.4.4 Documenting Profile Runs**

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

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

The ProVAL software is available for download at:

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

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

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

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

#### **C.5 Corrective Actions**

##### **C.5.1 General**

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

##### **C.5.2 Corrective Actions for Localized Roughness**

- (1) Apply localized roughness requirements to all pavements, including HMA III, PCC III, HMA IV, and PCC IV; except localized roughness requirements will not be applied to pavements within 25 feet of the following surfaces if they are not constructed under this contract: bridges, bridge approaches, or railroad crossings. The department may direct the contractor to make corrections to the pavement within the 25-foot exclusionary zones.
- (2) The engineer will review each individual wheel track for areas of localized roughness. The engineer will assess areas of localized roughness within 5 business days of

receiving notification that the reports were uploaded. The engineer will analyze the report documenting areas that exceed an IRI of 200 in/mile and do one of the following for each location:

1. Direct the contractor to correct the area to minimize the effect on the ride.
2. Leave the area of localized roughness in place with no pay reduction.
3. Except for HMA IV and PCC IV segments, assess a pay reduction as follows for each location in each wheel path:

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

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

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

### **C.5.3 Corrective Actions for Excessive IRI**

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

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

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

PCC II: Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer:

Continuous diamond grinding of the full lane width, if required, of the riding surface including adjustment of the paved shoulders. Conform to sections C.1 through C.4 of Concrete Pavement Continuous Diamond Grinding Special provision contained elsewhere in the contract.

Remove and replace the full lane width of the riding surface.

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

### **C.6 Dispute Resolution**

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

### **D Measurement**

- (1) The department will measure Incentive IRI Ride by the dollar, adjusted as specified in E.2.

### **E Payment**

#### **E.1 Payment for Profiling**

- (1) Costs for furnishing and operating the profiler, documenting profile results, and correcting the final pavement surface are incidental to the contract. The department will pay separately for engineer-directed corrective action performed within the 25-foot exclusionary zones under C.5.2 as extra work.

## E.2 Pay Adjustment

- (1) The department will pay incentive for ride under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
440.4410.S	Incentive IRI Ride	DOL

- (2) Incentive payment is not limited, either up or down, to the amount the schedule of items shows.
- (3) The department will administer disincentives for ride under the Disincentive IRI Ride administrative item.
- (4) The department will not assess disincentive on HMA III or PCC III segments. Incentive pay for HMA III and PCC III segments will be according to the requirements for the category of the adjoining segments.
- (5) The department will adjust pay for each segment based on the initial IRI for that segment. If corrective action is required, the department will base disincentives on the IRI after correction for pavement meeting the following conditions:

All Pavement:	The corrective work is performed in a contiguous, full lane width section 500 feet long, or a length as agreed with the engineer.
HMA Pavements:	The corrective work is a mill and inlay or full depth replacement and the inlay or replacement layer thickness conforms to standard spec 460.3.2.
Concrete Pavements:	The corrective work is a full depth replacement and conforms to standard spec 415.

- (6) The department will adjust pay for 500-foot long standard segments nominally one wheel path wide using equation “QMP 1.04” as follows:

HMA I	
Initial IRI (inches/mile)	Pay Adjustment <sup>[1]</sup> (dollars per standard segment)
< 30	250
≥ 30 to <35	1750 – (50 x IRI)
≥ 35 to < 60	0
≥ 60 to < 75	1000 – (50/3 x IRI)
≥ 75	-250

<b>HMA II and PCC II</b>	
<b>Initial IRI (inches/mile)</b>	<b>Pay Adjustment<sup>[1][2]</sup> (dollars per standard segment)</b>
< 50	250
≥ 50 to < 55	2750 – (50 x IRI)
≥ 55 to < 85	0
≥ 85 to < 100	(4250/3) – (50/3 x IRI)
≥ 100	-250

<b>HMA IV and PCC IV</b>	
<b>Initial IRI (inches/mile)</b>	<b>Pay Adjustment<sup>[1][2]</sup> (dollars per standard segment)</b>
< 35	250
≥ 35 to < 45	1125-(25xIRI)
≥ 45	0

<sup>[1]</sup> The department will not assess a ride disincentive for HMA pavement placed in cold weather because of a department-caused delay as specified in 450.5(4) of the contract additional special provisions (ASP 6).

<sup>[2]</sup> If the engineer directs placing concrete pavement for department convenience, the department will not adjust pay for ride on pavement the department orders the contractor to place when the air temperature falls below 35 F.

(7) The department will prorate the pay adjustment for partial segments based on their length.

### **31. General Provisions for Storm Sewer.**

Construct all round and elliptical shape storm sewers and catch basins, manholes, and inlets according to the pertinent provisions of standard spec 607, 608, 610 and 611 as shown on the plans, and as follows.

Storm Manholes: Precompressed butyl gasket (E-Z Stik or approved equal) shall be used between the manhole, manhole casting, and all concrete adjustment rings. Mortar shall not be used between these structures for adjustment, however mortar shall be used to provide a smooth trowel type finish to the interior surface of the joints between the manhole, adjusting rings and casting. The contractor shall also install concrete mortar between the pipe and the manhole cut-out to the satisfaction of the owner and/or engineer so as to fill any gaps and finish the interior flowline of the manhole.

Storm Inlets: Precompressed butyl gasket (E-Z Stik or approved equal) shall be used between the storm inlet, inlet casting, and all adjustment rings. A rubber composite adjustment riser (Infra-Riser made by East Jordan Iron Works or approved equal) shall be installed as the top most adjusting rings (no more than two per structure) and shall be used

to establish the final grade of the inlet casting. Mortar shall not be used between these structures for adjustment, however mortar shall be used to provide a smooth trowel type finish to the interior surface of the joints between the inlet structure, adjusting rings and casting. The contractor shall also install concrete mortar between the pipe and the inlet cut-out to the satisfaction of the owner and/or engineer so as to fill any gaps and finish the interior flowline of the manhole.

Concrete mortar shall be installed between the pipe and the manhole cut-out to the satisfaction of the engineer so as to fill any gaps and finish the interior flowline of the manhole.

Seal the joints for reinforced concrete pipe with either mastic or internal rubber gaskets as described in standard spec 607.3.4. The use of mortar as a pipe joint method is prohibited.

Dewatering trenches shall be incidental to the unit price for all storm sewer pipe installation.

Do not use station and offset for inlet structures, as given on the storm plans, for final layout of the structure. Determine the curb line in the area of the inlet prior to pouring or setting the inlet structure to assure proper location of the inlet relative to the curb line.

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

### **A Description**

This special provision describes furnishing, installing and removing a steel plate 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, acceptably completed in place, as units.

### **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.

611-006 (20030820)

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

#### **A Description**

This special provision describes furnishing and installing a plastic fence at locations shown on the plans and as hereinafter provided.

#### **B Materials**

Furnish notched conventional metal “T” or “U” shaped fence posts.

Furnish fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh Opening:	1 inch min to 3 inch max
Resin/Construction:	High density polyethylene mesh
Service Temperature:	-60° F to 200° (ASTM D648)
Tensile Yield:	Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate Tensile Strength:	Avg. 3000 lb per 4 ft. width (ASTM D638)
Elongation at Break (%):	Greater than 100% (ASTM D638)
Chemical Resistance:	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.

616-030 (20070510)

### **34. Trench Rock Excavation, Item SPV.0035.52.**

#### **A Description**

Perform any necessary excavation of bedrock within the excavation/trench limits for the new sanitary sewer, water, and storm sewer utility improvements to install these new facilities to the planned alignment, grade, and elevation as shown on the contract drawings or as directed by the WisDOT, Waupun Utilities, or its delegated representative.

Trench Rock Excavation shall be defined to include all hard, solid, rock in ledges, bedded deposits and un-stratified masses, all natural conglomerate deposits so firmly cemented as to present all the characteristics of solid rock. Shales, hard pan, masonry and concrete rubble, boulders less than one cubic yard which are not a part of or attached to substrata of rock, shall not be considered Trench Rock Excavation. Trench Rock Excavation will not be paid unless the removal of the consolidated rock formation requires methods above and beyond the operational capacity of a hydraulic excavator (at least 100,000-pounds or larger) utilizing a rock bucket.

#### **B Materials**

Trench Rock Excavation shall include all materials, equipment, and labor necessary to carefully remove any bedrock (as defined above) from the excavation/trench limits without damaging or disturbing any existing utilities, site features, buildings, structures, etc. in close proximity to the work. Any negligent damage or disturbance by the contractor (as determined by the engineer, Waupun Utilities or its delegated representative) shall be replaced or repaired at the contractor's expense to the satisfaction of the Waupun Utilities or its designated representative.

#### **C Construction**

Trench Rock Excavation shall be performed at the contractor's option using either a frost pick unit mounted to a hydraulic excavator, a hydraulic chisel unit mounted to a hydraulic excavator, rock blasting, or other method approved by the WisDOT, Waupun Utilities, or its designated representative.

##### **C.1 Rock Blasting**

Permits: The contractor shall be responsible for obtaining all state and local permits required prior to blasting. No additional payments will be made for any permits.

- Blasting Plan:
- A blasting plan is required on all projects where rock blasting occurs.
- Not less than three weeks prior to commencing drilling and blasting operations or at any time the contractor proposes to change the drilling and blasting methods, the contractor shall submit a "Blasting Plan" to the Waupun Utilities or its designated

representative for review. The blasting plan shall describe in full details, the drilling and blasting patterns the contractor proposes to use for the types of blasting required by the Contract. The blasting plan shall include (at a minimum):

- Name, license number and experience of blaster(s).
- Type of explosives, primers and initiators including manufacturer's data sheets for all explosive products.
- General blasting configurations including hole size, spacing, loading pattern, detonation procedure, anticipated maximum pounds of explosive per delay, powder factor, number of lifts, and limits of blasting.
- Procedures to inform and protect the public and adjacent property (e.g., signs, horns, letters, personal visits, etc.).
- Flyrock control plan.
- Proposed "Shot Log" for individual blasts.
- The blasting plan submittal is for quality control and record keeping purposes. Review of the blast plan by the Waupun Utilities or its delegated representative shall not relieve the contractor of his responsibility for the accuracy and adequacy of the plan when implemented in the field.

#### Shot Log:

- A shot log is required on all projects where rock blasting occurs.
- The contractor is required to submit records (shot logs) for each individual shot on forms reviewed by the Waupun Utilities or its designated representative. The shot log shall be maintained by the contractor and submitted to the Waupun Utilities or its designated representative at the end of each day. No blasting will be allowed until the shot log from the preceding day has been submitted to the Waupun Utilities or its designated representative. The shot log shall include the following information (at a minimum):
- Location of the shot by station and offset.
- Plan view of the drill pattern including free face, burden, hole spacing, diameters and angles.
- Section view showing type and amount of explosives, primers, initiators, location and depth of stemming, lift height, and subdrill depth.
- Initiation sequence of holes including cumulative delay times and delay system.
- Total pounds of explosives used.
- Maximum peak particle velocity measured at the closest (or most critical receptor), location of monitoring station, and scaled distance.

#### Precondition Building Survey:

- The contractor shall conduct a precondition survey of all residential and commercial structures within 500 feet of the blasting area. The survey shall be conducted in the responsible charge of a professional engineer registered in the state of Wisconsin. All reports shall be certified by this engineer.
- This Precondition Building Survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, and a written report describing the existing exterior and interior defects in the buildings being inspected. The second part, performed after the

construction activities, shall also include a visual inspection, photographs, and written report describing any change in the building's condition.

- Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical condition of the building's interior and exterior walls and foundation. The report shall be typed on bond paper and be in text form.
- The photographs shall be sharp, grain free, high-contrast colored pictures with good shadow details. Each photograph shall contain the following information:
  - I.D.
  - Building Location
  - View Looking
  - Date
  - Photographer
- Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the Waupun Utilities or its designated representative.
- After the construction activities are complete, conduct another survey in the same manner, take photographs, and submit another written report to the Waupun Utilities or its designated representative.
- In lieu of photographs, a video DVD with sharp, grain free, high-contrast colored pictures and good shadow details may be provided.

Precondition Well Survey:

- The contractor shall sample and test all potable water wells within 500 feet of the blasting area. It shall be the contractor's responsibility to locate all wells within 500 feet, contact property owner and obtain permission prior to sampling. Test for the following parameters:
  - Total Coliform Bacteria, colonies/100 ml.
  - Calcium, mg/L as Ca.
  - Magnesium, mg/L as MG.
  - Total Hardness, mg/L as CaCO<sub>3</sub>.
  - Manganese, mg/L as Mn.
  - Sodium, mg/L as Na.
  - Chloride, mg/L as Cl.
  - Total Iron, mg/L as Fe.
  - Sulfate, mg/L as SO<sub>4</sub>.
  - Nitrate-Nitrites, mg/L as N.
  - Total Suspended Solids, mg/L.
  - Well Capacity.
- Perform sampling and testing according to all applicable state codes.

#### Vibration Monitors:

- The amplitude/frequency vibration monitor shall be an InstanTel Blastmate DS677 or equivalent, available from Sobie & Associates, 1200 Pratt Avenue, Elk Grove Village, Illinois 60003; (708) 473-7333. This instrument shall be capable of measuring, recording, and producing a hard copy of the frequency and peak particle velocity in three mutually perpendicular axes (“vector sum” instrumentation is not allowed). The instrument shall be capable of measuring Linear Scale air blast pressure (other weighting systems, such as A- or C-scale are not allowed). The instrument must also be capable of plotting the measured vibration level against the OSM criteria or be capable of reporting the frequency and displacement of each vibration event.
- The contractor shall submit documentation of the last calibration of the instrument.

#### Use of Explosives:

- The regulatory requirements of OSHA Safety and Health Standards 29 CFR, Part 1926, Subpart U, “Blasting and Use of Explosives,” shall apply. All blasting operations, including the storage and handling of explosives and blasting agents, shall be performed according to all pertinent federal, state, and local regulations. Whenever explosives are used, they shall be of such character and in such amount as is permitted by state and local laws and ordinances and all respective agencies having jurisdiction over them. The person(s) responsible for the use of explosive materials shall be knowledgeable and experienced in their use and handling. Blasting will be limited to a period between 8:00 AM and 5:00 PM or as otherwise approved by the Waupun Utilities or its delegated representative.

#### Safety:

- The contractor shall observe the entire blast area for a minimum of five minutes following a blast to guard against rock fall before commencing work in the cut. The contractor is responsible for the safety of workers and the public in general.
- The Waupun Utilities or its delegated representative shall, at all times, have the authority to prohibit or halt the contractor’s blasting operations if it is apparent that, through the methods being employed the safety or property of the public is being jeopardized.
- The contractor is advised that structures may be located close to the proposed work and that noise and vibration producing activities shall be conducted so as to preclude damage to these structures and undue annoyance to their occupants. The contractor shall be responsible for all damage caused by his activities.

#### Public Relations:

- The contractor is required to have both letter and personal contact with residents or owners of buildings that are adjacent to the construction area or near enough to it for ground vibrations from construction operations (including blasting) to affect the structure, personal property, or water wells. This contact will be made prior to the beginning of any blasting or other vibration producing activity. The contractor will furnish a list of those contacted to the Waupun Utilities or its delegated representative, as part of the blasting plan.

- The contractor will identify a contact person for complaints from the public and will maintain a log of such complaints and any action taken by the contractor. This log shall be available to the Waupun Utilities or its delegated representative at his request. The contractor shall make an initial reply to complaints within 24 hours.

#### Fly Rock Control:

- Before the firing of any blast in areas where flying rock may result in personal injury or damage to property or the work, the rock to be blasted shall be covered with blasting mats, soil, or other equally serviceable material to prevent flyrock.

#### Vibration Control and Monitoring – General:

- Vibration control and monitoring is required on all projects where rock blasting occurs.
- Whenever vibration damage to adjacent structures is possible, the contractor shall monitor each blast with an approved seismograph located between the blast area and the closest (or most critical) structure subject to blast damage.
- The peak particle velocity of each component shall not be allowed to exceed the safe limits, as established below, for all adjacent structures subject to vibration damage.
- When blasting near buildings, structures, or utilities that may be subject to damage from blast induced ground vibrations, the ground vibrations shall be controlled by the use of properly designed delay sequences and allowable charge weights per delay. Allowable charge weights per delay shall be based on vibration levels, which will not cause damage. The allowable charge weights per delay shall be established by carrying out trial blasts and measuring vibration levels.
- Take seismograph readings prior to construction activities to establish an ambient index.
- Place the seismograph to continuously monitor all construction activities or as directed by the Waupun Utilities or its delegated representative. If construction activities generate ground vibration in excess of the Peak Particle Velocity Limits, stop the construction operation in progress and consider and implement alternate construction methods.
- 

#### Ground Vibration Control Limit:

- Measurements for this limit will be made at external ground locations adjacent to affected buildings or structures. Vibration criteria will be measured in peak particle velocity. No controls have been established for in-place utilities and the contractor shall conduct operations to prevent damage to all utilities.
- The maximum single component peak particle velocity resulting from construction activity shall not exceed the values given below:

Frequency of the Peak Particle Velocity (Hz)	Allowable Peak Particle Velocity [mm per second (ips)]
40 or less	25 (1.00)
50	32 (1.25)
60	38 (1.50)
70	44 (1.75)
80	51 (2.00)
90	51 (2.00)
100	51 (2.00)
110 or greater	51 (2.00)

- The frequency and peak particle velocity shall be analyzed for each of the three components and the velocity limit shall apply to each component. The frequency is defined as that associated with peak particle velocity pulse of the ground motion and is calculated as the inverse of twice the time interval between the two zero crossings of that pulse.

Air Blast Control Limit:

- The maximum air blast resulting from blasting shall not exceed the values given in the table below:

Frequency Range of Instrumentation	Maximum Air Blast (dB)	Maximum Air Blast [kPa (psi)]
0.1-200 Hz, flat response	134	0.103 (0.015)
2.0-200 Hz, flat response	133	0.090 (0.013)
6.0-200 Hz, flat response	129	0.055 (0.008)

**D Measurement**

The department will measure Trench Rock Excavation in volume by the cubic yard in place, acceptably completed. Measurement for Trench Rock excavation shall be per cubic yard, as determined by in-field elevations of material removed. The pay width for rock excavation in open cut utility installation shall be the actual width of the excavated trench, but not to exceed the outside diameter of the pipe plus 24 inches. The depth of rock excavation shall be 6-inches below the trench depth specified or indicated on the contract drawings. The pay quantity for manholes and other pre-cast structures shall be 12 inches beyond the outside neat lines of the proposed manhole or structure and 12-inches below the bottom of the slab elevation. The pay quantity for cast-in-place structures shall be 5-feet beyond the outside neat lines of the proposed walls and 12-inches below the bottom of the slab elevation.

All costs associated with the precondition building survey, precondition well survey, blasting plan, shot logs, vibration monitoring, permitting, and other requirements

mentioned above shall be included in the unit price for Trench Rock Excavation if the contractor intends to blast rock from the utility trench areas.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.52	Trench Rock Excavation	CY

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

**35. Temporary Curb Ramp, Item SPV.0045.01.**

**A Description**

This special provision describes providing, maintaining, moving, and removing temporary ADA compliant curb ramps where the plans show or engineer directs.

**B Materials**

Provide either asphalt or concrete conforming to the standard specifications.

For asphalt provide materials in accordance with standard spec 465.2.

For concrete provide materials in accordance with standard spec 602.2(2).

No QMP will be required for this work.

Furnish yellow cast iron detectable warning fields from the department's approved products list.

Furnish yellow surface applied detectable warning fields from the following manufacturers:

1. ADA Solutions, Inc.
2. Alert Tile
3. Armor Tile

Cast iron detectable warning fields are not considered surface applied.

Furnish surface applied detectable warning fields in accordance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and having a minimum slip resistance coefficient of 0.80 wet and dry. Maintain the minimum slip resistance throughout construction. Provide a certification of the slip resistance to the engineer for approval prior to installation. The certification shall include the anticipated duration the slip resistance can be maintained under normal use conditions.

Test the slip resistance of the surface applied detectable warning fields in accordance with ASTM F 609-05 and AASHTO Draft T4-33 Part 9 as directed by the engineer throughout construction.

Furnish 4-inch PVC drain pipe.

### **C Construction**

For asphalt temporary curb ramps, construct in accordance with standard spec 465.3.1. For concrete temporary curb ramps, construct in accordance with standard spec 602.3.2.

Provide detectable warning field, curbing, grading, and restoration for temporary curb ramps conforming to the plan details for permanent curb ramps. Match the width of the facility leading to the curb ramp. Conform to the requirements of the detectable warning field manufacturer and the current ADAAG.

Reconstruct or move temporary curb ramps if required for work operations. Maintain the temporary curb ramps including the detectable warning field, throughout the duration of the project to be compliant with the ADAAG and the manufacturer's specifications.

Construct temporary curb ramps with asphalt and a surface applied detectable warning field, or concrete and a cast iron detectable warning field for other temporary curb ramp locations in use when snow is not expected.

Remove temporary curb ramps and associated detectable warning fields as the staging plans provides or the engineer directs.

### **D Measurement**

The department will measure temporary curb ramps by each 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.0045.01	Temporary Curb Ramp	DAY

Payment is full compensation for furnishing all materials; for constructing and moving the temporary curb ramps as required by construction staging; and for removing and disposing of the temporary curb ramp materials once permanent curb ramps are completed and open to pedestrian traffic.

## **36. Temporary Crosswalk, Item SPV.0045.02.**

### **A Description**

This special provision describes providing, maintaining, moving and removing temporary crosswalk surface for pedestrians at locations shown in the plan details. A crosswalk is defined as an ADA compliant accessible crossing of a single leg of an intersection.



Additional locations may be required as directed by the engineer. Temporary curb ramps will be paid for separately under the Temporary Curb Ramp Item.

#### **B Materials**

Furnish a hard temporary surface material consisting of asphaltic surface temporary in accordance with standard spec 465.2, any grade of concrete in accordance to standard spec 602.2, skid resistant steel plating, or alternative material as approved by the engineer. Gravel or base course material is not acceptable.

Furnish and install safety fence to delineate the appropriate pedestrian crosswalk location.

#### **C Construction**

Install, maintain, relocate (if necessary to accommodate work or operations), and remove temporary surface material at Temporary Crosswalk location as shown on the plans and as directed by the engineer. Level and compact the base material prior to placing temporary surface material. The Temporary Crosswalk shall have a minimum clear width of 5 feet; be located outside the immediate work area, as approved by the engineer; and meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG). Install safety fence along both sides of the temporary crosswalk. Provide a gap in the safety fence to provide access for construction and emergency vehicles across the temporary crosswalk. The maximum width of the gap shall be 18 feet. Reconstruct Temporary Crosswalk when disturbed by construction operations or utility trenches.

#### **D Measurement**

The department will measure Temporary Crosswalk by the day, acceptably in service for each location. The measured quantity will equal the number of calendar days an acceptable and accessible temporary crosswalk through the work area is open to pedestrian traffic. A crosswalk is defined as an accessible crossing of a single leg of an intersection with existing, temporary, or finished curb ramps meeting ADA requirements. Each day that the crosswalk is out of service for more than 2 hours will result in 1 day being deducted from the quantity measured for payment. Crosswalks using existing or new permanent pavement will not be measured and paid for under this item.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.02	Temporary Crosswalk	DAY

Payment is full compensation for providing and installing the safety fence and required materials; for preparing the foundation; and for furnishing, placing, maintaining, and removing temporary surface material.

**37. U-Channel Sign Post 13-FT, SPV.0060.01; 14-FT, SPV.0060.02; 16-FT, SPV.0060.03.**

**A Description**

This special provision describes furnishing and installing U-Channel Sign Posts, and powder coating sign posts green according to standard spec 634, as shown in the plans or as directed by the engineer, and as hereinafter provided.

**B Materials**

Furnish sign posts consisting of hot rolled flanged channel section from high strength steel conforming to ASTM A-499, grade 60 modified to 70,000 psi minimum yield. Posts shall be straitened to have smooth uniform finish, free from defects affecting their strength, durability, or appearance. All edges shall be free from burrs. The permissible tolerance for straightness shall be 1/4" in a 5' span. Posts shall be punched with continuous 3/8" diameter holes on 1" centers for the entire length of the posts, beginning 1" from one end of the post. Length of each post shall be as shown in the plans as required to meet the proper sign mounting heights and a 3' minimum embedment.

The sign posts shall be polyester powder coated green color (PANTONE 553-C) according to the manufacturer's recommendations.

**C Construction**

**C1 Delivery, Storage and Handling**

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If the coating is damaged, repair or replace equipment to the approval of the engineer at no additional cost. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during installation.

**C2 Touch-up and Repair**

For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations with a matching Green color PANTONE 553-C finish. If damage is excessive, the equipment shall be replaced at no additional cost. Provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

**C3 Installation**

Install U-Channel Sign post at locations shown in the plans and according to the Manual on Uniform Traffic Control Devices.

For installations in concrete or asphalt, use box outs prior to pouring concrete to avoid cutting into the new concrete sidewalk installed in the terrace. These locations shall be field verified by contractor prior to pouring concrete. Install the posts per the manufacturer's installation instructions such that the posts are plumb. Remove any sign

posts installed that result in the posts leaning to any side out of plumb and reinstall at contractor expense.

**D Measurement**

The department will measure U-Channel Sign Posts (FT) as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	U-Channel Sign Post, 13-FT	Each
SPV.0060.02	U-Channel Sign Post, 14-FT	Each
SPV.0060.03	U-Channel Sign Post, 16-FT	Each

Payment is full compensation for furnishing, producing, and installing posts, cleaning the steel; furnishing and applying the powder coating materials; and for loading, hauling, storing, and performing field repairs.

**38. Traffic Control Sidewalk Detour, Item SPV.0060.05.**

**A Description**

This special provision describes furnishing, installing, maintaining, and removing sidewalk detours required for closing sidewalk on STH 49 for utility lateral construction and sidewalk replacement.

**B Materials**

Furnish traffic control items according to standard spec 643.

**C Construction**

Install temporary crosswalks across the work zone as shown in the plans.

Furnish and install traffic control signs and barricades for pedestrians as shown in the plans and according to standard spec 643.

**D Measurement**

The department will measure Sidewalk Detour by each 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.0060.05	Traffic Control Sidewalk Detour	Each

Payment is full compensation for furnishing and installing traffic control signs and traffic control items for sidewalk detour.

### **39. Connect Private Pipe, Item SPV.0060.16.**

#### **A Description**

This special provision describes re-establishing or providing connections for private storm sewer connections to the new storm sewer system.

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

#### **C Construction**

Identify all private connections to the existing storm sewer structures or pipes prior to removal of that section of storm sewer. Remove the existing pipe connection back to the next good joint, if applicable, and replace the pipe in-kind. Salvaging and reusing structurally sound pipe obtained from the removal of the old pipe connection is permissible with prior approval from the engineer. Verify that positive drainage is achieved with the new connection before backfilling. Connect the private pipe to the new storm sewer system using appropriate couplings, sleeves, bands, concrete collars or by other means approved by the engineer. Concrete masonry for concrete collars shall be according to standard spec 501.

#### **D Measurement**

The department will measure Connect Private Pipe by each connection, acceptably completed. The pipe length necessary to make the connection is measured and paid for separately.

#### **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	Connect Private Pipe	Each

Payment is full compensation for performing all work to reconnect the private storm sewer connection to the new storm sewer including; excavation, locating and removing the old connection, disposing of waste materials, furnishing and installing any necessary couplings, sleeves, bands, concrete collars, reducers, elbows, jointing compounds, sawing, drilling, sealing and backfilling.

### **40. 18”X36” Reducer, Item SPV.0060.17.**

#### **A Description**

This special provision describes providing a 36”x18” reducer to connect an 18-inch culvert pipe corrugated steel into a concrete structure with hole sized to accommodate a future connection to 36-inch sized concrete pipe.

#### **B Materials**

Shall conform to standard spec 607, 608, and 610.

**C Construction**

Connect the 36-inch end of the reducer into the concrete inlet structure and connect the 18" culvert pipe corrugated steel to the other end of the reducer.

**D Measurement**

The department will measure 18"X36" Reducer 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	18"X36" Reducer	Each

Payment is full compensation for performing all work including; excavation, disposing of waste materials, furnishing and installing any necessary couplings, sleeves, bands, jointing compounds, sawing, drilling, sealing and backfilling.

**41. Box Culvert Grate, Item SPV.0060.18.****A Description**

This special provision describes the furnishing and erecting box culvert grates from steel pipe as shown on the plans and as hereinafter provided.

**B Materials**

Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish miscellaneous metals conforming to standard spec 506.2.

Zinc coated fabrication shall conform to standard spec 506.2.10.

Furnish masonry anchors, type S conforming to standard spec 502.2.12.2.

**C Construction**

For constructing the box culvert grate, conform to standard spec 506, except as specified otherwise below.

For installing the masonry anchors, type S conform to standard spec 502.3.14.

**D Measurement**

The department will measure Box Culvert Grate 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.0060.18	Box Culvert Grate	Each

Payment is full compensation for fabricating, galvanizing, transporting, and installing the box culvert grate, including any touch-up and repairs.

**42. Storm Cleanout, Item SPV.0060.19.****A Description**

This special provision describes providing a storm sewer cleanout riser with tracer wire at the locations of private storm sewer connections to the new storm sewer system.

**B Materials**

The PVC elbows, reducers, risers, and any other necessary pipe fitting shall conform to the requirements of the specifications listed in ASTM 949. The manufacturer of the PVC pipe shall provide the PVC pipe fittings to ensure compatibility.

**C Construction**

Install the storm cleanouts at locations where the newly installed pipe will not be accessible for maintenance from the discharge end of pipe at the structures. Install the storm cleanouts near the end of the new pipe runs, near the connection to the existing pipes, within the right-of-way.

Set the cast iron frame elevation to be flush with the finished grade and restore the worksite to its original condition.

Set tracer wire as detailed in the plans

Follow the requirements of standard spec 607.3.5 for backfilling.

**D Measurement**

The department will measure Storm Cleanout by each 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.0060.19	Storm Cleanout	Each

Payment is full compensation for performing all work to install the storm cleanout including excavation, disposing of waste materials, placing tracer wire, furnishing and installing any necessary pipe, cast iron frames, plugs, couplings, sleeves, bands, concrete collars, reducers, elbows, jointing compounds, sawing, drilling, sealing and backfilling.

#### **43. Pole Accessory Weather-proof Duplex Outlet, Item SPV.0060.31.**

##### **A Description**

This special provision describes furnishing and installing a weather-proof duplex outlet on each new street light pole as shown on the plans and as hereinafter provided.

##### **B Materials**

All weather-proof duplex outlets shall be installed as per pole manufacturers specifications and shall include a single-pole in-line fuse, pole mounted electrical box, weather-proof cover, and other miscellaneous equipment as necessary to supply a complete working system. All duplex outlets shall not include ground fault circuit interrupter devices (GFI or GFCI). Circuit wiring for the duplex outlet shall be included under separate bid items as Electrical Wire Lighting (AWG). Prior to placing any equipment order, the contractor shall provide catalog cuts and product specifications to the Waupun Utilities or its designated representatives for review and written approval.

##### **C Construction**

The electrical box for the duplex outlet shall be installed by the pole manufacturer at the factory and mounted on the pole so that it faces 180-degrees away from the street at 20 feet-3 inches above the pole base to the top of the outlet box.

##### **D Measurement**

The department will measure Pole Accessory Weather-proof Duplex Outlet by each unit, approved by the City of Waupun, and acceptably completed.

##### **E Payment**

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.31	Pole Accessory Weather-proof Duplex Outlet	Each

Payment is full compensation for furnishing and installing all materials, including pole mounted weather-proof duplex outlet, hardware and fittings.

#### **44. Pole Accessory Banner Hanger and Flag Mount, Item SPV.0060.32.**

##### **A Description**

This special provision describes furnishing a flag mount plus installing one banner hanger mount (supplied by city) and one flag mount on each new street light pole as shown on the plans and as hereinafter provided.

##### **B Materials**

The banner hanger mount shall consist of a pole plate (supplied by city) and three stainless steel banding straps (supplied by the contractor as part of this work item). The banding straps shall be  $\frac{3}{4}$  inch wide and installed with a banding tool. Banding and tool shall be from Band-It or approved equal. The contact information is: Band-it IDEX Inc. of Denver, CO, Telephone (800) 525-0758 or website: [www.band-it-idex.com](http://www.band-it-idex.com).

The flag mount shall be Model Number = FHWADBRC (silver color) from Display Sales Company, 10925 Nesbitt Avenue South, Bloomington, MN 55437, Telephone (800) 328-6195 or Email: [sales@displaysales.com](mailto:sales@displaysales.com)

Prior to placing any equipment order, the contractor shall provide catalog cuts and product specifications to the Waupun Utilities or its designated representatives for review and written approval.

#### **C Construction**

The banner hanger mount shall be installed on the pole so that it faces the street at 23 feet-2 inches above the pole base to the top of the bracket. It shall be fastened with three stainless steel banding straps spaced equally along the pole plate to secure it to the pole.

The flag mount shall be installed on the pole so that it faces the street at 11 feet-6 inches above the pole base to the bottom of the bracket. The mount shall be fastened to the pole with the hardware supplied with the bracket.

#### **D Measurement**

The department will measure Pole Accessory Banner Hanger and Flag Mount by the unit (complete with both items), approved by the City of Waupun, and acceptably completed.

#### **E Payment**

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.32	Pole Accessory Banner Hanger and Flag Mount	Each

Payment is full compensation for furnishing and installing all materials as specified, including pole mounted banner hanger and flag mount hardware and fittings.

### **45. Accessory Circuit Clock Timer, Item SPV.0060.33.**

#### **A Description**

This special provision describes furnishing and installing a clock type timer to control the pole mounted duplex outlet circuit. The timer shall be installed inside each lighting control cabinet and as hereinafter provided.

#### **B Materials**

The clock type timer shall be a standard industrial grade digital readout, 120V single phase timer operating on a 24 hour clock with at least two programmable schedules. No external battery backup is required. Prior to placing any equipment order, the contractor shall provide catalog cuts and product specifications to the Waupun Utilities for review and written approval.

#### **C Construction**

The timer unit shall control the accessory pole mounted duplex outlet units and be mounted inside the lighting control cabinet according to the manufacturer's recommendations as space allows, with the final location approved by the City of Waupun.



The contractor shall connect the outlet circuit from one of the two lighting circuits that originate from each control cabinet to one clock timer and the second outlet circuit to a second timer. The contractor shall be responsible for determining the proper size of the timer load circuit and for programming each timer with a schedule as the city directs.

**D Measurement**

The department will measure Accessory Circuit Clock Timer by the unit, approved by the City of Waupun, and acceptably completed.

**E Payment**

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.33	Accessory Circuit Clock Timer	Each

Payment is full compensation for furnishing and installing all materials, including an accessory circuit clock timer, hardware and fittings; and for programming.

**46. Removing Base, Pole and Luminaire, Item SPV.0060.34.**

**A Description**

Remove existing light poles/arms, pole bases, and luminaires at the locations as shown in the plans and according to standard spec 204.

**B Materials**

Use backfill material according to standard spec 209.

**C Construction**

Carefully remove poles, arms, luminaires, and electrical wiring; backfill the resulting holes; and dispose of all materials outside of the right-of-way according to standard spec 204 and 638.3. All items removed shall be the property of the contractor and shall be removed from the construction site and disposed of properly.

**D Measurement**

The department will measure Removing Base, Pole and Luminaire by the unit, approved by the City of Waupun, and acceptably completed.

**E Payment**

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.34	Removing Base, Pole and Luminaire	Each

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

#### **47. Traffic Signal Controller and Cabinet, Fully Actuated 8-Phase, Item SPV.0060.41.**

##### **A Description**

- (1) This special provision describes furnishing and installing traffic signal controllers as shown on the plans and as hereinafter provided.
- (2) Submit a Certification of Compliance from the signal vendor, the contractor or the company that wired the cabinet certifying that the cabinet and equipment as furnished, conform to the plan and specifications. Ensure that the certificate of compliance is on the letterhead stationery, signed by an authorized officer of the company, and notarized. Submit a copy to the engineer.
- (3) It is the responsibility of the contractor or his designee that all functions within the controller, cabinet, switches, and other timing parameters, and that all electrical and electronics components are in proper working condition. In addition, it is the responsibility of the contractor or his designee to ensure it meets the plan and the specifications, and shall demonstrate this to the engineer or his designee at the field location.
- (4) After mounting the cabinet on the cabinet foundation, connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. Connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work.
- (5) The delivered cabinet at the intersection shall perform according to the standard specifications, the plan details, and special provisions once the field wiring is connected. It shall also be the responsibility of the contractor to have the person responsible for wiring the cabinet present at the location when the field wiring is connected to the cabinet wiring. In addition, the contractor assumes liability for any damage or damage due to malfunctions or improper wiring.
- (6) The controller shall be a fully traffic actuated, solid state, digital microprocessor controller, capable of providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan.
- (7) The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system. The equipment items included shall be, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.
- (8) Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be

provided for all phases. MUTCD flashing capability shall be provided. All controls shall be according to the accompanying plans and with NEMA Standards Publication No. TSI-1976 including Revisions No. 1 and No. 2.

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

## **B Electrical and Operational Aspects**

### **B.1 Buffering**

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

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

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

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

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

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

- (1) In the dual ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. The controller shall provide barrier protection against concurrent timing of two conflicting phases; no phases assigned to one side of the barrier shall be permitted to time concurrently, if a conflict will occur. The controller shall service calls on a single entry basis, and both rings shall cross the barrier simultaneously 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 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.

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

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

## **B.6 Red Revert**

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

## **B.7 Coordination**

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

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

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

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

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

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

## **B.10 Data Display**

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

## **B.11 Diagnostic Program**

- (1) A diagnostic program shall be prepared by the manufacturer of the controller unit that will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic

program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

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

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

#### **C Monitoring**

- (1) Provide a NEMA PLUS monitor with all components and circuitry, independent to the controller and having the capacity to handle a minimum of 12 channels. The monitor shall detect conflicting indications, controller voltage drops, and the absence of reds as follows:
  1. Conflicting indications shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the conflict monitor.
  2. The +24 VDC cabinet power source shall be monitored by the conflict monitor. If that voltage drops to an unsatisfactory level, the monitor shall cause the controller to revert to flashing mode. Upon resumption of normal voltages, the controller shall resume normal stop and go operation without the necessity of manual resetting.
  3. The absence of any required red signal voltage at the field connection terminals in the controller assembly shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset.
  4. After power interruption (exceeding 457 +/- 25 milliseconds) to the controller assembly a flashing period (4 to 10 seconds adjustable) shall precede the startup (initialization) sequence. This feature can be resident in either the monitor or the controller.
  5. The flash circuit shall be wired in a failsafe manner so that the intersection will revert to and remain in flashing mode whenever and for as long as either the controller mechanism or the monitor is disconnected.
  6. Indicator lights shall be: a) an indicator for each channel shall be provided with latch status of failure, b) +24V light inputs, c) conflict light, d) conflict monitor power light and program board ajar light, e) power interrupt after failure light, f) red failure light.

7. G or W vs. Y signals on the same channel: This function shall be enabled on a per unit basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk versus yellow indications active on one channel. It shall be recognized as a failure if the condition exists for 850 +/- 150 milliseconds. This failure shall always be considered a latched failure when enabled.
8. G, W, or Y vs. R signals on the same channel: This function shall be enabled on a per channel basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk or yellow versus red indications active on one channel. It shall be recognized as a failure if the condition exists for 850 ±150 milliseconds. This failure shall always be considered a latched failure when enabled.

#### **D Terminal Facilities**

- (1) Terminal facilities shall consist of all devices external to the controller unit that are necessary to complete the intersection control. Terminal facilities supplied shall be protected by dual 30-amp circuit breakers. The dual 30-amp breakers shall feed an evenly split signal bus supplied through bus relays and radio interference line filters. Bus relays, in all cases, shall be mercury type contractors and shall not be jack mounted. Terminal facilities shall also include applicable load switch panels of sufficient capacity to accommodate 8 vehicle phases, 4 pedestrian phases, and 4 overlap phases and shall include a minimum of 6 solid state 3 circuit load switches with visual indicators. Flash transfer relays and two double circuit flashers shall also be provided. The internal wiring in the load switch panels shall be insulated wiring of sufficient size or the individual outputs fused so that the wiring will not be damaged by shorted output light circuits. Printed circuits in the load switch panels will not be acceptable.
- (2) Use terminal strips to terminate controller cable, signal head cables and vehicle and pedestrian detector cables. Terminate all controller inputs and outputs on an interface panel. All interface and output terminal connections shall be the screw down type.
- (3) Fuse all interconnect terminal facilities to incoming lines.

#### **E Cabinet Switches**

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

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

- (2) Provide switches for all vehicle phases and all even pedestrian phases.
- (3) Locate the following switches behind the Police access door:
  - a. Signal/Off
  - b. Flash/Normal

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

Signal		Off
Flash	Signals Flash	Signals Dark
Normal	Signals Normal	Signals Dark

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

Upper Position:                      Spring loaded:                      Disconnect detector

Center Position:    Normal detector operation

Lower Position:                      Spring loaded:                      Test call is placed to controller.

#### **F Cabinet and Cabinet Equipment**

- (1) Furnish the controller completely housed in a door-in-door ground mounted (without anchor bolts) metal cabinet of minimum size 1115 mm wide, 685 mm deep, and 1495 mm high.
- (2) Provide a cabinet of clean-cut design and appearance. The size of the cabinet shall be such as to provide ample space for housing the controller, and all of the associated electrical devices which are to be furnished with the controller, together with any other auxiliary devices herein specified.
- (3) All cabinets shall have the following:
  1. A 15-amp circuit breaker for auxiliary equipment.
  2. A 2-pole 20-amp circuit breaker for street lighting, photo eye, and contactor.
  3. A valve type surge protector, as manufactured by Joslyn, catalog #L9200-10; General Electric, catalog #9L15DCB002; or approved equal, shall be mounted internally within the traffic signal cabinet and shall be connected across the load terminals of the circuit breakers. A General Electric Varistor, catalog #V130PA20A, shall be installed at the load terminals of each circuit breaker from the hot line to the grounded current carrying neutral conductor.
  4. Incandescent light socket.
  5. Solid state jack mounted NEMA flasher(s) with visual indicators and completely wired base, rated for at least 10 amps per circuit at 74 degrees C.
  6. Control switches, including controller power switch, stop time switch, cabinet light switch, and emergency flash switch.
  7. All switches specified in Section C-8 and F.
  8. Necessary fuses and circuit breakers.
  9. All wiring harnesses including detector harnesses. Loop detector harness connector shall be MS-3106B018-IS fully wired terminals I and J which shall go to separate

isolated terminals. One loop harness shall be provided for each of the phases (i.e. 01 - 08).

10. **Duplex power receptacle.** A 120 VAC 20 amp, NEMA 5-20R GFI convenience outlet shall be mounted in each cabinet for energizing equipment or tools. The outlet shall be fuse protected.
  11. **Radio interference filter.** Each control cabinet shall be equipped with a single radio interference suppressor of sufficient ampere rating to handle the load requirements. The RIS shall be installed at the input power point. It shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50DB over a frequency range of from 200KHZ to 75MHZ, when used in connection with normal installations. The radio interference suppressor shall be hermetically sealed in a substantial metal case that shall be filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two No. 8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall not be rated less than 35 amperes. The RIS shall be designed for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and shall meet the standards of UL and Radio Manufacturer's Association.
  12. **Cabinet grounding.** In all controller cabinets and auxiliary cabinets, the AC common, the logic ground, and the chassis ground shall be isolated from each other the same as detailed by NEMA Standard.
  13. **Suppressors.** Each 120 VAC circuit that serves as inductive device, such as a pan motor or a mechanical relay, shall have a suppressor to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.
- (4) All conductors in the cabinet shall be number 22 AWG or larger, with a minimum of 19 strands, and conforming to military specifications, Mil-W-16878D, Type B or D, vinyl nylon jacket, 600 volt, 105 degree C. All cabinets shall be factory wired.
  - (5) The cabinet shall provide weather protection and forced ventilation, air filters and heaters, with adjustable thermostat switches, and comply with the environmental and operating standards outlined in NEMA Specification TSI-1-1976. The cabinet shall provide reasonable vandalism protection. Provide access doors that have latches and a Corbin lock, dust cap, and key change IR6380. The small door shall be provided with standard police locks. The heater supplied shall have adjustable thermostat setting which varies from 0 degrees to 40 degrees Celsius.
  - (6) **Forced Ventilation.** Ventilate the controller cabinet containing solid-state equipment by means of a 120 VAC, 60HZ, tube axiac compact type fan. The fans free delivery airflow shall be greater than 2.83 cubic meter per minute. The magnetic field of fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp or have bearing failure within a 7 year duty



cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The thermostat's turn on setting shall be adjustable from 32 to 49 degrees Celsius. The fan shall run until the cabinet temperature decrease to approximately 17 degrees C. below the turn on temperature setting. The fan shall be fused.

- (7) Provide metal shelves to support the controller and external equipment. The controller shall be located on the top shelf and not less than 965 mm above the bottom of the cabinet. There shall be a minimum of 250 mm vertical height for detector units.
- (8) Locate buss and flash transfer relays, flashers, load switches, circuit breakers, and interference filters on a standard panel consistent with the intersection plan. Design shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.
- (9) Prime all inside and outside surfaces of the cabinet inside and outside surfaces with phosphate treatment and primer. After priming, give all exterior surfaces a minimum of 2 coats of rust resistant silver grey enamel; interior surfaces shall be furnished with rust resistant high gloss white enamel.
- (10) Neatly fold and cap any cables, wires or circuits that are not being used. These wires shall be neatly tied and stowed away in or on the terminal facilities.
- (11) Terminal facilities arrangement shall be in a fashion so that trouble shooting of load bay or behind the load bay can be accomplished with simple tools. This means that the load bay will be hinged so that it can be dropped down for ease of maintenance. There will be sufficient slack in the load bay wiring to allow for dropping the load bay.
- (12) Protect all control cables, i.e., detector harnesses, controller harnesses, harnesses which connect manual/vehicle detector switches, by a nylon jacket or provide equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.
- (13) If any branch circuit wiring or control wiring does not conform to the wire specifications, the supplier will be considered as not meeting the specifications and proper corrective action will be exercised against the supplier.
- (14) Provide a 4 input PED isolation circuit to isolate controller logic ground from the field wiring. Outputs from the PED isolator shall be connected to phases 2,4,6,8.

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

- (1) Load switches shall meet the requirements of NEMA TSI-Part 5 for three circuit load switches.
- (2) Each load switch shall contain three individually replaceable, molded case, solid state relay modules. Each relay module shall utilize optical isolation between the control and

the load circuits. The module shall have the functions and terminal assignments as specified in NEMA TSI-Part 5.

- (3) Each panel of load switches shall either be rack mounted or shall have a switch support bracket extending across the entire length of the switch panel.
- (4) The load bay arrangement from left to right in the cabinet shall be as described below:
  1. Vehicular Phasing shall be groups first - 01, 02, 03, 04, 05, 06, 07, 08.
  2. Pedestrian Phasing shall be followed second - 02, 04, 06, 08.
  3. Any other special phasing shall be grouped last.

## **H Equipment List and Drawings**

- (1) Submit detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet to the owner or their representative for approval. Two sets of cabinet wiring diagrams shall be contained in a heavy duty clear plastic envelope mounted on the inside of the front door.
- (2) At the time of delivery, furnish one set of instruction manuals and an itemized price list for each type of equipment, their subassemblies, and their replacement parts. The instruction book shall include the following information: a) Table of Contents, b) operating procedure, c) step-by-step maintenance and troubleshooting information for the entire assembly, d) circuit wiring diagrams, e) pictorial diagrams of parts locations, f) parts numbers, and g) theory of operation. The instructional manuals shall include itemized parts lists. The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC's, diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

## **I Supplier Warranty**

- (1) The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description. The following documents shall also be provided.
  1. A supplier's warranty statement that stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.
  2. Operations manuals.
  3. Maintenance manuals.
  4. Schematic diagrams.
  5. Component and equipment locations within the cabinet.
- (2) If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the owner or their representative will then return the spare component to the supplier.

## **J Preemption**

### **J.1 General**

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

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

- (1) Preempt Registration. The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.
- (2) Preempt Delay. As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum.
- (3) As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervals will time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.
- (4) Entry Clearance Phase(s) Select. Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.
- (5) Dwell Sequence. After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omissible by setting the timer to zero.
- (6) Exit Sequence. After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

## **K Time Base Coordination**

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

## **L Loop Detector Amplifiers**

- (1) Provide a 16 Channel Detector Rack and Power Supply compatible with microwave detector units.

## **M Controller Operation**

- (1) Consistent with customary trade practices, the manufacturer shall furnish a warranty for all electrical or mechanical equipment described herein. The contractor shall turn such warranty over to the owner for potential dealing with the guarantor.
- (2) If the contractor is the guarantor, he specifically waives the requirements of Section 289.14(2), Wisconsin Statutes, and agrees as a condition of the contract that the owner may maintain an action against him at any time during the warranty period for recovery of damages which the state may have sustained by reason of the failure of the contractor to comply with the provisions of the warranty provided to the owner.
- (3) During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.
- (4) If a malfunction in the controller unit or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit, module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction and the repair and/or replacement of any device within the warranty period shall be the responsibility

of the supplier. After the supplier has repaired and returned the equipment, the county shall return the spare component to the supplier.

**N Measurement**

- (1) The department will measure Traffic Signal Controller and Cabinet, Fully Actuated 8-Phase, as each unit of work, acceptably completed.

**O Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.41	Traffic Signal Controller and Cabinet, Fully Actuated 8-Phase	Each

- (2) Payment is full compensation for furnishing and installing the signal controller and conflict monitor together with cabinet, switches for flashing operation, and fittings as are necessary to assure that the controller will perform the said functions.

**48. Parking Lot Bollard, Item SPV.0060.42.**

**A Description**

This special provision describes providing and installing parking lot bollards as shown on the plans and as hereinafter provided.

**B Materials**

Furnish materials conforming to the following:

- Round steel pipe of the size shown in the plans, conforming to standard spec 506.2.3.6.
- Concrete Masonry Grade A, conforming to standard spec 501.
- Epoxy paint system conforming to standard spec 517.

**C Construction**

Embed steel pipe in augered hole backfilled with concrete as shown in the plans. Set pipe plumb vertical. Brace pipe if necessary during and after concrete placement, to maintain plumb vertical orientation until concrete attains sufficient strength. Fill pipe with concrete and finish concrete with a smooth rounded top at the top of the pipe as shown in the plans.

Paint with finished top coat colors and pattern as shown in the plans. Paint may be applied in the field.

**D Measurement**

The department will measure Parking Lot Bollard 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.0060.42	Parking Lot Bollard	Each

Payment is full compensation for furnishing, installing and painting the parking lot bollard.

## **49. Audible-Tactile Pedestrian Signal System, Item SPV.0060.43.**

### **A Description**

Furnish and install an Audible-Tactile Pedestrian Signal System (APS). The system shall consist of all electronic control equipment, mounting hardware, push buttons and signs, which are designed to provide both a push button with a raised vibrating tactile arrow on the button, along with a variety of audible sounds for different pedestrian signal functions.

### **B Materials**

#### **B.1 General Requirements**

Ensure APS complies with US Access Board's "Draft Guidelines for Accessible Public Rights of Way (PROWAG) Section R306. In addition, ensure that the APS complies with and provides operation consistent with requirements of Sections 4E.09 through 4E.13 of the 2009 Edition of the Federal Highway Administration publication Manual on Uniform Traffic Control Devices.

- (1) The System shall meet the functionality requirements of MUTCD 2009 – 4E.
- (2) The System shall meet NEMA TS 2 Section 2.1 Temperature and Humidity requirements.
- (3) The System shall meet NEMA TS 2 Section 2.1 Transient Voltage Protection requirements.
- (4) The System shall meet NEMA TS 2 Section 2.1 Mechanical Shock and Vibration requirements.
- (5) The System shall meet IEC 61000-4-4, IEC 61000-4-5 Transient Suppression requirements.
- (6) The System shall meet FCC Title 47, Part 15, Class A Electronic Noise requirements.
- (7) The Push Button Station (PBS) Enclosure shall meet NEMA 250 – Type 4X Enclosure requirements.
- (8) The Central Control Unit (CCU) and Ped Station Monitor (PSM) Enclosures shall meet NEMA 250 – Type 1 requirements.
- (9) The System shall meet NEMA TS 4 – Electrical Reliability requirements (applicable portions of Section 8).
- (10) The firmware and voice messages shall be upgradeable via a PC standard USB port at the PBS. There shall be no requirement for the IC chips or module hardware to be removed or exchanged in order to complete a firmware update.

## B.2 Functional Requirements

Supply an APS (pushbutton station) that includes a pedestrian sign, a pushbutton, vibrotactile arrow, an ambient noise sensing microphone, and an audible speaker contained in one unit and with the following features:

- (1) All audible sounds shall emanate from the PBS.
- (2) Pushbutton locator tone with duration of 0.15 seconds or less, repeating at 1-second intervals. The pushbutton locator tones must deactivate when the traffic control signal is operating in a flashing mode. The locator tones must be intensity responsive to ambient sound and be audible (a maximum of 5 dBA louder than ambient sound) up to 6 to 12 feet from the pushbutton or to the building line whichever is less.
- (3) Optional Speech walk message for the WALKING PERSON (symbolizing WALK) indication.
- (4) Optional Speech pushbutton information message.
- (5) Audible tone walk indications – consisting of ticks repeating at 8 to 10 times per second at multiple frequencies with a dominant component at  $880\text{ Hz} \pm 20\%$ . It must provide an audible walk indication during the walk interval only.
- (6) The System shall provide two language capabilities, selectable by user (as a custom feature).
- (7) The System shall provide Emergency preemption message in conjunction with a preemption system (selectable feature).
- (8) LOCATE tone and “Walk”, “Pedestrian Clearance” audible feature must have independent settable minimum and maximum volume limits.
- (9) The System shall be able to be set to vibrate a tactile arrow button during the WALK interval following a button push and/or every time the walk comes up.
- (10) The System shall have the field-selectable function known as “Locating Tone”. This means that during the FLASHING DON’T WALK and the DON’T WALK intervals, the system shall provide a locating tone that emanates from the Pedestrian Push Button Station. The system shall provide at least three different sounds to choose from.
- (11) The System shall have the field selectable function known as “Extended Push Activation”. This means that the audible WALK message will only be activated and sound during the WALK interval if the button is depressed for a field selectable minimum period of time (from 0 to 6 seconds). Also, for the following walk phase, the volumes have a separately settable minimum and maximum volume level.
- (12) The System shall have the field selectable function known as “Informational Message”. This means that a custom message giving the location of the street to cross and the intersection (or other information) will be vocalized only when the button is depressed for a minimum field selectable time.
- (13) The System shall provide a “Wait” message that plays once the button is activated until the walk cycle goes into effect. This message must have the field selectable option of OFF or playing every 4, 6, 8 or 10 seconds.
- (14) The System shall have standard “Travel Direction” options that can be selected at the time of installation.

- (15) The System shall have at least five field selectable walk sound options including a cuckoo, a chirp, a rapid tick or custom voice message.
- (16) The System shall provide 3 Ped-clearance sound choices including audible countdown (field selectable). The audible countdown shall represent the time remaining during the pedestrian clearance interval. Timing is automatically adjusted to CLEARANCE INTERVAL timing.
- (17) All sounds for all PBS's must be synchronized.
- (18) The system shall have an ambient sensing microphone located in the pedestrian station in a non-visible, environmentally protected housing.
- (19) Automatic volume adjustment in response to ambient traffic sound level provided up to a maximum volume of 100 dBA.
- (20) The pushbutton must be ADA compliant and activate both the walk interval and accessible pedestrian signal.
- (21) Actuation indicator-tone and light.
- (22) Pushbutton station and Central Control Unit shall be rated for the following temperature range: -34C to +74C (-29F to +165F).

### **B.3 Material Specification**

- (1) General Materials
  - Vibrating tactile arrow with high visual contrast, located on the actual push button, not separate on the push button unit.
  - PUSH BUTTON: ADA compliant with raised arrow on the button plunger. The arrow on the PBS shall be able to be changed to one of four directions.
  - PUSH BUTTON: Uses Piezo switch technology rated to greater than 20 million operations.
  - CONFLICT WALK MONITOR: Circuitry shall have a separate microcontroller that independently monitors the main microcontroller outputs and "Walk Mode" for conflict condition, the PBS is reset in case of a conflict detection
- (2) Controller
  - Supply a central control unit (CCU) for the pushbutton stations that resides in the Traffic Signal Controller Cabinet.
  - Provide a CCU capable of controlling up to 4 pedestrian phases and 16 Pushbutton stations.
  - Ensure that all inputs and outputs on the CCU have Transient Voltage Protection.
  - Shall be provided with an interface connection board.
  - Shall have Ethernet access to PBS's through the CCU to be able to change the settings of PBS as well as monitor the self-test Events of the PBS's and report back to the Central Control Station.
  - Shall have internal memory to store a few hundred events with a date-time stamp for each event.
  - Shall have an internal real-time clock capable of updating and synchronizing its time with an NTP server.
  - Shall provide user settable information to the user including location, contact information and system name via SNMP protocol.



- Shall have the ability to send system Trap messages for any event logged in the system health log to up to three separate IP addresses using SNMP protocol.
- Shall provide a user settable calendar function allowing four separate configuration profiles to be configured to become active at different times of the day on a daily, weekly, or holiday basis.

#### **B.4 Supplier Warranty**

The system shall be supported by a three-year supplier warranty.

#### **C Construction**

Assemble Audible-Tactile Pedestrian Signal System (APS) per the manufacturer's recommendations.

#### **D Measurement**

The department will measure Audible-Tactile Pedestrian Signal System, by each individual unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.43	Audible-Tactile Pedestrian Signal System	Each

Payment is full compensation for furnishing and installing the Audible-Tactile Pedestrian Signal System (APS) including all necessary mounting hardware and appurtenances.

### **50. Utility Line Openings Item SPV.0060.51.**

#### **A Description**

Perform the necessary excavation to uncover utilities for the purpose of determining elevation and potential conflicts with proposed underground facilities, as shown on the plans or as directed by the Waupun Utilities or its delegated representative.

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

#### **C Construction**

Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.

Perform the utility line openings (ULO) as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Prior to ordering structures, perform ULO's. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening is called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Obtain prior approval for all utility line openings from the Waupun Utilities or its delegated representative. Notify the utility engineers or their agents of this work a minimum of three days prior to the work so they may be present when the work is completed. Verify the need for performing ULO's as shown on the plans, since some of the utilities may have been or will be relocated prior to the start of construction.

#### **D Measurement**

The department will measure Utility Line Openings as each ULO, 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.0060.51	Utility Line Opening (ULO)	Each

Payment is full compensation for the excavation required to expose the utility line; backfilling with existing material removed from the excavation; compacting the backfill material; restoring the site; and for cleanup.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings shall not be considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

### **51. Sanitary Manhole Special, Item SPV.0060.52; Sanitary Drop Manhole Special, Item SPV.0060.53.**

#### **A Description**

Furnish and install sanitary sewer manholes as shown in the plans and hereinafter provided

#### **B Materials**

##### **B.1 Precast Manhole Sections**

Precast concrete manhole sections shall have an inside diameter of 48 inches (Type 1). Clear opening shall match dimensions of castings. The cone section shall be the eccentric type with a minimum clear opening of 24 inches. Clear opening shall match dimensions of castings. Compressive strength of the concrete shall be 4000 psi and shall conform to ASTM C478. Wall thicknesses of manholes will vary with diameter in conformance with ASTM C76, Class B concrete tongue and groove joint pipe. Steel reinforcement (sq. in./lin. ft.) shall not be less than 0.0025 times the inside diameter of the manhole in inches.

## **B.2 Steps**

Steps shall be constructed of a 1/2 inch diameter, Grade 60 reinforcing steel bar conforming to ASTM A615 completely encased in polypropylene conforming to ASTM D4101 to obtain a minimum thickness of 1-1/8 inch and minimum width of 12 inches. They shall be securely and permanently set in the manhole wall. Steps shall be set at 16 inches on center and have a 5-3/4 inch projection from the wall. Steps shall conform to ASTM F783.

## **B.3 Manhole Joint Materials**

Sanitary sewer manhole joint materials shall be butyl rubber gasket material (E-Z Stik or approved equal). No mortar shall be used between these structures for adjustment; however, mortar shall be used to provide a smooth trowel type finish to the interior surface of the manhole. The contractor shall also install concrete mortar between the pipe and the manhole pipe cut-out to the satisfaction of the Waupun Utilities or its delegated representative so as to fill any gaps and finish the interior flowline of the manhole.

Butyl rubber gaskets shall be pre-formed, high adhesion material, packaged ready for use between protective paper strips, conforming to Federal Spec SS-S-210A, Rope Form; by Press Seal Gasket Corporation or equal. A butyl rubber gasket strip shall be installed along the top and bottom section of the tongue and groove joint and shall extend the full circumference of the manhole section joint.

## **B.4 Waterstop Seals**

Waterstop seals shall be flexible, watertight, rubber wedge ring or O-ring compression seals for pipe entrance holes. Wedge ring type shall be Press-Wedge II by Press-Seal Gasket Corporation, PSX Boot by Press Seal Gasket Corporation, pipe to manhole connector by KOR-N-SEAL or equal. O-ring type shall have cast iron compression flange, Res-Seal by Scales Manufacturing Corporation or equal.

## **B.5 Adjustment Rings**

Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C478. Rings shall be either 2 inches or 4 inches in thickness. The manholes shall be built so that a minimum of two 2 inch rings are installed for adjustment. A maximum of 12 inches of adjustment will be allowed, but the top two rings shall be of 2 inches thickness.

Precompressed butyl gasket, 3/8 inch x 3-1/2 inch shall be used between the manhole, manhole casting, and all adjustment rings. Butyl material shall be E-Z stik or approved equal. Mortar shall not be used between these structures for adjustment, however mortar shall be used to provide a smooth trowel type finish to the interior surface of the joints between the manhole, adjusting rings and casting.

## **B.6 Tracer Wire**

Tracer wire shall be No. 12 gauge, ASTM C578, Type IV, solid insulated copper wire rated for wet conditions. Tracer wire for sewer utilities applications shall have green

colored insulator. Tracer wire shall be installed through the manhole for access purposes as shown in the detail within the contract drawings and shall include all necessary materials.

## **B.7 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its delegated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

## **C Construction**

### **C.1 General**

All lift holes on sanitary sewer manholes shall be sealed watertight.

Invert channels shall be smooth and accurately shaped and according to the contract drawings.

No horizontal surfaces shall be left on the inside of the manhole. The bench shall be shaped to drain into the floor channel.

All sanitary sewer pipes entering or leaving the structure shall be fitted with rubber waterstop seals where they pass through the manhole wall.

The contractor shall verify size, invert elevation, and location of all pipes in existing manholes and inform Waupun Utilities or its delegated representative of any discrepancies with the contract drawings before the replacement manhole is constructed.

### **C.2 Drop Manhole Connections**

Sanitary sewer manhole drop connections shall be outside drops constructed according to detail drawings. The drop assembly shall consist of a tee or wye connecting to the inflowing sewer, a drop pipe of the same diameter as the inflowing sewer, and a 90-degree bend at the bottom, all encased in concrete.

### **C.3 Tracer Wire**

Tracer wire shall be installed along the side of the manhole structure as well as through the manhole wall (for access purposes) as shown in the detail within the contract drawings or as directed by Waupun Utilities. At manholes, the wire transition from outside to inside the manhole shall be watertight.

### **C.4 Cleaning**

The contractor is responsible to see that manholes and sewer lines are free of dirt, gravel and debris, from the construction operations, at all times. Waupun Utilities will notify the contractor of any debris identified, and if the contractor fails to properly clean said debris, Waupun Utilities will charge the contractor for the cleaning of any manholes and sewer lines on this project during the progress of construction and until final acceptance of the improvements.

Upon completion of the work, the contractor shall thoroughly clean out all manholes and pipe along the entire length of the project before leaving the construction site.

### **C.5 Testing**

Conduct vacuum testing on manholes using vacuum testing equipment acceptable to Waupun Utilities or its delegated representative. Isolate manhole to be tested by plugging inlet and outlet pipes with inflatable stopper or other suitable test plugs. Securely brace plugs to avoid plugs being drawn into manhole. Plug lift holes with a non-shrink grout. Place vacuum test equipment inside of top cone section and conduct vacuum test according to manufacturer's recommendations. Operate vacuum pump until 10 inches of mercury is obtained. Shut off vacuum pump and measure time for vacuum to drop from 10 to 9 inches of mercury. Manhole test is acceptable if the time exceeds the values in the table below:

Depth/Feet	Test Time/Seconds
8	20
10	25
12	30
14	35
16	40
18	45
20	50
22	55
24	59
26	64
28	69
30	74

If the test fails, the contractor shall repair or seal manhole using non-shrink grout or other materials that are approved. Retest until an acceptable test is obtained. Test may be conducted before or after backfilling. Waupun Utilities or its delegated representative shall be present for this testing.

### **D Measurement**

The department will measure Sanitary Manhole Special and Sanitary Drop Manhole Special as each individual manhole, approved by Waupun Utilities, 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.0060.52	Sanitary Manhole Special	Each
SPV.0060.53	Sanitary Drop Manhole Special	Each

Payment is full compensation for providing all labor and materials, including precast concrete manhole sections, base, cone, adjustment rings, steps, waterstop seals, couplings,

and other required fittings; for outside manhole drop connections, pipe, and concrete encasement; for furnishing all tracer wire installation; for furnishing all excavating, except rock excavation; for forming foundation; for replacing unstable material in the trench bottom; for sheeting and shoring; for dewatering; for constructing the manhole; for backfilling and compacting; for providing granular backfill material, including bedding material; for removing sheeting and shoring; for testing; for cleaning out the manhole and adjoining pipes and restoring the worksite.

## **52. Sanitary Manhole Covers Type J-Special, Item SPV.0060.54.**

### **A Description**

Furnish and install sanitary manhole covers, including frames, sealed lids and internal/external chimney seals.

### **B Materials**

#### **B.1 Frame and Cover**

The frame and cover shall be Neenah R-1550, Type “B” solid lid with self-sealing gasket, concealed pick holes, non-rocking design, and the word “SANITARY” stamped on the cover.

#### **B.2 Internal/External Chimney Seal**

The sanitary sewer manhole chimney seal shall be an internal/external rubber sleeve manufactured by Adaptor, Inc. of West Allis, Wisconsin and shall extend from the casting, down over the adjusting rings, to the manhole cone.

The sleeve and extension shall have a minimum thickness of 3/16 inches and shall be extruded or molded from a high grade rubber compound conforming to the applicable requirements of ASTM C923, with a minimum 1,500 psi tensile strength, maximum 18 percent compression set and hardness (durometer) of 48±5. The sleeve shall be doubled pleated with a minimum unexpanded vertical height of 8 inches and be capable of vertical expansion of not less than 2 inches when installed.

The bands used for compressing the sleeve and extension against the manhole shall be fabricated from 16 gauge stainless steel conforming to ASTM A240 Type 304. All screws, bolts or nuts used on this band shall be stainless steel conforming to ASTM F-923 and 594, Type 304.

#### **B.3 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its delegated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

### **C Construction**

Each casting shall be set on the sanitary manhole structure in such a way so that the top of the casting is parallel to the new pavement. This is especially important on steep grades. In areas of new concrete pavement, the top surface of the manhole casting shall be set

1/16 inch to 1/8 inch below the finished pavement, and in areas of new asphaltic pavement, the top surface of the manhole casting shall be set 1/8 inch to 1/4 inch below the finished pavement.

Precompressed butyl gasket (E-Z Stik or approved equal) shall be used between the manhole, manhole casting, and all adjustment rings. Mortar shall not be used between these structures for adjustment, however mortar shall be used to provide a smooth trowel type finish to the interior surface of the joints between the manhole, adjusting rings and casting.

#### **D Measurement**

The department will measure Sanitary Manhole Cover, Type J-Special, as each individual manhole frame and cover, 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.0060.54	Sanitary Manhole Cover, Type J-Special	Each

Payment is full compensation for providing all labor and materials, including adjustment rings, frame and cover, chimney seal, and other required fittings; for properly installing said frame and cover on each sanitary manhole including any related cleanup or related work.

### **53. Sanitary Wye 8-Inch Main Special, Item SPV.0060.55; 10-Inch Main Special, Item SPV.0060.56.**

#### **A Description**

Furnish and install sanitary sewer mainline wye fittings for lateral connections.

#### **B Materials**

##### **B.1 Pipe Connection Fittings**

Provide elastomeric seals (rubber gaskets) conforming to ASTM F477 (Mission, Clow, Fernco, coupling or equal) according to State and/or local plumbing code requirements.

##### **B.2 Wye Fittings**

Sanitary sewer pipe and fittings shall be Type PSM SDR-35 and meet the requirements of ASTM D3034.

##### **B.3 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its delegated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

## **C Construction**

### **C.1 Sanitary Tee and Wye Fittings**

Install factory wye or tee fittings in the new sanitary sewer mainline pipe to accommodate all existing active sanitary sewer building laterals. Approximate locations of existing laterals are shown on the contract drawings. Verify that existing sanitary lateral pipes are active by dye testing or other approved methods before installing a new wye fitting in the mainline pipe. The cost of this verification is considered incidental to the sanitary sewer construction.

The pipe size of the various existing sanitary building laterals is unknown at this time. The bid item for sanitary wye includes a differentiation for mainline pipe size only. The contractor shall have a sufficient amount of both 4" and 6" nominal diameter branch wye fittings on hand to make equivalent size replacements from the main to a point near the right-of-way line as directed by Waupun Utilities or its delegated representative. The wye fittings will be paid according to the mainline size with no differentiation for either a 4" or 6" nominal diameter branch size.

## **D Measurement**

The department will measure Sanitary Wye (X-Inch) Main Special by the individual connection or fitting, approved by Waupun Utilities, and 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.0060.55	Sanitary Wye 8-Inch Main	Each
SPV.0060.56	Sanitary Wye 10-Inch Main	Each

Payment is full compensation for providing all labor and materials, including flexible couplings and bands, wye fittings, and other required connection fittings; for furnishing all excavating, except rock excavation; for sealing joints and making connections to new pipe; for backfilling and compacting; for providing granular backfill material, including bedding material; for cleaning out pipes and restoring the worksite.

- 54. Water Valve and Box 6-Inch Special, Item SPV.0060.57; Water Valve and Box 8-Inch Special, Item SPV.0060.58; Water Valve and Box 10-Inch Special, Item SPV.0060.59; Live Tapping Water Valve and Box 4-Inch Special, Item SPV.0060.60; Live Tapping Water Valve and Box 8-Inch Special, Item SPV.0060.61; Fire Hydrant Special, Item SPV.0060.62; Tees 8"x4"x8" Special, Item SPV.0060.63; Tees 8"x8"x8" Special, Item SPV.0060.64; Tees 10"x6"x10" Special, Item SPV.0060.65; Tees 10"x8"x10" Special, Item SPV.0060.66; Crosses 10"x8" Special, Item SPV.0060.67; Bend 45-Degree 8-Inch Special, Item SPV.0060.68; Bend 90-Degree 8-Inch Special, Item SPV.0060.69; Bend 22.5-Degree 10-Inch Special, Item SPV.0060.70; Bend 45-Degree 10-Inch Special,**



**Item SPV.0060.71; Reducer 8"x4" Special, Item SPV.0060.72; Reducer 8"x6" Special, Item SPV.0060.73; Plug 8-Inch Special, Item SPV.0060.74; Plug 10-Inch Special, Item SPV.0060.75; Corporation, Curb Stop and Box (Set) Special, Item SPV.0060.76; Temporary Water Service Special, Item SPV.0060.77.**

#### **A Description**

Furnish and install water appurtenances as shown in the plans and as hereinafter provided.

#### **B Materials**

##### **B.1 Water Valve and Box**

Valves shall be American Flow Series 2500 or Mueller Series 2360 Resilient Wedge Gate Valves with O-ring packing, resilient-seated, 2" operating nut (LEFT CLOSE), and mechanical joints with rubber gaskets conforming to ANSI/AWWA C509/A25.09 or AWWA C515 unless specified otherwise.

Live Tapping Valves shall be an Advanced Valve Technologies EZ2 Valve System and shall include all labor, equipment, and materials to install a new watertight valve into the live existing water main pipe without any shutdown or disruption of service to the existing water main pipe. The operating nut shall be 2" (LEFT CLOSE).

Valve box shall be Mueller H-10357 or Tyler Union Model #6860 screw type box assembly and shall consist of a top section, bottom section, base, drop lid, and necessary extensions and shall all be cast iron. The word "WATER" shall be cast on the lid. All 4 inch or larger water valves shall be installed with a Valve Box Adaptor as manufactured by Adaptor Inc., or equal.

##### **B.2 Fire Hydrant**

Fire hydrants shall be Waterous Pacer, Model WB67 meeting the following minimum requirements:

- Hydrants shall be dry barrel fire hydrant, dry top design, conforming to ANSI/AWWA C502/A25.02 with mechanical joint base connection.
- Hydrants shall be manufacturer's premium model, Underwriters Laboratories, Inc. (UL) and Factory Mutual Research (FM) listed fire hydrant.
- Hydrants shall be traffic design with protective groundline coupling (traffic flange) which assures reliable fracture at traffic impact. This coupling shall also allow hydrant rotation to any position after hydrant installation.
- Hydrant to be furnished as standard 3-way style with two 2-1/2 inch and one 4-1/2 inch standard hose nozzles (chains on nozzle caps are required). Hydrants shall have 5-1/4 inch main valve openings.
- Hydrant operating nut shall be standard pentagon (5 sided). Operating assembly shall include, as a minimum, weather shield, thrust washer, revolving nut with seal for dry top design and lifetime lubrication.
- Hydrant base shall contain a barrel drain operated by hydrant activator.

- All hydrants shall be connected to the main with a 6-inch diameter (minimum) water main pipe conforming to the requirements of this section.
- Upper barrel section shall be a minimum 16 inches.
- Thread shall be 8 threads per inch, 4.937-inch O.D.
- Operating nut shall make weather shield, operating nut will be a standard 1-1/2 inch pentagon, CCW open
- Mechanical joint connections.
- Painted red.
- Maintain electrical continuity.
- Resilient wedge main seat.
- Bronze to bronze fittings.
- Tapped drain port opening (no plugs unless specified on contract drawings).

It shall be the contractor's responsibility to determine the depth of bury for each hydrant to be installed. The information shown on the plan is approximate and may vary due to rock elevation and/or other conflicts from the actual field conditions at the time of installation. Any hydrant adjustments as determined by the Waupun Utilities or its designated representative shall be incidental to the construction of the Fire Hydrant. All fire hydrants shall include a tracer wire terminal box (incidental to fire hydrant). All tracer wire terminal boxes shall be Bingham and Taylor, 2-1/2 inch diameter shaft, Model P200NFG. Lids shall be marked "Water" for water utilities. Eighteen inches of extra wire shall be provided at all terminations.

### **B.3 Water Main Fittings**

Full body fittings shall conform to ANSI/AWWA C110/ A21.10 and ANSI/AWWA C111/A21.11 with bituminous coating. Compact fittings shall conform to ANSI/AWWA C153/A21.53 and ANSI/AWWA C111/21.11 with bituminous coating. All fittings shall be provided with cement mortar lining conforming to ANSI/AWWA C104/A21.4. Only ductile iron fittings manufactured in North America shall be allowed. No PVC fittings will be allowed.

Polyethylene encasement shall be polyethylene film tube conforming to ANSI/AWWA C105/A21.5. Polyethylene film sheet conforming to ANSI/AWWA C105/A21.5 may be used at odd-shaped appurtenances where the use of tube is not practical.

All water main fittings shall be connected with fluorocarbon coated T-head bolts ("Core Blue" bolts or approved equal) meeting the requirements of ANSI/AWWA C111/A21.11-0 and each fitting shall be fully encased and sealed with polyethylene film.

### **B.4 Corporation, Curb Stop and Curb Box**

The pipe size of the various existing building water services is unknown at this time. All water services, unless noted otherwise on the plans, shall be 1-inch nominal diameter (minimum size) and shall be larger if required to match the size of the existing service pipe. The contractor shall have a sufficient amount of the various size fittings on hand to make equivalent size replacements.

Service line connection to PVC mainline pipe shall be made using a Mueller compression fitting (outlet) and a Mueller "CC" thread (inlet) saddle type connection or approved equal. Service connections shall be rated for 250 psi, have a conductive compression connection, have a coated ductile iron body, 304 stainless steel strap, nitrile O-ring gasket, and meet all applicable parts of ANSI/AWWA C800. A simple threaded connection shall not be acceptable.

Curb stops shall be Mueller Mark II Oriseal with threaded connections. Curb stops shall be rated for 250 psi, have a conductive compression connection, have a Minneapolis top thread, and conform to AWWA C800.

Curb stop box shall be Mueller, Minneapolis pattern, 7 foot bury, 1-1/4 inch upper pentagon nut opening without stationary rod.

All curb stops shall include tracer wire and a tracer wire terminal box installed next to the curb stop box flush with the finished ground elevation (incidental to curb stop). All tracer wire terminal boxes shall be Bingham and Taylor, 2-1/2 inch diameter shaft, Model P200NFG. Lids shall be marked "Water" for water utilities. Eighteen inches of extra wire shall be provided at all terminations.

## **B.5 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its designated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

## **B.6 Temporary Water Service**

Temporary Water Service bid item shall include all labor, equipment, and materials required to install, maintain, protect, and remove a temporary supply of water (because of water main break or replacement) to any building(s) (residential or commercial) within or adjacent to the project as directed by Waupun Utilities. All Temporary Water Services shall meet the requirements of NR 810.17 and shall be of materials approved according to NR 811.69 or as approved by Waupun Utilities. The contractor shall coordinate with Waupun Utilities' staff regarding the placement of the temporary water service, the connection to the existing water main, the connection to the existing building, and the protection of the temporary water service at driveway or roadway crossings. Note that the length of piping, quantity of fittings, types of connections to the existing main or buildings, etc. may vary with each temporary water service.

## **C Construction**

### **C.1 Water Main and Service Appurtenances**

All joints, taps, valves, tees, crosses, bends, reducers and other fittings must be completely wrapped or covered and properly secured with 8 mil thick polyethylene.

The connecting tees for hydrants shall be anchoring tees and all fittings must also be completely wrapped or covered and properly secured with 8 mil polyethylene. The

polyethylene film shall be fitted to the contour of the pipe or fitting creating a snug, but not tight, encasement. Sufficient slack shall be provided in contouring to prevent stretching the polyethylene where it bridges irregular surfaces, such as joints or fittings, and to prevent damage to the polyethylene caused by backfilling operations. Overlaps and ends shall be secured with adhesive tape or plastic tie straps. For installations below the water table, circumferential wraps of tape shall be placed at two foot intervals along the barrel of the pipe.

Block all bends and fittings thoroughly with concrete as shown in the special details or install with approved anchoring fittings. Concrete buttresses shall be poured against firm, undisturbed ground. When concrete buttresses cannot be placed against undisturbed ground they shall be placed against fill material of composition conforming to the requirements of ASTM C12 or ASTM D2321 as applicable for rigid and flexible pipe respectively, compacted to 95 percent of the modified proctor density for the material. The buttresses shall be constructed to the minimum dimensions as shown on the contract drawings or as required by the Waupun Utilities or its designated representative. All buttresses shall be formed to keep the joints free of concrete. Solid precast concrete blocks may be used in lieu of the poured buttresses when approved by the Waupun Utilities or its designated representative. When concrete blocks are used, they shall be stepped-out to match the minimum dimensions required for poured concrete buttresses. No wooden blocking may be used for thrust buttressing.

The Live Tapping Valves (at the Beaver Dam Street intersection) shall be installed per the manufacturer's recommendations and prior to any water work along the project unless approved otherwise by Waupun Utilities.

A valve box and valve box adaptor shall be provided for every valve unless otherwise specified. The valve box shall not transmit shock or stress to the valve and shall be centered and plumb over the wrench nut of the valve.

All fittings (tee, cross, bend, hydrant, etc.) shall be set on a concrete block that is centered and plumb under the fitting.

## **C.2 Corporation, Curb Stop and Box**

All water services, unless noted otherwise on the plans, shall be 1-inch nominal diameter (minimum size and shall be larger if required to match the size of the existing service pipe) and shall use a corporation installed on the mainline with a tapping saddle and a curb stop and box positioned as shown on the plans or as directed by Waupun Utilities. The bid item for this work is not dependent upon the size of the water service. Any size service between 1-inch and 2-inch nominal diameter shall be at the same unit cost. The contractor shall be responsible for locating and verifying all active water services along the project and the cost of this verification is considered incidental to the water construction. Approximate locations of the existing water services are shown on the contract drawings.

If curb boxes are located within a driveway, sidewalk, or other paved area, the contractor shall install the curb box so that the top of the curb box is approximately 3 inches below

the final paved surface elevation. The concrete contractor shall then install a “4-inch standard adaptor” for a valve box (supplied by Waupun Utilities) centered on the water service curb box. The new casting shall be cast flush into the new pavement or concrete and shall not be connected in any way to the curb stop box. The coordination between the water pipe contractor and the concrete contractor shall be considered incidental to this work and the ultimate responsibility for the proper setting of this structure in the new concrete shall rest with the concrete contractor.

The contractor shall adjust all existing and proposed curb stops within the project limits to finished ground elevations. This work shall be considered incidental to the water construction.

### **C.3 Fire Hydrants**

Furnish and install fire hydrants at each hydrant branch to assure proper height as required. The contractor is responsible for setting the fire hydrant to match the elevation of the finished ground or pavement.

All hydrants shall stand plumb and shall have the pumper nozzle facing the curb. Drainage shall be provided 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 1 foot around the elbow.

The connecting tees for the hydrants shall be anchoring tees and all fittings for hydrant connections shall be anchoring fittings.

Set the finish elevation of the hydrants so the bolts of the break flange are a minimum of 2" and a maximum of 6" above finish ground elevation. Maintain this grade no matter the depth of the main. If extensions are required for hydrants they must be included in the bid, as no extra monies will be paid for adjustments or extensions to match the finish grade.

### **C.4 Temporary Water Service**

All Temporary Water Services shall meet the requirements of NR 810.17 and shall be installed to the satisfaction of Waupun Utilities. All Temporary Water Service piping shall be disinfected according to AWWA Standard C651-05.

It is anticipated that a Temporary Water Service will be required at the Waupun Dialysis Center located at 10 Beaver Dam Street to maintain water service when water utility installation work occurs within and near the Beaver Dam Street and Main Street intersection. The contractor shall coordinate with Waupun Utilities' staff regarding the placement of the temporary water service, the connection to the existing water main, the connection to the existing building, and the protection of the temporary water service at driveway or roadway crossings.

## **D Measurement**

The department will measure Water Valve and Box (Size) Special; Fire Hydrant Special; Tees (Size) Special; Cross (Size) Special; Bend (Size) Special; Reducer (Size) Special; Corporation, Curb Stop and Box (Set) Special; Plug (Size) Special; Live Tapping Water Valve and Box (Size) Special by each individual fitting and/or set, approved by Waupun Utilities, and 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.0060.57	Water Valve and Box 6-Inch Special	Each
SPV.0060.58	Water Valve and Box 8-Inch Special	Each
SPV.0060.59	Water Valve and Box 10-Inch Special	Each
SPV.0060.60	Live Tapping Water Valve and Box 4-Inch Special	Each
SPV.0060.61	Live Tapping Water Valve and Box 8-Inch Special	Each
SPV.0060.62	Fire Hydrant Special	
SPV.0060.63	Tee 8"x4"x8" Special	
SPV.0060.64	Tee 8"x8"x8" Special	Each
SPV.0060.65	Tee 10"x6"x10" Special	Each
SPV.0060.66	Tee 10"x8"x10" Special	Each
SPV.0060.67	Cross 10"x8" Special	Each
SPV.0060.68	Bend 45-Degree 8-Inch Special	Each
SPV.0060.69	Bend 90-Degree 8-Inch Special	Each
SPV.0060.70	Bend 22.5-Degree 10-Inch Special	Each
SPV.0060.71	Bend 45-Degree 10-Inch Special	Each
SPV.0060.72	Reducer 8"x4" Special	Each
SPV.0060.73	Reducer 8"x6" Special	Each
SPV.0060.74	Plug 8-inch Special	Each
SPV.0060.75	Plug 10-Inch Special	Each
SPV.0060.76	Corporation, Curb Stop and Box (Set) Special	Each
SPV.0060.77	Temporary Water Service Special	Each

Payment is full compensation for providing all labor and materials, including valves and valve boxes, fire hydrants, tees, crosses, bends, reducers, couplings, connection sleeves, tapping saddles, saddle outlets, corporations, curb stops and boxes, plugs, polyethylene encasement, insulation, thrust restraint, anchoring fittings and other required materials to provide a complete working system; for furnishing all excavating, except rock excavation; for forming foundation; for replacing unstable material in the trench bottom; for sheeting and shoring; for dewatering; for backfilling and compacting; for providing granular backfill material, including bedding material; for providing trench insulation where required; for removing sheeting and shoring; for testing and chlorination; for cleaning out pipes and structures; and restoring the worksite.

Payment for Water Valves and Boxes (Inch) Special and Live Tapping Water Valves and Boxes (Inch) Special also includes valve box adaptors, polyethylene encasement, and all other fittings to properly install each valve and box according to the specifications.

Payment for Fire Hydrants Special also includes reaction blocking or thrust restraint, drain bedding, polyethylene encasement, filter fabric and all hydrant extensions and appurtenances required to set hydrants to the established grade and according to the specifications.

Payment for Corporation, Curb Stop and Box (Set) Special also includes corporation, saddle, curb stop, curb box, polyethylene encasement, and all other fittings to properly install each unit according to the specifications.

## **55. Pipe Underdrain Wrapped 6-Inch and Aggregate, Item SPV.0090.01.**

### **A Description**

This special provision describes furnishing and placing wrapped pipe underdrain, and aggregate as shown on the plans and hereinafter provided. The work under this item shall be according to the pertinent requirements of the standard specifications for each component.

### **B Materials**

#### **B.1. Pipe**

Provide Pipe Underdrain Wrapped (6-Inch) conforming to standard spec 612.2.

#### **B.2 Aggregate**

Provide clean concrete aggregate graded according to Concrete Aggregate #1 as specified under standard spec 501.2.5.4.

### **C Construction**

Construct the underdrain system according to standard spec 612.3.1, 612.3.3, 612.3.5 and 645.3.4. The trench shall be lined with Geotextile Fabric Type DF, Schedule B and backfilled with Concrete Aggregate #1 as shown on the construction detail.

### **D Measurement**

The department will measure Pipe Underdrain 6-Inch and Aggregate by the linear foot, acceptably completed. The department will measure along the centerline of the pipe, center to center of junctions 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.0090.01	Pipe Underdrain Wrapped 6-Inch and Aggregate	LF

Payment is full compensation for providing, transporting, handling, and placing all materials, including wrapped pipe, aggregate, geotextile fabric, backfill, connections, fittings, and caps or plugs; for furnishing all excavating, recompact, disposing of surplus material, and restoring the work site.

## **56. Concrete Curb and Gutter HES 30-Inch Type A, Item SPV.0090.02.**

### **A Description**

This special provision describes constructing concrete curb and gutter according to the requirements of standard spec 601, at locations approved by the engineer, and as hereinafter provided.

### **B Materials.**

Provide concrete that conforms to the requirements for high early strength concrete according to standard spec 501.

### **C Construction**

Perform this work at locations directed by the engineer according to the requirements of standard spec 415 for concrete pavement high early strength. Use 9-bag HES cement rather than 7-bag HES.

Modify standard spec 601.3.4 (5) to require that contraction joints be sawed.

Saw the joints to a minimum depth of one-third (D/3) of the depth of the curb and gutter at the flag line.

### **D Measurement**

The department will measure Concrete Curb and Gutter HES (Size and Type) in length by the linear feet, 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.0090.02	Concrete Curb and Gutter HES 30-Inch Type A	LF

Payment is full compensation for furnishing all foundation excavation and preparation; all special construction required at driveway and alley entrances or curb ramps; 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, and for restoring the work site.

The department will adjust pay for crack repairs on concrete built under standard spec 601 as specified in standard spec 416.5.2 for ancillary concrete.



**57. Concrete Curb and Gutter 30-Inch Type A, Special, Item SPV.0090.03.**

Construct the curb and gutter according to standard spec 601 and according to the plan details.

**58. Concrete Curb and Gutter Type Special Parking Lot, Item SPV.0090.04.**

Construct the curb and gutter according to standard spec 601 and to the dimensions and shapes of existing private parking lot curb and gutter that will be tied into.

**59. Temporary Pedestrian Safety Fence, Item SPV.0090.05.**

**A Description**

This special provision describes furnishing, installing, maintaining, removing, and disposing temporary pedestrian safety fence at locations the plans show or the engineer directs.

**B Materials**

Furnish notched metal “T” or “U” shaped fence posts.

Furnish conventional 2 x 4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh Opening:	1 inch min to 3 inch max
Resin/Construction:	High density polyethylene mesh
Service Temperature:	-60° F to 200° (ASTM D648)
Tensile Yield:	Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate Tensile Strength:	Avg. 3000 lb per 4 ft. width (ASTM D638)
Elongation at Break (%):	Greater than 100% (ASTM D638)
Chemical Resistance:	Inert to most chemicals and acids

**C Construction**

Construct wooden frames as the plans show using nails or screws as fasteners.

Secure fence fabric to frame with staples. Overlap fence fabric rolls at a vertical member of the frame.

Drive fence posts to the depth the plans show. Provide a post for each vertical member of the frame. For installations on paved surfaces, anchor the post to the paved surface.

Secure frame to fence posts as shown in the plans, with the fence fabric facing away from the pedestrian facility.

**D Measurement**

The department will measure Temporary Pedestrian Safety Fence by the linear foot, acceptably completed, and measured along the base of the fence.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Temporary Pedestrian Safety Fence	LF

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

**60. PVC Pipe 4-Inch, Item SPV.0090.16; 8-Inch, Item SPV.0090.17; 10-Inch, Item SPV.0090.18; 12-Inch, Item SPV.0090.19.**

**A Description**

This special provision describes furnishing and installing the PVC Pipes, per plan details and at the locations shown on the plans for the purpose of conveying storm water from existing private pipe connections to the storm sewer.

**B Materials**

The PVC elbows, reducers, risers, and any other necessary pipe fitting shall conform to the requirements of the specifications listed in ASTM 949. The manufacturer of the PVC pipe shall provide the PVC pipe fittings to ensure compatibility.

The PVC pipe shall conform to the requirements of the specifications listed in ASTM 949. A Certificate of Compliance shall be furnished to the engineer prior to placement.

**C Construction**

Follow the manufacturers recommended installation procedures and use the manufacturers recommended installation materials when joining PVC pipe.

Connect the PVC Pipe to the existing private pipe as shown in the plans.

**D Measurement**

The department will measure PVC Pipe (Size) by the linear foot from the center of the new storm sewer structure to the location where the connection is made at the existing private pipe, acceptably completed in place.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.16	PVC Pipe 4-Inch	LF
SPV.0090.17	PVC Pipe 8-Inch	LF
SPV.0090.18	PVC Pipe 10-Inch	LF
SPV.0090.19	PVC Pipe 12-Inch	LF

Payment is full compensation for PVC Pipe, including excavation, base aggregate, backfilling and compacting; all PVC components, pipe fittings, glues, joint compounds, sealers; and for connection to the new storm sewer structure. Providing the connection at the existing private pipe is paid for separately.

**61. Tracer Wire, Item SPV.0090.20.****A Description**

This special provision describes installing a tracer wire on storm sewer installations.

**B Materials**

Tracer wire shall be No. 12 gauge, ASTM C578, Type IV, solid insulated copper wire rated for wet conditions. Tracer wire for sewer utilities applications shall have green colored insulator.

**C Construction**

Install tracer wire on the storm sewer connections to private pipes where the locations of the buried pipe will not be able to be ascertained by observation of the exposed inlet and manhole covers. Connect the wire to each pipe section every 15 feet or in at least two places. Provide tracer wire access risers at all inlets and manhole structures and at the connection location to storm cleanouts for private laterals within the right-of-way as shown in the plans or directed by the engineer or city staff.

Ground level access locations shall be at all manholes and inlets with the tracer wire installed into the structure (between the structure and the lowest adjustment ring) and approximately 12-inches of excess wire wrapped around the nearest step or as directed by the city staff.

Insulate splices with epoxy kits if located below grade following manufacturer's instructions. Do not move cables or splice until resin has completely cured and hardened.

**D Measurement**

The department will measure Tracer Wire by the linear foot, acceptably completed, from center of structure to structure or storm clean-out through the structures with no deductions made for structure diameter or additions made for riser heights.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.20	Tracer Wire	LF

Payment is full compensation for installing the tracer wire and terminal taps; for disposing of scrap material.

## **62. Sanitary Sewer Pipe 8-Inch Special, Item SPV.0090.51; Sanitary Sewer Pipe 10-Inch Special, Item SPV.0090.52; Sanitary Lateral 4-Inch or 6-Inch Special, Item SPV.0090.53.**

### **A Description**

Furnish and install sanitary sewer mainline and laterals as shown in the plans and as hereinafter provided.

### **B Materials**

#### **B.1 PVC Pipe**

Pipe requirements for 4-inch to 15-inch diameters shall be Type PSM SDR-35 and meet the requirements of ASTM D3034. Pipe shall be of the bell and spigot type and meet the requirements of ASTM D3034 Type PSM SDR-35. Pipe joints shall be elastomeric seals (rubber gaskets) conforming to ASTM F477 and joint assembly that conforms to ASTM D3212.

#### **B.2 Sanitary Lateral Pipe Size**

The pipe size of the various existing sanitary building laterals is unknown at this time. The contractor shall have a sufficient amount of both 4-inch and 6-inch nominal diameter pipe on hand to make equivalent size replacements.

#### **B.3 Tracer Wire**

For direct burial installations, tracer wire shall be No. 12 gauge, ASTM C578, Type IV, solid insulated copper wire rated for wet conditions. Tracer wire for sewer utilities applications shall have green colored insulator.

All tracer wire terminal boxes shall be Bingham and Taylor, 2-1/2 inch diameter shaft, Model P200NFG. Lids shall be marked "Sewer" for sanitary sewer utilities. All tracer wire terminal boxes shall be incidental to the construction of the sanitary lateral piping.

#### **B.4 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its designated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

## **C Construction**

### **C.1 Embedment**

The bedding, haunching and initial backfill material shall be  $\frac{3}{4}$ -inch clear stone. The initial backfill (cover material) shall be installed and compacted to a minimum of 12-inches over the top of the pipe.

PVC pipes shall be embedded according to ASTM D2321, Class II embedment.

### **C.2 Trench Backfill**

Backfill all trenches and excavations with granular backfill conforming to standard spec 209 or dense graded base (1 1/4-Inch) conforming to standard spec 305. The contractor may use excavated material from trench conforming to standard spec 209 for granular backfill to supplement any imported materials, if approved by Waupun Utilities.

The backfill material shall be mechanically compacted in 12-inch thick layers, from a distance of one foot above the pipe to the finished subgrade. The degree of compaction shall be to 95 percent maximum dry density per modified proctor (ASTM D1557).

### **C.3 Unstable Soil**

If in the opinion of the Waupun Utilities or its designated representative the trench bottom is of unstable material, the Waupun Utilities or its designated representative may direct the contractor to excavate the unstable material and replace same with  $\frac{3}{4}$  inch washed stone. Washed stone used in such cases shall be considered incidental and included in the price bid for sanitary sewer unless bid or specified otherwise.

### **C.4 Sanitary Sewer Mainline Testing**

The unit price for sanitary sewer shall also include deflection testing. All polyvinyl chloride pipe installations shall be tested by the contractor for deflection by using a rigid ball or mandrel and shall be performed according to ASTM D2321 and without the use of mechanical pulling devices. Deflection may not exceed 5 percent if tested within 30 days of placement of final backfill or 7.5 percent if tested more than 30 days after final backfill is placed. Final backfill must be in place prior to testing. Waupun Utilities or its delegated representative shall be present for this testing.

The new sanitary sewer main piping shall be televised by Waupun Utilities and the sanitary manholes shall be visually inspected for acceptance after all utility work and roadway gravel base preparation is completed and prior to any paving activities. Sewer main pipe shall also be inspected by Waupun Utilities for alignment by the use of mirrors, flashlights or lamps. Sewer lines shall permit a through view of at least half the pipe diameter between manholes. The contractor shall coordinate with Waupun Utilities staff and shall notify Waupun Utilities when the project site is ready for this testing.

If any of the tests are not met, the contractor shall, at his or her own expense, determine the source of the problem and repair or replace all defective materials.

### **C.5 Determination of Active Sanitary Laterals**

Dye test and/or provide the necessary inspections to determine which laterals are active and to be reconnected and relayed. Waupun Utilities staff will be available to assist the contractor in making this determination. Existing connections to the main, as indicated by a previous television report, are shown on the plan and could be either active or inactive.

### **C.6 Depth of New Sanitary Laterals**

Make every effort to keep the depth of the new sanitary lateral greater than 8 feet beneath the sidewalk elevation and then connect with 45-degree bends to meet the existing lateral elevation. Additionally, keep the sanitary laterals deep enough to avoid conflicts with other utilities. This can be accomplished by having a riser located at the mainline connection and another riser located near the connection to the existing pipe near the right-of-way line or as directed by Waupun Utilities.

### **C.7 Sanitary Lateral Slope**

Where new sewer is to be installed to replace existing sanitary sewer, service laterals shall be extended from the old sanitary lateral and connected to the new main. Minimum grade of lateral extensions shall be 1/8 inch per foot. Maximum grade of lateral extensions shall be 1/2 inch per foot. Lateral extensions which require a grade in excess of 1/2 inch per foot to connect new sewers to existing service laterals shall be installed with a riser section.

### **C.8 Maintaining Sanitary Sewer Service**

Provide adequate equipment and facilities to provide bypass pumping for all elements of work requiring interruption to flow in the sanitary sewer. The contractor is responsible for damages to private or public property due to sewer backup while controlling sewage flow and during construction.

### **C.9 Water/Sewer Pipe Crossings**

The contractor shall maintain the following minimum separations unless otherwise approved by Waupun Utilities or its delegated representative. Wherever the sewer crosses above a water main maintain a clear vertical separation of 18 inches (outside of pipe to outside of pipe) and wherever the sewer crosses below the water main maintain a clear vertical separation of 6 inches (outside of pipe to outside of pipe). Note that if an 18" diameter or larger storm sewer pipe crosses over a sanitary sewer or water utility pipe with less than 12-inches of vertical separation, the contractor shall install concrete bridging as per the detail shown on the contract drawings.

### **C.10 Cleaning**

The contractor is responsible to see that manholes and sewer lines are free of dirt, gravel and debris, from the construction operations, at all times. Waupun Utilities will notify the contractor of any debris identified, and if the contractor fails to properly clean said debris, Waupun Utilities will charge the contractor for the cleaning of any manholes and sewer lines on this project during the progress of construction and until final acceptance of the improvements.

Upon completion of the work, the contractor shall thoroughly clean out all manholes and pipe along the entire length of the project before leaving the construction site.

### **C.11 Tracer Wire**

Tracer wire shall be installed in conjunction with all PVC, or non-conductive sanitary main and services. The cost of tracer wire installation shall be incidental to the sewer construction. Ground level access locations shall be at sanitary manholes (for mainline piping) and in a terminal box at the street right-of-way line (for sanitary lateral piping), installed as shown in the contract drawings or as directed by Waupun Utilities. Eighteen inches of extra wire shall be provided at all terminations.

Tracer wire shall be installed continuous to the greatest extent possible with the wire placed along the top of the entire length of the pipe, and taped to the pipe at intervals not exceeding 10-feet. Splices in the wire shall be held to a minimum. Where splices are necessary, they shall be made with underground rated mechanical wire connectors or by twisting the wires a minimum of four times and soldering, then wrapping with two layers of polyethylene tape to 6-inches beyond the stripped wire. Splicing with wire nuts shall not be allowed.

### **C.12 Connections to Existing Pipes**

Reconnect all existing live/active sanitary sewer pipes and structures into the new relayed sanitary sewer piping. When a new pipe is connected to an existing pipe or structure, a watertight joint using a flexible coupling (Mission, Clow, Fernco or approved equal) installed according to the manufacturer's recommendations is required. All connections into existing piping and structures shall be incidental to the construction of the respective sanitary sewer piping.

### **C.13 Notification**

The contractor shall be responsible for attempting to notify 100% of the adjacent residents and businesses that may be directly affected by proposed construction activities. This notification shall be at least 24 hours prior to the proposed construction activity and shall be delivered either by personal contact and/or by placing a written notification in a conspicuous location at each property. The notification shall clearly indicate the type of construction activity, the start date and time, the finish date and time, and what the effect will be upon the property owner or what response the contractor is expecting from said property owner. Additionally, the contractor shall provide similar notice to the Waupun Utilities or its designated representative, who will provide other appropriate notifications (Police, Fire, EMS, solid waste pick-up contractor, etc.). This work shall be incidental to construction.

### **D Measurement**

The department will measure Sanitary Sewer Pipe (Size) Special and Sanitary Lateral (Size) Special by the linear foot, approved by Waupun Utilities, and acceptably completed. The measurement for sanitary mainline is the actual length of pipe and does not include the inside diameter of sanitary manholes. The measurement for sanitary lateral is the actual

length of pipe and includes fittings, bends, couplings, or plugs that may be required to provide a complete working system.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.51	Sanitary Sewer Pipe 8- Inch Special	LF
SPV.0090.52	Sanitary Sewer Pipe 10- Inch Special	LF
SPV.0090.53	Sanitary Lateral 4 or 6 Inch Special	LF

Payment is full compensation for providing all labor and materials, including couplings, vertical risers, vertical and horizontal bends, tracer wire, tracer wire terminal boxes, and other required fittings; for furnishing all dye testing or inspection required to identify active laterals; for furnishing all excavating, except rock excavation; furnishing and placing pipe bedding; for forming foundation; for replacing unstable material in the trench bottom; for sheeting and shoring; for dewatering; for laying pipe; furnishing and placing granular backfill; compacting the backfill; for removing sheeting and shoring; for providing flow control and temporary pumping; for testing; for cleaning out pipes and restoring the worksite.

Payment for Sanitary Lateral (Size) Special also includes all work and materials, including miscellaneous fittings to properly connect the new lateral to the existing lateral pipe according to the specifications. Additionally, if Waupun Utilities or its delegated representative directs the contractor to install a lateral without connecting it to an existing pipe (for a future connection), then this work item shall also include any fittings required to properly cap or plug and mark the end of the pipe.

## **63. Water Main 4-Inch Special, Item SPV.0090.54; Water Main 6-Inch Special, Item SPV.0090.55; Water Main 8-Inch Special, Item SPV.0090.56; Water Main 10-Inch Special, Item SPV.0090.57; Steel Casing Pipe 18-Inch Special, Item SPV.0090.58; Water Service 1-Inch to 2-Inch Special, Item SPV.0090.59.**

### **A Description**

Furnish and install water main and appurtenances as shown in the plans and hereinafter provided.

### **B Materials**

#### **B.1 Polyvinyl Chloride (PVC) Mainline Pipe**

Polyvinyl Chloride pipe shall meet the requirements of ANSI/AWWA C900, Pressure Class (PC) 235, minimum; or ASTM D2241, Pressure Rating (PR) 250, minimum; and a DR 18 or less. Joints shall be push-on type employing rubber gaskets and conform to ASTM D3139. All joint gaskets for mechanical fittings shall be thoroughly greased with



gasket compound during assembly of the fittings. The contractor shall not be allowed to “dry fit” these gaskets by use of force and mechanical leverage.

### **B.2 Copper Service Pipe**

Service piping shall be Type K copper tubing and shall conform to ANSI/AWWA C800. No joints allowed as service pipe shall be continuous between fittings.

### **B.3 Steel Casing Pipe**

Casing pipe shall be welded steel pipe, Grade B, meeting the requirements of ASTM A139. The wall thickness of the steel casing pipe shall be 5/16 inches. Casing spacers shall be manufactured by Cascade Waterworks Manufacturing Company, Ford Meter Box Company Inc., or approved equal and shall be stainless steel with HDPE, nylon, or PVC runners. Water-tight rubber end seals shall be as manufactured by Cascade Waterworks Manufacturing Company or approved equal.

### **B.4 Tracer Wire**

For direct burial installations, tracer wire shall be No. 12 gauge, ASTM C578, Type IV, solid insulated copper wire rated for wet conditions. Tracer wire for water utilities applications shall have blue colored insulator.

All tracer wire terminal boxes shall be Bingham and Taylor, 2-1/2 inch diameter shaft, Model P200NFG. Lids shall be marked “Water” for water utilities. All tracer wire terminal boxes shall be incidental to the construction of the water piping.

### **B.5 Insulation**

Insulation shall be extruded polystyrene insulation (25 psi) conforming to ASTM C578, Type IV in 4 foot x 8 foot sheets with minimum thickness of 2 inches.

### **B.6 Shop Drawings**

Prior to incorporating any materials or products into the work, submit to the Waupun Utilities or its designated representative product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

## **C Construction**

### **C.1 Applicable Specifications**

All construction shall be done in conformance with ANSI/AWWA C600 unless otherwise specified.

### **C.2 Water Main**

The contractor shall supply and install pipe fittings, couplings, bends, and appurtenances as required to furnish a complete and fully functional system. A 7 foot depth of cover (as measured from the top of the pipe to the future street grade) over all newly installed water utility piping is desired for this project unless directed otherwise by Waupun Utilities or its delegated representative. No water utility piping shall be installed with a depth of cover less than 5.0 feet. The elevations of the proposed water utility piping as shown on the plans

is approximate and it shall be the responsibility of the contractor to review these for conflicts with other existing or new utilities and to coordinate with Waupun Utilities or its delegated representative on any changes to the plan.

Insulation shall be installed if the depth of cover is less than seven feet (7'-0") or a utility crossing effectively removes earthen freeze protection (storm sewer crossings, etc.). Insulation shall be installed as directed by Waupun Utilities or its delegated representative and shall be considered incidental to the water construction.

Begin construction of the water main only after the deeper sanitary sewer and storm sewer work has been completed unless pre-approved by Waupun Utilities prior to construction.

Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed in the line. If the crew cannot put the pipe into the trench and in place without getting earth or foreign matter into it, the Waupun Utilities or its designated representative may require that before lowering the pipe into the trench, a heavy, tightly woven bag of suitable size shall be placed over each end and left there until the connection is to be made to the adjacent pipe.

The new water utility piping shall be installed and tested while the existing water utility piping is still in operation to keep water service to the adjacent residents and businesses for as long as possible. The contractor shall install temporary water service to all users where water service will be interrupted for more than 4 hours. The contractor shall coordinate interruption to business and commercial users so the interruption will not cause a disruption of business or commercial activities. All users shall be given 24 hour notice of service interruption, except during emergencies. The contractor shall make arrangements with Waupun Utilities to sequence connection and operation of new mains and abandonment of existing mains.

Note that Waupun Utilities has encountered problems in past projects with plugged meters and low water pressure at adjacent houses after the service has been turned off and then on again. The city softens their water which can create a thin layer of scaling material on the inside of the existing water main pipes. When these existing pipes are disturbed (cut for connection to new piping, water main flushing, etc.), this scaling material can break apart into small flaky pieces and become plugged in the water meters or faucet screens. As such, Waupun Utilities requires when existing piping is cut at all connection points, that the inside of the existing water main be thoroughly cleaned to remove any loose debris in the pipe or to remove any pieces that may break off during water main flushing.

Extreme care shall be exercised by the contractor in handling all pipe, fittings, and special castings so as to prevent breakage and damage. Under no circumstances shall they be dropped into the trench or so handled as to receive hard blows or jolts when being moved. Before lowering and while suspended, the pipe or fittings shall be inspected for defects. All materials used in the work must pass field inspection.

### **C.3 Embedment**

The bedding, haunching and initial backfill material shall be ¾-inch clear stone. The initial backfill (cover material) shall be installed and compacted to a minimum of 12-inches over the top of the pipe.

Class II embedment shall be used for all PVC and copper pipe installed under this contract according to the contract drawings and ASTM D2321.

### **C.4 Trench Backfill**

Backfill all trenches and excavations with granular backfill conforming to standard spec 209 or dense graded base (1 1/4-Inch) conforming to standard spec 305. The contractor may use excavated material from trench conforming to standard spec 209 for granular backfill to supplement any imported materials, if approved by Waupun Utilities.

The backfill material shall be mechanically compacted in 12-inch thick layers, from a distance of one foot above the pipe to the finished subgrade. The degree of compaction shall be to 95 percent maximum dry density per modified proctor (ASTM D1557).

### **C.5 Unstable Soil**

If in the opinion of the Waupun Utilities or its designated representative the trench bottom is of unstable material, the Waupun Utilities or its designated representative may direct the contractor to excavate the unstable material and replace same with ¾ inch washed stone. Washed stone used in such cases shall be considered incidental and included in the price bid for water main or water service unless bid or specified otherwise.

### **C.6 Water Shut-Off Notice and Existing Valve Operation**

The contractor shall give Waupun Utilities notice at least 24 hours prior to any planned water shut-off that may extend continuously for more than 1 hour. The contractor shall coordinate with Waupun Utilities to attempt to notify 100% of the adjacent residents and businesses that may be directly affected by proposed construction activities. This notification shall be at least 24 hours prior to the proposed construction activity and shall be delivered either by personal contact and/or by placing a written notification in a conspicuous location at each property. The notification shall clearly indicate the type of construction activity, the start date and time, the finish date and time, and what the effect will be upon the property owner or what response the contractor is expecting from said property owner. Additionally, the contractor shall provide similar notice to the Waupun Utilities or its designated representative, who will provide other appropriate notifications (Police, Fire, EMS, solid waste pick-up contractor, etc.). This work shall be incidental to construction.

Only Waupun Utilities water utility personnel will be allowed to operate all existing water supply valves.

### **C.7 Tracer Wire**

Tracer wire shall be installed along all newly installed water main and water service piping. The cost of tracer wire installation shall be incidental to the water construction.

Ground level access locations shall be at fire hydrants (for mainline piping) and at curb stop boxes (for water service piping) using a tracer wire terminal box set next to the hydrant and curb stop box as shown in the contract drawings or as directed by Waupun Utilities. Eighteen inches of extra wire shall be provided at all terminations. Tracer wire terminal boxes shall be set flush with the finish ground elevation. All tracer wire terminal boxes shall be incidental to the construction of the water piping.

Tracer wire shall be installed continuous to the greatest extent possible with the wire placed along the top of the entire length of the pipe, and taped to the pipe, including hydrant barrels, at intervals not exceeding 10-feet. Splices in the wire shall be held to a minimum. Where splices are necessary, they shall be made with underground rated mechanical wire connectors or by twisting the wires a minimum of 4 times and soldering, then wrapping with two layers of polyethylene tape to 6-inches beyond the stripped wire. Splicing with wire nuts shall not be allowed.

### **C.8 Disinfecting Water Mains**

All water main and services shall be disinfected in conformance with ANSI/AWWA C651. The main will not be accepted or placed in service until two consecutive satisfactory tests are taken a minimum of 24 hours apart from samples of the new main following the final flushing. The testing lab shall furnish copies of all lab results from the bacteriological tests run on the water mains to the Waupun Utilities.

The quantity of sampling as well as the sampling locations shall be as directed by Waupun Utilities or its delegated representative. In general, at least one set of samples shall be collected from every 1,200 feet of the new water main, plus one set of samples from the end of the main and a minimum of one set from each water main branch.

### **C.9 Dechlorinating Water Mains**

The local water utility will provide water for filling and flushing water mains at no cost to the contractor. A record of the estimate of water used shall be kept by the contractor and provided to the water utility at the completion of the project.

Chlorinated water discharged directly or indirectly to surface waters as a result of flushing newly installed water mains, discharging water tanks or reservoirs, hydrant flushing, test pumping wells, or any other circumstance shall be dechlorinated according to the current "Hydrostatic Test Water or Water Supply System Water General Permit, WPDES Permit No. WI-0057681". The free chlorine residual of discharged water shall be reduced to 0.1 parts per million or less or to the normal operating concentration of the chlorine residual maintained in the water supply system. The concentration of free chlorine residual shall be measured at the point of surface water entrance.

Chlorinated water flushed/discharged from the newly installed water utility piping may be directed into the city sanitary sewer system for treatment. If this is the contractor's intention, the contractor shall notify Waupun Utilities at least 24-hours prior to flushing activities.

### **C.10 Determination of Active Water Services**

Provide the necessary inspections and excavations to determine which water services are active and shall be reconnected and relayed. Approximate locations of the existing water services based on city/utility records are shown on the contract drawings. The contractor shall be responsible for locating and verifying all active water services along the project and the cost of this verification is considered incidental to the water construction. Waupun Utilities staff will be available to assist the contractor in making this determination.

### **C.11 Water Services**

The work includes all labor and materials to reconstruct and reconnect each existing active water service, plus install any new services that the contractor is directed by Waupun Utilities to be installed at the time of construction. Start this work only after the hydrostatic and bacteriological tests of the mainline have been successfully completed and verified by Waupun Utilities water utility staff.

The pipe size for all existing water services is based upon information contained in the city/utility records. If during construction, a different water service pipe size is encountered match the size of the new pipe to the existing pipe, within reason, as directed by Waupun Utilities. In no case shall the water service pipe size be decreased without the consent of Waupun Utilities. If a different water service pipe size is encountered from that noted on the plans, notify Waupun Utilities of the difference and document the existing pipe size and also the size of the new water service being installed. The minimum pipe diameter for new water service is 1-inch.

The connection from the new service pipe to the existing service pipe shall, in all cases, be located beyond the limits of the new street pavement, being located behind the new curb and gutter. The exact location will depend upon the condition of the existing pipe and be as shown on the plan or as directed in the field by Waupun Utilities or its delegated representative.

### **C.12 Connect New Water Piping to Existing Pipes**

Provide all labor and materials required to properly connect the new water utility piping to the existing water piping and fittings at the locations shown on the contract drawings. This shall include all fittings, including vertical bends, to properly align the new and old pipe and complete the water-tight connection. All connections into existing piping and fittings shall be incidental to the construction of the respective water piping.

At all side street water main connections along the length of the project, the contractor is expected to use the bend fittings that are shown on the plan, to adjust the new piping for both horizontal and vertical alignment so as to properly match the existing pipe. No additional compensation will be allowed for misaligned pipes requiring additional fittings because of contractor negligence.

### **C.13 Water/Sewer Pipe Crossings**

The contractor shall maintain the following minimum separations unless otherwise approved by Waupun Utilities or its delegated representative. Wherever the sewer crosses

above a water main maintain a clear vertical separation of 18 inches (outside of pipe to outside of pipe) and wherever the sewer crosses below the water main maintain a clear vertical separation of 6 inches (outside of pipe to outside of pipe).

#### **C.14 Steel Casing Pipe**

The contractor shall coordinate the installation of the steel casing pipe and water main piping with the removal and replacement of the box culvert crossing at the existing creek near the Harris Avenue intersection. The steel casing pipe shall be installed via open trench cut and shall be centered under the proposed box culvert crossing as shown on the contract drawings or as directed by Waupun Utilities. Following the installation of the casing pipe, the contractor shall install the carrier pipe and seal the casing ends. Casing spacers shall be installed per manufacturer's instructions and recommendations. Class II embedment shall be used for the casing pipe and the bedding, haunching and initial backfill material shall be  $\frac{3}{4}$ -inch clear stone. The initial backfill (cover material) shall be installed and compacted to a minimum of 12-inches over the top of the casing pipe.

#### **C.15 Testing**

Hydrostatic tests shall consist of pressure and leakage test according to ANSI/AWWA C600, Hydrostatic Testing. The hydraulic tests shall be conducted at 150 psi. Water shall not be added during the pressure test. No pipe section will be accepted if the test pressure drops more than 5 psi within the two-hour test duration. The leakage is the amount of water required to bring the pressure back up to the starting pressure once the pressure test passes.

Hydrostatic tests shall be conducted on sections of water main recommended as ready by the contractor and approved by the Waupun Utilities or its designated representative. No section shall be less than one block (approximately 400 feet) of water main unless conditions warrant such testing of smaller sections. All equipment required for hydrostatic testing shall be furnished and operated by the contractor under the supervision of Waupun Utilities or its delegated representative.

All water main piping shall be not be accepted or placed in service until two consecutive water sample tests are satisfactory obtained meeting the requirements mentioned herein.

All tracer wire must be tested for electrical continuity as required by Waupun Utilities. All equipment necessary to make the test and to establish continuity of all tracer wire shall be provided by the contractor.

If any of the tests are not met, the contractor shall, at his or her own expense, determine the source of the problem and repair or replace all defective materials.

## **D Measurement**

The department will measure Water Main (Size) Special; Water Service (Size) Special by the linear foot; Steel Casing Pipe (Size) Special, approved by Waupun Utilities, and acceptably completed. The measurement for water main, water service, and steel casing piping is the actual length of pipe and does not include fittings (valves, tees, crosses, bends, reducers, curb stops, corporations, etc.) necessary to provide a complete working system.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.54	Water Main 4-Inch Special	LF
SPV.0090.55	Water Main 6-Inch Special	LF
SPV.0090.56	Water Main 8-Inch Special	LF
SPV.0090.57	Water Main 10-Inch Special	LF
SPV.0090.58	Steel Casing Pipe 18-Inch Special	LF
SPV.0090.59	Water Service (1-Inch to 2-Inch) Special	LF

Payment is full compensation for providing all labor, equipment, and materials, including pipe, tracer wire, tracer wire terminal box, and miscellaneous items for installing of a complete working system; for furnishing all excavating, except rock excavation; furnishing and placing pipe bedding; for forming foundation; for replacing unstable material in the trench bottom; for sheeting and shoring; for dewatering; for making connections to new or existing pipe or fixtures; furnishing and placing granular backfill; compacting the backfill; for providing insulation where required; for removing sheeting and shoring; for testing and chlorination; for dechlorination (if required); for cleaning out pipes and structures; and restoring the worksite.

Payment for Water Service (Size) Special also includes all work and materials, including miscellaneous fittings to properly connect the new service to the existing service pipe according to the specifications. Additionally, if Waupun Utilities or its delegated representative directs the contractor to install a service without connecting it to an existing pipe (for a future connection), then this work item shall also include any fittings required to properly cap or plug and mark the end of the pipe.

## **64. Concrete Pavement Joint Layout, Item SPV.0105.01.**

### **A Description**

This special provision describes providing a concrete pavement or concrete base joint layout design for intersections and marking the location of all joints in the field.

### **B (Vacant)**

### **C Construction**

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint

layout design to the engineer before paving each intersection. Mark the location of all concrete joint in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

#### **D Measurement**

The department will measure Concrete Pavement Joint Layout as a single lump sum unit of work for all joint layout designs and marking, acceptably completed under the contract.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Concrete Pavement Joint Layout	LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.

The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

### **65. Railing Steel Type C2 Galvanized Pedestrian C-20-155, Item SPV.0105.16.**

#### **A Description**

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

#### **B Materials**

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

#### **B.1 Coating System**

##### **B.1.1 Galvanizing**

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



### **B.1.2 Two-Coat Paint System**

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

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

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of the engineer.

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

<sup>1</sup> Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

## **B.2 Shop Drawings**

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

## **C Construction**

### **C.1 Delivery, Storage and Handling**

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

### **C.2 Touch-up and Repair**

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

## **D Measurement**

The department will measure Railing Steel Type C2 Galvanized Pedestrian B-20-155 as a single lump sum unit of work for each structure where railing is satisfactorily furnished and 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.0105.16	Railing Steel Type C2 Galvanized Pedestrian C-20-155	LS

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

## **66. Temporary Bypass Channel, Item SPV.0105.17.**

### **A Description**

This work consists of constructing, maintaining, and ultimately removing a temporary bypass channel for the purposes of erosion control and stream diversion for the construction of the bridge structure within the Harris Creek stream channel.

### **B Materials**

Provide granular backfill according to standard spec 209.2.

Provide rip rap according to standard spec 606.2.

Provide silt fence according to standard spec 628.2.6

Provide clean concrete aggregate size no. 2 graded according to the requirements as specified under standard spec 501.2.5.4.4. The soundness and wear requirements are deleted from this material.

Provide sandbags made of jute, woven polyester, or polypropylene mesh resistant to ultra-violet radiation, and of sufficient strength to contain the sand without failure or leakage. The size of the sack shall be approximately 16" by 25" measured inside the seam when the sack is laid flat and each sack will be filled with 1 cubic foot of unwashed sand.

Provide polyethylene sheeting in rolls that are a minimum of 7 feet in width and a minimum thickness of 8 mils.

### **C Construction**

Construct the excavation according to standard spec 205.3.

Construct the coarse aggregates according to standard spec 209.3.

Construct rip rap according to standard spec 606.3.

Construct silt fence according to standard spec 628.3.4.

Construct the sandbag diversion by beginning the placement of the sandbags at the upstream location and continuing downstream. When it is necessary to overlap the polyethylene sheeting, overlap the upstream portion of the sheeting over the downstream portion a minimum of 24".

Leave the sandbag diversion and polyethylene sheeting in place until the disturbed areas are stabilized and the engineer approves their removal. Remove all sandbags and polyethylene sheeting and all materials incidental to their construction prior to backfilling the temporary bypass channel. Restore the area to the original or planned contours.

**D Measurement**

The department will measure Temporary Bypass Channel as a lump sum unit of work, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.17	Temporary Bypass Channel	LS

Payment is full compensation for performing all work to furnish and install the temporary bypass channel; payment will constitute full compensation for excavating the temporary channel, for furnishing, placing, and maintaining all materials including; constructing the sandbags for providing the diversion walls, for removing and disposing of the sandbags, polyethylene sheeting, for furnishing all aggregates, for rip rap, for silt fence, for backfilling and restoring the area.

**67. Removing Lighting Conduit and Wire, Item SPV.0105.31.****A Description**

Remove existing street light conduit, pull boxes, wiring and other miscellaneous related items within the project limits and according to standard spec 204.

**B Materials**

Use backfill material according to standard spec 209.

**C Construction**

Remove the existing street lighting conduit, pull boxes, wiring and other miscellaneous related items; and dispose of all materials outside of the right-of-way according to standard spec 204 and 638.3. All items removed shall be the property of the contractor and shall be removed from the construction site and disposed of properly.

**D Measurement**

The department will measure Removing Lighting Conduit and Wire by the lump sum unit of work, approved by the City of Waupun, and acceptably completed.

**E Payment**

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.31	Removing Lighting Conduit and Wire	LS

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

**68. Remove Existing Sanitary Structures, Item SPV.0105.51; Remove Existing Water Main Structures, Item SPV.0105.52.**

**A Description**

Removing the existing sanitary sewer and water facilities as shown in the plans and hereinafter provided and abandon the existing piping system.

**B (Vacant)**

**C Construction**

**C.1 Remove Sanitary Sewer Structures (and abandon facilities as required)**

The price for this item shall include the cost of furnishing all necessary labor, materials, equipment, excavation, salvage, proper disposal of excess material, sheeting, shoring, dewatering, backfilling, compaction, and all related work to dismantle or remove the existing manholes, to bulkhead each exposed end of the sanitary pipe and abandon in-place if the existing piping is not located within the normal excavation limits of the new construction, or to remove the existing piping if it is located within the normal excavation limits of the new construction, all as stated herein and according to the Standard Specifications for Sewer and Water Construction in Wisconsin.

Verify as to whether-or-not Waupun Utilities desires to inventory any of the castings and/or covers on the existing sanitary manholes. If not, properly dispose of these items. If Waupun Utilities desires to keep these items, carefully remove the existing manhole castings and covers, and deliver the same to the storage yard at 817 Madison Street, Waupun WI. Prior to delivery, contact Waupun Utilities staff to schedule delivery and to allow Waupun Utilities personnel to inspect the materials and determine which are suitable to be delivered.

Remove completely all existing facilities that are in conflict with the new facilities and/or are located within the excavation/trench limits of the new facilities (incidental to construction).

The contractor shall bulkhead the exposed ends of the existing sanitary pipes that are not in conflict with or located within the excavation limits of the new facilities. The bulkhead shall consist of a minimum 8-inch thick solid pour-in-place concrete wall to completely seal the exposed end of the pipe, or by other method as approved by the Waupun Utilities or its designated representative.

Remove existing manholes either completely or to a point 5 feet below grade (minimum). Completely fill the remaining void and/or manhole base with compacted granular backfill only after the exposed pipe ends have been sealed with a bulkhead.

**C.2 Remove Water Structures (and abandon facilities as required)**

The price for this item shall also include the cost of furnishing all necessary labor, materials, equipment, excavation, salvage, proper disposal of excess material, sheeting, shoring, dewatering, backfilling, compaction, and all related work to dismantle or remove

the existing structures, valve boxes, hydrants, to bulkhead each exposed end of the water pipe and abandon in-place if the existing piping is not located within the normal excavation limits of the new construction, or to remove the existing piping if it is located within the normal excavation limits of the new construction, all as stated herein and according to the Standard Specifications for Sewer and Water Construction in Wisconsin.

Verify as to whether-or-not Waupun Utilities desires to inventory any of the existing water fittings and structures. If not, properly dispose of these items. If Waupun Utilities desires to keep these items, carefully remove the existing water fittings and structures, and deliver the same to the storage yard at 817 Madison Street, Waupun WI. Prior to delivery, contact Waupun Utilities staff to schedule delivery and to allow Waupun Utilities personnel to inspect the materials and determine which are suitable to be delivered.

Remove completely all existing facilities that are in conflict with the new facilities and/or are located within the excavation/trench limits of the new facilities (incidental to construction).

The contractor shall bulkhead the exposed ends of the existing water pipes that are not in conflict with or located within the excavation limits of the new facilities. The bulkhead shall consist of a minimum 8-inch thick solid pour-in-place concrete wall to completely seal the exposed end of the pipe, or by other method as approved by the Waupun Utilities or its designated representative.

Remove existing valve boxes and/or valve manholes completely or to a point 5 feet below grade (minimum). Completely fill the remaining void with compacted granular backfill only after the exposed pipe ends have been sealed with a bulkhead.

Remove fire hydrants completely, bulkhead the remaining pipe, and completely fill the void with compacted granular backfill.

#### **D Measurement**

The department will measure Remove Existing Sanitary Structures; and Remove Existing Water Structures as a lump sum unit of work, approved by Waupun Utilities, and acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.51	Remove Existing Sanitary Structures	LS
SPV.0105.52	Remove Existing Water Structures	LS

Payment is full compensation for providing all labor, equipment and materials for furnishing all structure removal and associated pipe abandonment and/or removal; for furnishing all excavating, for sheeting and shoring; for dewatering; for installing concrete bulkheads; for proper disposal of removed items (including salvage if applicable); for furnishing and placing granular backfill; compacting the backfill; and for restoring the worksite.

## **69. Remove and Reset Pavers, Item SPV.0165.01.**

### **A Description**

This special provision describes removing, salvaging and placing salvaged path pavers in areas adjacent to sidewalk reconstruction.

### **B Materials**

Remove, salvage, and stockpile existing paver materials. Replace any damaged pavers with new pavers that match the size, material, texture, and color of the existing pavers.

Furnish granular subbase according to standard spec 350.2.

Furnish polymeric paver interlock sand. Furnish the material information to the engineer for approval prior to use.

### **C Construction**

Remove, salvage, and stockpile existing pavers adjacent to sidewalk reconstruction areas. Remove existing pavers to the limits necessary to accommodate existing sidewalk removal and forms for new sidewalk construction.

Place and compact granular subbase to a minimum depth of 3 inches and according to standard spec 350.3.

Install the salvaged pavers to match the existing line, grade, and paver pattern of the sidewalk path. Tamp and set the pavers to match the construction of the original path layout. Sawcut salvaged pavers as necessary to fit the layout and existing paver pattern.

Install the paver interlock sand according to the manufacturer's instructions.

### **D Measurement**

The department will measure Remove and Reset Pavers by the square foot of disturbed and restored 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.0165.01	Remove and Reset Pavers	SF



Payment is full compensation for removing and salvaging existing pavers; for furnishing and placing granular subbase and polymeric paver interlock sand; for cutting and placing salvaged pavers; and for excavation, hauling and disposal of waste material.

**70. Concrete Sidewalk HES 6-Inch, Item SPV.0165.02.**

**A Description**

This special provision describes constructing concrete sidewalk according to the requirements of standard spec 602, at locations approved by the engineer, and as hereinafter provided.

**B Materials.**

Provide concrete that conforms to the requirements for high early strength concrete according to standard spec 501.

**C Construction**

Perform this work at locations directed by the engineer according to the requirements of standard spec 415 for concrete pavement high early strength. Use 9-bag HES cement rather than 7-bag HES.

**D Measurement**

The department will measure Concrete Sidewalk HES 6-Inch by the square foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.02	Concrete Sidewalk HES 6-Inch	SF

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; and for disposing of surplus excavation material, restoring the work site.

The department will adjust pay for crack repairs on concrete built under standard spec 602 as specified in standard spec 416.5.2 for ancillary concrete.

**71. Stone Mulch, Item SPV.0165.03.**

**A Description**

This special provision describes salvaging and placing, or furnishing and placing stone mulch in landscape beds to restore landscape areas with stone mulch that are disturbed by construction activities and as directed by the engineer.

## **B Materials**

If existing material cannot be salvaged with a sufficient quantity to restore the area to pre-construction activity conditions, furnish new stone mulch as follows.

Furnish washed, coarse aggregate landscape stone mulch matching the existing stone mulch in the area being replaced in type, color, and size.

Furnish weed barrier fabric according to standard spec 632.2.14.

## **C Construction**

Salvage the existing stone mulch material by removing and stockpiling the material.

Maintain or carefully cut away and remove existing weed barrier fabric without undermining or disturbing fabric outside the construction limits. Install new weed barrier fabric between the subgrade and salvaged or new stone mulch if the existing weed barrier fabric cannot be salvaged.

Place approximately 3 inches thickness of stone mulch within the disturbed area after performing all necessary backfilling and adjustment. Blend new mulch into existing mulch to create a smooth transition.

## **D Measurement**

The department will measure Stone Mulch by the square foot of disturbed and restored 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.0165.03	Stone Mulch	SF

Payment is full compensation for furnishing and placing stone mulch and weed barrier fabric; for excavation, salvaging and stockpiling existing stone mulch; and for excavation, hauling and disposal of waste material.

## **72. Geogrid Reinforcement, Item SPV.0180.01.**

### **A Description**

This special provision describes furnishing and installing geogrids for subgrade stabilization, base reinforcement, or pavement structure applications according to the plans, standard spec 645 and as hereinafter provided.

### **B Materials**

Provide geogrid that consists of either single or joined multiple layers of a uniform rectangular grid of bonded, formed, or fused polymer tensile strands crossing with a nominal right angle orientation. The polymer shall consist of polyester, polypropylene, polyamide, or polyethylene. The grid shall maintain dimensional stability during handling, placing, and

installation. The geogrid shall be insect, rodent, mildew, and rot resistant. Minimum geogrid width shall be 6.0 feet.

Provide geogrid that complies with the following physical properties:

<b>Test</b>	<b>Method</b>	<b>Value<sup>(1)</sup></b>
Tensile Strength at 5% Strain, Both Principal Directions (lb/ft)	ASTM D 4595 <sup>(2)</sup>	450 min.
Flexural Rigidity Both Principal Directions (mg-cm)	ASTM D 1388 <sup>(3)</sup>	150,000 min.
Aperture Area (in <sup>2</sup> )	Inside Measurement <sup>(4)</sup>	5.0 max.
Aperture Dimension (in)	Inside Measurement <sup>(4)</sup>	0.5 min.

<sup>(1)</sup>All numerical values represent minimum/maximum average roll values, i.e. the average minimum test results on any roll in a lot should meet or exceed the minimum specified value.

<sup>(2)</sup>The tensile strength (T) of a joined multi-layered geogrid shall be computed using the following equation:

$$T = n(f) t$$

Where

n = The number of individual layers in the joined multi-layered geogrid,

t = The tensile strength of a single layer of geogrid as determined using testing method ASTM D4595, and

f = Reduction factor based on the number of layers comprising the multi-layered system and determined by the equation  $f = 1.00 - [0.04(n-1)]$

<sup>(3)</sup>Values shall be determined by Option "A" (Cantilever Test) of testing method ASTM D1388 using test specimens that are 36 inches  $\pm 0.04$  inch long. Test specimen widths for differing geogrids shall be variable and equal to 1 element plus 1/2 the aperture width on both sides of the element. An element is defined as the minimum number of parallel strands that form a distinguishable repeating pattern.

<sup>(4)</sup>Aperture Area and Aperture Dimension for joined multi-layered geogrids shall be determined based on measurement of a single layer of geogrid.

Protect the geogrid from ultraviolet radiation and from damage due to shipping and handling. Keep the geogrid dry until it is installed. The geogrid rolls shall be clearly marked to identify the material contained.

Deliver a sample of the geogrid material to the engineer at least 10 days prior to its incorporation into the work. At the same time, furnish a manufacturer's Certified Report of Test or Analysis that verifies that the geogrid delivered for use on the work meets the above requirements. Samples of geogrid for test purposes will be obtained from the job site for each 10,000 square yards or portions thereof used on the contract.

### **C Construction**

Prior to placement of the geogrid, bring the indicated placement surface to the required lines, grades, and dimensions as shown on the plans. Smooth and shape the surface to eliminate any rocks, clods, roots, or other items that may cause damage to the geogrid during placement or covering.

Place the geogrid on the prepared surface at the locations and to the limits as shown on the plans. After placement, pull the geogrid taut and secure it using pins, clips, staples, or other devices to prevent movement or displacement. Place parallel strips of geogrid with a minimum overlap of 6 inches. Lap butt joints between roll ends a minimum of 12 inches. Fasten all lapped sections together by using ties, straps, clips, or other devices to develop a secure joint that meets the approval of the engineer. No vehicles or construction equipment shall be permitted to operate directly on the geogrid.

Cover small rips, tears, or defects in the geogrid with an additional section of geogrid; secure the additional geogrid in place so that it overlaps the damaged area by at least 3 feet in all directions. Remove and replace geogrid sections with large rips, tears, defects, or other damage at the direction of the engineer. All costs to repair or replace damaged or defective geogrid shall be the responsibility of the contractor.

After placement, cover the geogrid to the indicated depth with the type of material required on the plans or in the special provisions. Placing, spreading, and compacting of this material shall comply with the applicable sections of the standard specifications or special provisions except that the initial lift of material placed on the geogrid must be at least 4 inches. Place, spread, and compact the required backfill material so that the geogrid is not displaced or damaged. The engineer may require changes in equipment and/or operations to prevent such damage or displacement.

### **D Measurement**

The department will measure Geogrid Reinforcement by the square yard of surface area upon which the geogrid has been placed, 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	Geogrid Reinforcement	SY

Payment is full compensation for furnishing, transporting, and installing the geogrid; and for furnishing and installing all devices and materials necessary to join or secure the geogrid in place.

### **73. Excavation, Hauling, and Disposal of Contaminated Soil and Management of Contaminated Groundwater, Item SPV.0195.01.**

#### **A Description**

##### **A.1 General**

This special provision describes excavating, loading, hauling, and disposing of contaminated soil at a DNR approved disposal facility. The closest DNR approved disposal facility is:

Advanced Disposal Services Glacier Ridge LLC  
N7296 Highway V  
Horicon, WI 53032  
(920) 387-0615

Perform this work in accordance 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.

This special provision also describes pumping and disposing of contaminated groundwater (if dewatering is necessary).

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 100-299 of the Wisconsin Administrative Code, as supplemented herein. Perform all work necessary to control, handle, and dispose of groundwater and surface water, and all other water that may be encountered within contaminated areas, as required for performance of the work.

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

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

Solvent-contaminated soil is potentially present at the following location:

1. Station 47+00 to 47+75 from 20 feet RT of reference line to construction limits RT at the Care n Cleaners (735 West Main Street).

Solvent-contaminated groundwater (if dewatering is necessary) is potentially present at the following location:

1. Station 47+00 to 47+75 from 20 feet RT of reference line to construction limits RT at the Care n Cleaners (735 West Main Street).

Contaminated soils and/or groundwater and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soils and/or groundwater and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer and the environmental consultant.

Contaminated soil and/or groundwater at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Daniel Haak  
Address: TRC Environmental Corporation  
708 Heartland Trail, Suite 3000, Madison, WI 53717  
Phone: (608) 826-3628  
Fax: (608) 826-3941  
E-mail: dhaak@trcsolutions.com

### **A.3 Coordination**

Coordinate work under this Contract with the environmental consultant retained by the department:

Consultant: TRC Environmental Corporation  
Contact: Mr. Dan Haak  
Address: 708 Heartland Trail, Suite 3000, Madison, WI 53717  
Phone: (608) 826-3628  
Fax: (608) 826-3941  
E-mail: dhaak@trcsolutions.com

The role of the environmental consultant will be limited to:

- 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;
- Identifying contaminated soils to be hauled to the disposal facility;
- 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
- Obtaining the necessary approvals for disposal of contaminated soil from the disposal facility.
- Identifying contaminated groundwater to be pumped for treatment and disposal (if dewatering is necessary).

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 each of the contaminated areas.

Identify the DNR approved disposal 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 disposal facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not transport contaminated soil or pump contaminated groundwater offsite without prior approval from the environmental consultant.

#### **A.4 Protection of Groundwater Monitoring Wells**

Groundwater monitoring wells, including lost or improperly abandoned wells, may be present within the construction limits. Notify the environmental consultant when groundwater monitoring wells are encountered. Protect all groundwater monitoring wells to maintain their integrity. If required by the environmental consultant, adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant, or for wells that require abandonment, the abandonment or adjustment of the wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

Coordinate with the environmental consultant to ensure that the environmental consultant is present to abandon and/or document the location of the groundwater monitoring wells during excavation activities.

#### **A.5 Excavation Management Plan Approval**

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Randall Maass with the department, at (608) 275-3224.

#### **A.6 Health and Safety Requirements**

*Supplement standard spec 107.1 with the following:*

During excavation activities, expect to encounter soil contaminated with chlorinated VOCs. 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.

Disposal of contaminated soil at the disposal facility is subject to the facility's safety policies, which include as a minimum:

1. No smoking is allowed on-site.
2. Maximum speed limit of 15 mph on access roads and 5 mph while in active area.
3. All persons entering the active area must wear the following personal protective equipment: hard hats, high visibility clothing, steel toed work boots, safety glasses, and seat belts.
4. Minimum requirement for spacing is as follows:
  - a. A minimum 15 foot Safety Zone is required between landfill equipment and all personnel at all times.
  - b. Do not back up directly behind the compactor or dozer.
  - c. Trucks must yield the right-of-way to landfill equipment.
  - d. 15 feet required between trucks.
5. Only the driver can exit the truck and must stay within 4 feet of the truck. Use of Spotter is prohibited. Helper (if any), must remain in vehicle while unloading.
6. Tailgates of all vehicles may only be opened while in the active area and must be closed prior to exiting the active area.
7. Cleaning out vehicles must be done in designated area, not in the active area. Vehicles must be properly locked out / tagged out according to OSHA during the clean out process.
8. No scavenging is allowed.
9. Horseplay is prohibited.

Violation of the landfill's safety policy will result a verbal or written warning explaining this policy and may result in the loss of dumping privileges.

Immediately report all accidents and injuries at the disposal facility to landfill management.



## **B (Vacant)**

## **C Construction**

*Supplement standard spec 205.3 with the following:*

The environmental consultant will periodically examine excavated soil during excavations in the areas of known soil contamination within the construction limits.

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated and to ensure that excavations do not extend beyond the minimum required to construct utilities and highway improvements unless expressly directed to do so by the engineer.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite disposal or can be beneficially re-used on-site. 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.

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material for reuse as fill within the construction limits, or
- Contaminated soil for off-site disposal at the WDNR-licensed disposal facility, or
- Potentially contaminated for temporary stockpiling and additional characterization prior to disposal.

Some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 100 cubic yards of contaminated soil on-site that require additional characterization. Construct and maintain a temporary stockpile of the material in accordance with NR 718.05(3), including, but not limited to, placement of the contaminated soil/fill material on an impervious surface and covering the stockpile with impervious material to prevent infiltration of precipitation. The department's environmental consultant will collect representative samples of the stockpiled material, laboratory-analyze the samples, and advise the contractor, within 10 business days of the construction of the stockpile, of disposal requirements. The stockpiled material shall be disposed either at the WDNR-licensed disposal facility by the contractor or, if

characterized as hazardous waste, by the department. As an alternative to temporarily stockpiling contaminated soil/fill material that requires additional characterization, the contractor has the option of suspending excavation in those areas where such soil is encountered until such time as characterization is completed.

Directly load and haul soils designated by the environmental consultant for off-site disposal to the DNR approved disposal facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids. Verify that the vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations.

When material is encountered outside the above-identified limits of known contamination that appears to have been impacted with chlorinated VOCs or petroleum products, or when other obvious potentially contaminated materials are encountered or material exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or when underground storage tanks are encountered, suspend excavation in that area and notify the engineer and the Environmental Consultant.

Groundwater may be present within the construction limits. Water generated during dewatering operations (if necessary) is expected to be permitted to discharge to the surface except in the contaminated areas.

Contaminated groundwater generated from dewatering activities within the contaminated areas may exceed the surface water discharge limits for VOCs specified in the DNR's "General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System" for "Contaminated Groundwater from Remedial Action Operations" (WPDES Permit No. WI-0046566-5), Table 3.1.

Pump contaminated water that exceeds surface water discharge limits, as determined by environmental consultant, into temporary holding tanks provided by others to the City of Waupun POTW, as necessary to complete construction. Allow contaminated water encountered, but not requiring removal as a standard course of construction, to remain in-place and do not manage according to this special provision.

The environmental consultant will coordinate approval of contaminated water hauling and disposal within the City of Waupun POTW. Only pump contaminated groundwater if the environmental consultant is on-site.

Discharging contaminated groundwater to any location other than that approved and provided by the environmental consultant, is at the contractor's cost. If the contractor chooses alternate discharge, at the contractor's cost, obtain DNR concurrence on any dewatering plans, and provide and operate any and all treatment and discharge equipment required.

Employ construction methods and techniques in a manner that will minimize the need for dewatering, and if dewatering is required, minimize the volume of water generated. Take measures to limit groundwater, surface water, and precipitation from entering and exiting excavations in the areas of contamination. Such measures, which may include berming, ditching, or other means, shall be maintained until construction of utilities in the areas of contamination are complete.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits 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 Contaminated Soil and Management of Contaminated Groundwater in tons of contaminated soil accepted by the disposal facility as documented by weight tickets generated by the disposal facility, 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.0195.01	Excavation, Hauling, and Disposal of Contaminated Soil and Management of Contaminated Groundwater	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and disposal of contaminated soil; tipping fees including applicable taxes and surcharges; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; and for dewatering of soils prior to transport, if necessary.



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

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

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

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

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

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

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

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

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 3 (number) TrANS Apprentice(s) be utilized on this contract.

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

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

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

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

## ***II. IMPLEMENTATION***

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

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

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

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

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

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

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

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

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

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

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

#### 1. Description

##### General

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

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

#### 2. Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

- a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they

have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

- b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.
- c. Prime Contractors should:
  - i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
  - ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, **as required by federal rules**. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
    - (1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.
    - (2) SBN is the preferred outreach tool. <https://www.bidx.com/wi/main> Other acceptable means include postal mail, email, fax, phone call.
      - a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
      - b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.
    - (3) Second solicitation should take place within 5 days
      - a. An email solicitation is highly recommended for this second solicitation
    - (4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
    - (5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.
    - (6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
      - a. Email to all prospective DBE firms in relevant work areas
      - b. Phone call log to DBE firms who express interest via written response or call.
      - c. Fax/letter confirmation
      - d. Copy of the DBE quotes
      - e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

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

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

## **6. Bidder's Appeal Process**

- a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

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

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

- a. The department maintains a DBE list on the department's website  
<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

## **8. Counting DBE Participation**

### **Assessing DBE Work**

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

**9. Commercially Useful Function**

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

**10. Trucking**

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

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

**11. Manufacturers and Suppliers**

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

**12. DBE Prime**

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

**13. Joint Venture**

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

**14. Mentor Protégé**

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

**15. DBE Replacement**

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

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>

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

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

**17. Contract Modifications**

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

**18. Payment**

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

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

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GFW SAMPLE MEMORANDUM

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

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

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

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

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

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

All questions should be directed to:

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



## Sample Contractor Solicitation Letter Page 2

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

### REQUEST FOR QUOTATION

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

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

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

**Please check all that apply**

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

**Prime Contractor 's Contact Person**

Phone: _____
Fax: _____
Email: _____
_____

**DBE Contractor Contact Person**

Phone _____
Fax _____
Email _____
_____

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

Proposal No.	1	2	3	4	5	6	7
County							

**WORK DESCRIPTION:**

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

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

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

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

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

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

### **Primes**

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

### **DBE**

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

## APPENDIX C

### Types of Efforts considered in determining GFE

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

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

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

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

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

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

## Appendix E

### Small Business Network [SBN] Overview

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

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

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

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

## **ADDITIONAL SPECIAL PROVISION 4**

### **Payment to First-Tier Subcontractors**

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

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

### **Payment to Lower-Tier Subcontractors**

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

### **Release of Routine Retainage**

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

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

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

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



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

Make the following revisions to the standard specifications:

---

**450.3.2.1 General**

Replace the entire text with the following effective with the January 2015 letting:

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects on or north of STH 29 between May 1 and October 15 inclusive and for projects south of STH 29 between April 15 and November 1 inclusive. Notify the engineer at least one business day before paving.
  - (2) Unless the contract specifies otherwise, conform to the following:
    - Keep the road open to all traffic during construction.
    - Prepare the existing foundation for treatment as specified in 211.
    - Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.
  - (3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.
- 

**450.5 Payment**

Replace the entire text with the following effective with the May 2015 letting:

- (1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.
  - (2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.
  - (3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.
  - (4) The contractor is responsible for the quality of HMA pavement placed in cold weather. If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:
    - Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
    - Will not assess disincentives for density or ride.
- 

**455.3.2.1 General**

Replace the paragraphs one and two with the following effective with the January 2015 letting:

- (1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.
- (2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as-received from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

**460.2.2.3 Aggregate Gradation Master Range**

*Replace paragraph one with the following effective with the December 2014 letting:*

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

**TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS**

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

<sup>[1]</sup> 14.5 for E-0.3 and E-3 mixes.

<sup>[2]</sup> 15.5 for E-0.3 and E-3 mixes.

**460.3.4 Cold Weather Paving**

*Add a new subsection as follows effective with the May 2015 letting:*

**460.3.4 Cold Weather Paving****460.3.4.1 Cold Weather Paving Plan**

- (1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:
- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
  - Use additional rollers.

- (2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

**460.3.4.2 Cold Weather Paving Operations**

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.
- (2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to a previously engineer-accepted cold weather paving plan for engineer validation. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

**460.4 Measurement**

Add paragraph two as follows effective with the January 2015 letting:

- (2) The department will measure HMA Cold Weather Paving by the ton of HMA mixture for pavement placed conforming to an engineer-accepted cold weather paving plan.

**460.5.1 General**

Revise paragraph one as follows effective with the January 2015 letting:

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

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.1100	HMA Pavement Type E-0.3	TON
460.1101	HMA Pavement Type E-1	TON
460.1103	HMA Pavement Type E-3	TON
460.1110	HMA Pavement Type E-10	TON
460.1130	HMA Pavement Type E-30	TON
460.1132	HMA Pavement Type E-30X	TON
460.1700	HMA Pavement Type SMA	TON
460.2000	Incentive Density HMA Pavement	DOL
460.4000	HMA Cold Weather Paving	TON

**460.5.2.2 Disincentive for HMA Pavement Density**

Revise paragraph two as follows effective with the January 2015 letting:

- (2) The department will not assess density disincentives for pavement placed in cold weather because of a department-caused delay as specified in 450.5(4).

**460.5.2.4 Cold Weather Paving**

Add a new subsection as follows effective with the May 2015 letting:

**460.5.2.4 Cold Weather Paving**

- (1) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 460.3.4 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed on days when the department is assessing liquidated damages.
- (2) If HMA pavement is placed under 460.3.4 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 460.5.2.4(1) as extra work. The department will pay separately for HMA pavement under the appropriate HMA Pavement bid items.

**465.2 Materials**

Replace paragraph two with the following effective with the December 2014 letting:

- (2) Under the other 465 bid items, the contractor need not submit a mix design. Furnish aggregates mixed with a type AC asphaltic material, except under the Asphaltic Curb bid item furnish PG58-28 asphaltic material. Use coarse and fine mineral aggregates uniformly coated and mixed with the asphaltic material in an engineer-approved mixing plant. The contractor may include reclaimed asphaltic pavement materials in the mixture.

**506.3.2 Shop Drawings**

Replace the entire text with the following effective with the May 2015 letting:

- (1) Ensure that shop drawings conform to the contract plans and provide additional details, dimensions, computations, and other information necessary for completely fabricating and erecting the work. Include project and structure numbers on each shop drawing sheet.
- (2) Check shop drawings and submit electronically to the department for review before beginning fabrication. For primary fabrication items, also certify that shop drawings conform to quality control standards by submitting department form DT2333. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.
- (3) Shop drawings are part of the contract. The department must approve differences between shop drawings and contract plans. The contractor bears the costs of department-approved substitutions. Do not deviate from or revise drawings without notifying the department and resubmitting revised drawings.
- (4) Ensure that the fabricator delivers 3 sets of shop drawings for railroad structures to the railroad company upon contract completion.

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**Bid Items Added**

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Add the following new bid item effective with the January 2015 letting:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.4000	HMA Cold Weather Paving	TON

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**Errata**

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Make the following corrections to the standard specifications:

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**501.3.2.4.4 Water Reducer**

Correct errata by deleting the reference to footnote 6 for grade D concrete.

- (1) Add a water reducing admixture conforming to 501.2.3. Determine the specific type and rate of use based on the atmospheric conditions, the desired properties of the finished concrete and the manufacturer's recommended rate of use. The actual rate of use shall at least equal the manufacturer's recommended rate, and both the type and rate used require the engineer's approval before use.
- 

**506.5 Payment**

Correct errata by changing the reference to 506.3.22.

- (9) The department will limit costs for inspections conducted under 506.3.22 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

**ADDITIONAL SPECIAL PROVISION 7**

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



## **ADDITIONAL SPECIAL PROVISION 9**

### **Electronic Certified Payroll Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

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





## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or



will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

##### **a. Apprentices (programs of the USDOL).**

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### **b. Trainees (programs of the USDOL).**

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:



"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

**Goals for Minority Participation for Each Trade:**

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

**Goals for female participation for each trade: 6.9%**

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director  
Office of Federal Contract Compliance Programs  
Ruess Federal Plaza  
310 W. Wisconsin Ave., Suite 1115  
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

**APRIL 2013**

**ADDITIONAL FEDERAL-AID PROVISIONS**

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**Effective August 2015 letting**

**BUY AMERICA PROVISION**

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

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

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

<http://wisconsindot.gov/rdwy/worksheets/ws4567.doc>



**Effective with September 2004 Letting**

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

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

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

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

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

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

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

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

## **II. PAYROLL REQUIREMENTS**

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

## **III. POSTINGS AT THE SITE OF THE WORK**

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

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

## **IV. WAGE RATE REDISTRIBUTION**

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

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

## **V. ADDITIONAL CLASSIFICATIONS**

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

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

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

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

**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
DODGE COUNTY**

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

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

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	32.59	17.56	50.15
Carpenter	32.72	16.00	48.72
Future Increase(s): Add \$1.42/hr on 6/1/2015; Add \$1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	35.18	16.78	51.96
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	33.93	22.77	56.70
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	11.42	35.15
Ironworker	31.50	20.01	51.51
Line Constructor (Electrical)	39.50	16.07	55.57
Painter	26.65	14.06	40.71
Pavement Marking Operator	30.27	20.98	51.25
Piledriver	30.11	26.51	56.62
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/2016. Premium Pay: Add \$.65/hr for Piledriver Loftsmen; Add \$.75/hr for Sheet Piling Loftsmen. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Rofer or Waterproofer	19.50	10.10	29.60
Teledata Technician or Installer	22.25	15.15	37.40

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Tuckpointer, Caulker or Cleaner	33.76	17.42	51.18
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	15.29	46.89
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.73	12.17	33.90

**TRUCK DRIVERS**

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	28.12	15.55	43.67
Articulated, Euclid, Dumptror, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	28.12	15.55	43.67

**LABORERS**

General Laborer	28.12	15.55	43.67
Asbestos Abatement Worker	18.00	0.00	18.00
Landscaoper	30.13	15.14	45.27
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	24.75	15.55	40.30
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.33	13.65	31.98
Railroad Track Laborer	17.00	2.71	19.71

**HEAVY EQUIPMENT OPERATORS**

Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).	37.72	21.15	58.87
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<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
<p>Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium.  See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a>.</p>			
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.	37.22	21.15	58.37
<p>Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium.  See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a>.</p>			
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames.	36.72	21.15	57.87
<p>Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium.  See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a>.</p>			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep	36.46	21.15	57.61

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	36.17	21.15	57.32
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Fiber Optic Cable Equipment.	28.89	17.95	46.84



**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
FOND DU LAC COUNTY**

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

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

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	30.85	17.61	48.46
Carpenter	32.72	16.00	48.72
Future Increase(s): Add \$1.42/hr on 6/1/2015; Add \$1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	33.86	17.96	51.82
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	33.93	22.77	56.70
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	29.27	23.97	53.24
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Line Constructor (Electrical)	39.50	16.55	56.05
Painter	28.00	11.15	39.15
Pavement Marking Operator	23.37	23.30	46.67
Piledriver	30.11	26.51	56.62
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/2016. Premium Pay: Add \$.65/hr for Piledriver Loftsman; Add \$.75/hr for Sheet Piling Loftsman. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Roofer or Waterproofer	22.15	8.39	30.54
Teledata Technician or Installer	24.89	13.24	38.13
Tuckpointer, Caulker or Cleaner	33.76	17.82	51.58
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.64	46.24
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38

**TRUCK DRIVERS**

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	28.12	15.55	43.67
Articulated, Euclid, Dumptror, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Pavement Marking Vehicle	23.16	21.14	44.30
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	28.12	15.55	43.67

**LABORERS**

General Laborer	30.13	15.14	45.27
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	18.00	0.00	18.00
Landscaper	30.13	15.14	45.27
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Flagperson or Traffic Control Person	26.76	15.14	41.90
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.00	0.49	18.49
Railroad Track Laborer	17.00	2.86	19.86

### HEAVY EQUIPMENT OPERATORS

Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).	37.72	21.15	58.87
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.	37.22	21.15	58.37
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor);	36.72	21.15	57.87

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84

SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 28, 2015

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits		Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler .....	\$30.67 .....	15.55			
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); .....	30.77 .....	15.55			
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man .....	30.82 .....	15.55			
Group 4: Line and Grade Specialist .....	31.02 .....	15.55			
Group 5: Blaster and Powderman .....	30.87 .....	15.55			
Group 6: Flagperson; Traffic Control .....	27.30 .....	15.55			
			<u>Truck Drivers:</u>		
			1 & 2 Axles .....	25.18 .....	18.31
			Three or More Axles; Euclids, Dumptr & Articulated, Truck Mechanic .....	25.38 .....	18.31

CLASSES OF LABORER AND MECHANICS

Bricklayer .....	28.67 .....	12.55
Carpenter .....	30.48 .....	15.80
Millwright .....	32.11 .....	15.80
Piledriverman .....	30.98 .....	15.80
Ironworker .....	32.85 .....	21.84
Cement Mason/Concrete Finisher .....	32.65 .....	17.44
Electrician .....	See Page 3	
Line Construction		
Lineman .....	40.81 .....	32% + 5.00
Heavy Equipment Operator .....	38.77 .....	32% + 5.00
Equipment Operator .....	32.65 .....	32% + 5.00
Heavy Groundman Driver .....	26.78 .....	14.11
Light Groundman Driver .....	24.86 .....	13.45
Groundsman .....	22.45 .....	32% + 5.00
Millwrights (N. of I-94) .....	25.37 .....	13.53
Painter, Brush .....	26.70 .....	17.65
Painter, Spray, Structural Steel, Bridges .....	27.70 .....	17.65
Well Drilling:		
Well Driller .....	16.52 .....	3.70

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 2, 2015; Modification #1 dated January 16, 2015; Modification #2 dated March 20, 2015; Modification #3 dated April 10, 2015; Modification #4 dated May 22, 2015; Modification #5 dated June 12, 2015; Modification #6 dated June 26, 2015; Modification #7 dated July 31, 2015; Modification #8 dated August 7, 2015; Modification #9 dated August 28, 2015.

SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 28, 2015

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits		Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler .....	\$30.67 .....	15.55			
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); .....	30.77 .....	15.55			
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man .....	30.82 .....	15.55			
Group 4: Line and Grade Specialist .....	31.02 .....	15.55			
Group 5: Blaster and Powderman .....	30.87 .....	15.55			
Group 6: Flagperson; Traffic Control .....	27.30 .....	15.55			
			<u>Truck Drivers:</u>		
			1 & 2 Axles .....	25.18 .....	18.31
			Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic .....	25.38 .....	18.31

CLASSES OF LABORER AND MECHANICS

Bricklayer .....	30.77 .....	16.62
Carpenter .....	30.48 .....	15.80
Millwright .....	32.11 .....	15.80
Piledriverman .....	30.98 .....	15.80
Ironworker .....	29.27 .....	23.96
Cement Mason/Concrete Finisher .....	32.65 .....	17.44
Electrician .....	See Page 3	
Line Construction		
Lineman .....	40.81 .....	32% + 5.00
Heavy Equipment Operator .....	38.77 .....	32% + 5.00
Equipment Operator .....	32.65 .....	32% + 5.00
Heavy Groundman Driver .....	26.78 .....	14.11
Light Groundman Driver .....	24.86 .....	13.45
Groundsman .....	22.45 .....	32% + 5.00
Painters .....	23.74 .....	11.72
Well Drilling:		
Well Driller .....	16.52 .....	3.70

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(iii)). Includes Modification #0 dated January 2, 2015; Modification #1 dated January 16, 2015; Modification #2 dated March 20, 2015; Modification #3 dated April 10, 2015; Modification #4 dated May 22, 2015; Modification #5 dated June 12, 2015; Modification #6 dated June 26, 2015; Modification #7 dated July 31, 2015; Modification #8 dated August 7, 2015; Modification #9 dated August 28, 2015.

SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 28, 2015

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer .....	\$38.27	\$21.55	(scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator. ....	\$37.27	\$21.55
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer. ....	\$37.77	\$21.55	Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner. ....	\$37.01	\$21.55
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper. ....	\$36.72	\$21.55
			Group 6: Off - road material hauler with or without ejector.....	\$30.82	\$21.55
			Premium Pay: EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hours		

SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 28, 2015

LABORERS CLASSIFICATION:

Rates

Benefits

			Area 4 -	BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.
Electricians				
Area 1 .....	\$29.60	26.5%+ 9.15		
Area 2:				
Electricians.....	31.21	18.92	Area 5 -	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area 3:				
Electrical contracts under \$130,000 .....	26.24	16.85		
Electrical contracts over \$130,000 .....	29.41	16.97		
Area 4: .....	29.84	29.50% + 9.37		
Area 5 .....	28.96	24.85% + 9.70		
Area 6 .....	35.25	19.30	Area 6 -	KENOSHA COUNTY
Area 8				
Electricians.....	31.30	24.93% + 10.40	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 9:				
Electricians.....	35.75	19.87		
Area 10 .....	29.64	20.54	Area 9 -	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 11 .....	32.54	24.07		
Area 12 .....	32.87	19.23	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 13 .....	35.13	23.09		
Teledata System Installer				
Area 14			Area 11 -	DOUGLAS COUNTY
Installer/Technician .....	22.50	12.72		
Sound & Communications			Area 12 -	RACINE (except Burlington township) COUNTY
Area 15				
Installer .....	16.47	14.84	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Technician .....	26.00	17.70	Area 14 -	Statewide.
Area 1 -			Area 15 -	DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.
CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.				
Area 2 -				
ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON and WASHBURN COUNTIES				
Area 3 -				
FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)				



**FEBRUARY 1999**

**NOTICE TO BIDDERS  
WAGE RATE DECISION**

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.



## Wisconsin Department of Transportation

PAGE: 1

DATE: 09/23/15

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20151110008PROJECT(S):  
6090-06-75  
6090-06-76FEDERAL ID(S):  
WISC 2015572  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

## SECTION 0001 Contract Items

0010	201.0120 Clearing	416.000 ID	.	.	.	.
0020	201.0220 Grubbing	416.000 ID	.	.	.	.
0030	203.0200 Removing Old Structure (station) 01. 27+95	LUMP	LUMP	.	.	.
0040	204.0100 Removing Pavement	24,272.000 SY	.	.	.	.
0050	204.0150 Removing Curb & Gutter	1,442.000 LF	.	.	.	.
0060	204.0155 Removing Concrete Sidewalk	4,765.000 SY	.	.	.	.
0070	204.0185 Removing Masonry	13.000 CY	.	.	.	.
0080	204.0195 Removing Concrete Bases	10.000 EACH	.	.	.	.
0090	204.0210 Removing Manholes	32.000 EACH	.	.	.	.
0100	204.0220 Removing Inlets	53.000 EACH	.	.	.	.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0245 Removing Storm Sewer (size) 01. 12-Inch	1,439.000 LF	.		.	
0120	204.0245 Removing Storm Sewer (size) 02. 15-Inch	256.000 LF	.		.	
0130	204.0245 Removing Storm Sewer (size) 03. 18-Inch	1,730.000 LF	.		.	
0140	204.0245 Removing Storm Sewer (size) 04. 21-Inch	45.000 LF	.		.	
0150	204.0245 Removing Storm Sewer (size) 05. 24-Inch	1,866.000 LF	.		.	
0160	204.0245 Removing Storm Sewer (size) 06. 30-Inch	1,374.000 LF	.		.	
0170	204.0245 Removing Storm Sewer (size) 07. 36-Inch	1,176.000 LF	.		.	
0180	204.0245 Removing Storm Sewer (size) 08. 42-Inch	55.000 LF	.		.	
0190	204.9090.S Removing (item description) 01. Retaining Wall & Steps	45.000 LF	.		.	
0200	204.9105.S Removing (item description) 01. Traffic Signal Equipment WIS 49 & Beaver Dam St/Brandon St Intersection	LUMP	LUMP		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0210	204.9105.S Removing (item description) 02. Overhead Sign Support Station 55+74 RT	LUMP	LUMP			.
0220	204.9105.S Removing (item description) 03. Overhead Sign Support Station 59+91 LT	LUMP	LUMP			.
0230	204.9105.S Removing (item description) 04. Overhead Sign Support Station 5 'BD' +45 LT	LUMP	LUMP			.
0240	204.9105.S Removing (item description) 05. Overhead Sign Support Station 2 'BD' +72 RT	LUMP	LUMP			.
0250	204.9105.S Removing (item description) 06. Care'n Cleaners Sign Station 47+16	LUMP	LUMP			.
0260	205.0100 Excavation Common	35,877.000 CY	.		.	.
0270	206.2000 Excavation for Structures Culverts (structure) 01. C-20-155	LUMP	LUMP			.
0280	209.0200.S Backfill Controlled Low Strength	1.100 CY	.		.	.
0290	210.0100 Backfill Structure	1,200.000 CY	.		.	.

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			DOLLARS	CTS	DOLLARS	CTS
0300	213.0100 Finishing Roadway (project) 01. 6090-06-75	1.000 EACH	.		.	
0310	305.0110 Base Aggregate Dense 3/4-Inch	78.000 TON	.		.	
0320	305.0120 Base Aggregate Dense 1 1/4-Inch	18,745.000 TON	.		.	
0330	312.0110 Select Crushed Material	22,455.000 TON	.		.	
0340	415.0090 Concrete Pavement 9-Inch	27,583.000 SY	.		.	
0350	415.0210 Concrete Pavement Gaps	6.000 EACH	.		.	
0360	415.1090 Concrete Pavement HES 9-Inch	2,862.000 SY	.		.	
0370	416.0160 Concrete Driveway 6-Inch	1,415.000 SY	.		.	
0380	416.0260 Concrete Driveway HES 6-Inch	76.000 SY	.		.	
0390	416.0620 Drilled Dowel Bars	44.000 EACH	.		.	
0400	440.4410.S Incentive IRI Ride	5,066.000 DOL	1.00000		5066.00	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0410	455.0120 Asphaltic Material PG64-28	64.000 TON	.		.	
0420	455.0605 Tack Coat	537.000 GAL	.		.	
0430	460.1110 HMA Pavement Type E-10	1,150.000 TON	.		.	
0440	460.2000 Incentive Density HMA Pavement	740.000 DOL	1.00000		740.00	
0450	465.0105 Asphaltic Surface	182.000 TON	.		.	
0460	465.0120 Asphaltic Surface Driveways and Field Entrances	396.000 TON	.		.	
0470	504.0100 Concrete Masonry Culverts	285.000 CY	.		.	
0480	505.0410 Bar Steel Reinforcement HS Culverts	50,170.000 LB	.		.	
0490	516.0500 Rubberized Membrane Waterproofing	39.000 SY	.		.	
0500	520.8000 Concrete Collars for Pipe	9.000 EACH	.		.	
0510	521.0118 Culvert Pipe Corrugated Steel 18-Inch	80.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0520	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH 1.000	.		.	
0530	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH 1.000	.		.	
0540	523.0538 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 38x60-Inch	EACH 1.000	.		.	
0550	601.0409 Concrete Curb & Gutter 30-Inch Type A	LF 11,970.000	.		.	
0560	601.0411 Concrete Curb & Gutter 30-Inch Type D	LF 822.000	.		.	
0570	601.0600 Concrete Curb Pedestrian	LF 75.000	.		.	
0580	602.0405 Concrete Sidewalk 4-Inch	SF 50,413.000	.		.	
0590	602.0415 Concrete Sidewalk 6-Inch	SF 7,865.000	.		.	
0600	602.0505 Curb Ramp Detectable Warning Field Yellow	SF 456.000	.		.	
0610	602.1500 Concrete Steps	SF 74.000	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0620	606.0200 Riprap Medium	37.000 CY	.		.	
0630	606.0300 Riprap Heavy	205.000 CY	.		.	
0640	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	2,533.000 LF	.		.	
0650	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	25.000 LF	.		.	
0660	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	984.000 LF	.		.	
0670	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	2,927.000 LF	.		.	
0680	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	352.000 LF	.		.	
0690	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	727.000 LF	.		.	
0700	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	78.000 LF	.		.	
0710	610.0138 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	561.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0720	611.0530 Manhole Covers Type J	31.000 EACH	.		.	
0730	611.0612 Inlet Covers Type C	5.000 EACH	.		.	
0740	611.0624 Inlet Covers Type H	89.000 EACH	.		.	
0750	611.0645 Inlet Covers Type MS-A	3.000 EACH	.		.	
0760	611.0651 Inlet Covers Type S	17.000 EACH	.		.	
0770	611.2004 Manholes 4-FT Diameter	17.000 EACH	.		.	
0780	611.2005 Manholes 5-FT Diameter	2.000 EACH	.		.	
0790	611.2006 Manholes 6-FT Diameter	11.000 EACH	.		.	
0800	611.2008 Manholes 8-FT Diameter	6.000 EACH	.		.	
0810	611.3003 Inlets 3-FT Diameter	14.000 EACH	.		.	
0820	611.3004 Inlets 4-FT Diameter	7.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0830	611.3230 Inlets 2x3-FT	85.000				
		EACH	.		.	
0840	611.3901 Inlets Median 1 Grate	1.000				
		EACH	.		.	
0850	611.3902 Inlets Median 2 Grate	1.000				
		EACH	.		.	
0860	611.8120.S Cover Plates Temporary	5.000				
		EACH	.		.	
0870	616.0700.S Fence Safety	1,620.000				
		LF	.		.	
0880	618.0100 Maintenance And Repair of Haul Roads (project) 01. 6090-06-75	1.000				
		EACH	.		.	
0890	619.1000 Mobilization	1.000				
		EACH	.		.	
0900	623.0200 Dust Control Surface Treatment	43,000.000				
		SY	.		.	
0910	624.0100 Water	220.000				
		MGAL	.		.	
0920	625.0100 Topsoil	16,600.000				
		SY	.		.	
0930	627.0200 Mulching	700.000				
		SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0940	628.1504 Silt Fence	772.000				
		LF	.		.	
0950	628.1520 Silt Fence Maintenance	772.000				
		LF	.		.	
0960	628.1905 Mobilizations Erosion Control	5.000				
		EACH	.		.	
0970	628.1910 Mobilizations Emergency Erosion Control	8.000				
		EACH	.		.	
0980	628.2006 Erosion Mat Urban Class I Type A	16,040.000				
		SY	.		.	
0990	628.2027 Erosion Mat Class II Type C	560.000				
		SY	.		.	
1000	628.7005 Inlet Protection Type A	45.000				
		EACH	.		.	
1010	628.7010 Inlet Protection Type B	4.000				
		EACH	.		.	
1020	628.7015 Inlet Protection Type C	131.000				
		EACH	.		.	
1030	628.7020 Inlet Protection Type D	6.000				
		EACH	.		.	
1040	628.7504 Temporary Ditch Checks	8.000				
		LF	.		.	

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N/A

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1050	628.7555 Culvert Pipe Checks	4.000 EACH	.		.	
1060	628.7560 Tracking Pads	3.000 EACH	.		.	
1070	629.0210 Fertilizer Type B	11.000 CWT	.		.	
1080	630.0140 Seeding Mixture No. 40	297.000 LB	.		.	
1090	634.0614 Posts Wood 4x6-Inch X 14-FT	5.000 EACH	.		.	
1100	634.0616 Posts Wood 4x6-Inch X 16-FT	15.000 EACH	.		.	
1110	634.0620 Posts Wood 4x6-Inch X 20-FT	1.000 EACH	.		.	
1120	637.2210 Signs Type II Reflective H	519.000 SF	.		.	
1130	637.2215 Signs Type II Reflective H Folding	25.200 SF	.		.	
1140	637.2230 Signs Type II Reflective F	51.200 SF	.		.	
1150	638.2102 Moving Signs Type II	20.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1160	638.2602 Removing Signs Type II	66.000 EACH	.		.	
1170	638.3000 Removing Small Sign Supports	36.000 EACH	.		.	
1180	638.4000 Moving Small Sign Supports	16.000 EACH	.		.	
1190	642.5401 Field Office Type D	1.000 EACH	.		.	
1200	643.0100 Traffic Control (project) 01. 6090-06-75	1.000 EACH	.		.	
1210	643.0410 Traffic Control Barricades Type II	10,024.000 DAY	.		.	
1220	643.0420 Traffic Control Barricades Type III	14,650.000 DAY	.		.	
1230	643.0705 Traffic Control Warning Lights Type A	24,704.000 DAY	.		.	
1240	643.0715 Traffic Control Warning Lights Type C	500.000 DAY	.		.	
1250	643.0900 Traffic Control Signs	18,444.000 DAY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1260	643.0920 Traffic Control Covering Signs Type II	1.000 EACH	.		.	
1270	643.1000 Traffic Control Signs Fixed Message	468.000 SF	.		.	
1280	643.1050 Traffic Control Signs PCMS	105.000 DAY	.		.	
1290	643.2000 Traffic Control Detour (project) 01. 6090-06-75	1.000 EACH	.		.	
1300	643.3000 Traffic Control Detour Signs	33,206.000 DAY	.		.	
1310	645.0120 Geotextile Fabric Type HR	400.000 SY	.		.	
1320	646.0106 Pavement Marking Epoxy 4-Inch	24,386.000 LF	.		.	
1330	646.0126 Pavement Marking Epoxy 8-Inch	1,137.000 LF	.		.	
1340	646.0600 Removing Pavement Markings	275.000 LF	.		.	
1350	647.0166 Pavement Marking Arrows Epoxy Type 2	10.000 EACH	.		.	

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6090-06-75  
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WISC 2015572  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1360	647.0206 Pavement Marking Arrows Bike Lane Epoxy	45.000 EACH	.		.	
1370	647.0306 Pavement Marking Symbols Bike Lane Epoxy	45.000 EACH	.		.	
1380	647.0356 Pavement Marking Words Epoxy	5.000 EACH	.		.	
1390	647.0456 Pavement Marking Curb Epoxy	4,091.000 LF	.		.	
1400	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	136.000 LF	.		.	
1410	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	1,761.000 LF	.		.	
1420	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	2,290.000 LF	.		.	
1430	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	70.000 LF	.		.	
1440	649.0600 Temporary Pavement Marking Removable Tape 6-Inch	2,730.000 LF	.		.	
1450	650.4000 Construction Staking Storm Sewer	147.000 EACH	.		.	
1460	650.4500 Construction Staking Subgrade	7,184.000 LF	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1470	650.5000 Construction Staking Base	353.000 LF	.		.	
1480	650.5500 Construction Staking Curb Gutter and Curb & Gutter	822.000 LF	.		.	
1490	650.7000 Construction Staking Concrete Pavement	6,582.000 LF	.		.	
1500	650.8500 Construction Staking Electrical Installations (project) 01. 6090-06-75	LUMP	LUMP		.	
1510	650.9910 Construction Staking Supplemental Control (project) 01. 6090-06-75	LUMP	LUMP		.	
1520	650.9920 Construction Staking Slope Stakes	7,184.000 LF	.		.	
1530	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	8,457.000 LF	.		.	
1540	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	162.000 LF	.		.	
1550	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	1,192.000 LF	.		.	
1560	652.0800 Conduit Loop Detector	1,836.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1570	653.0135 Pull Boxes Steel 24x36-Inch	13.000 EACH	.		.	
1580	653.0140 Pull Boxes Steel 24x42-Inch	10.000 EACH	.		.	
1590	653.0905 Removing Pull Boxes	8.000 EACH	.		.	
1600	654.0101 Concrete Bases Type 1	4.000 EACH	.		.	
1610	654.0102 Concrete Bases Type 2	4.000 EACH	.		.	
1620	654.0105 Concrete Bases Type 5	45.000 EACH	.		.	
1630	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	.		.	
1640	654.0224 Concrete Control Cabinet Bases Type L24	2.000 EACH	.		.	
1650	655.0210 Cable Traffic Signal 3-14 AWG	192.000 LF	.		.	
1660	655.0230 Cable Traffic Signal 5-14 AWG	332.000 LF	.		.	
1670	655.0270 Cable Traffic Signal 15-14 AWG	1,323.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1680	655.0310 Cable Type UF 2-12 AWG	309.000 LF	.		.	
1690	655.0515 Electrical Wire Traffic Signals 10 AWG	2,333.000 LF	.		.	
1700	655.0610 Electrical Wire Lighting 12 AWG	7,474.000 LF	.		.	
1710	655.0620 Electrical Wire Lighting 8 AWG	14,924.000 LF	.		.	
1720	655.0625 Electrical Wire Lighting 6 AWG	14,924.000 LF	.		.	
1730	655.0700 Loop Detector Lead In Cable	2,431.000 LF	.		.	
1740	655.0800 Loop Detector Wire	3,530.000 LF	.		.	
1750	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. 56+66.5, 59.5' RT	LUMP	LUMP		.	
1760	656.0300 Electrical Service Unmetered (location) 01. 24+10, 42.5' LT	LUMP	LUMP		.	
1770	656.0300 Electrical Service Unmetered (location) 02. 56+65.8, 50.5' RT	LUMP	LUMP		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1780	657.0100 Pedestal Bases	4.000				
	EACH		.		.	
1790	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	49.000				
	EACH		.		.	
1800	657.0305 Poles Type 2	2.000				
	EACH		.		.	
1810	657.0310 Poles Type 3	2.000				
	EACH		.		.	
1820	657.0322 Poles Type 5-Aluminum	45.000				
	EACH		.		.	
1830	657.0420 Traffic Signal Standards Aluminum 13-FT	4.000				
	EACH		.		.	
1840	657.0590 Trombone Arms 20-FT	4.000				
	EACH		.		.	
1850	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	47.000				
	EACH		.		.	
1860	658.0110 Traffic Signal Face 3-12 Inch Vertical	8.000				
	EACH		.		.	
1870	658.0155 Traffic Signal Face 3-12 Inch Horizontal	4.000				
	EACH		.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1880	658.0215 Backplates Signal Face 3 Section 12-Inch	12.000 EACH	.		.	
1890	658.0416 Pedestrian Signal Face 16-Inch	8.000 EACH	.		.	
1900	658.0600 Led Modules 12-Inch Red Ball	12.000 EACH	.		.	
1910	658.0605 Led Modules 12-Inch Yellow Ball	12.000 EACH	.		.	
1920	658.0610 Led Modules 12-Inch Green Ball	12.000 EACH	.		.	
1930	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	8.000 EACH	.		.	
1940	658.5069 Signal Mounting Hardware (location) 01. Beaver Dam / Brandon St.	LUMP	LUMP		.	
1950	659.0115 Luminaires Utility HPS 150 Watts	47.000 EACH	.		.	
1960	659.2124 Lighting Control Cabinets 120/240 24-Inch	2.000 EACH	.		.	
1970	690.0150 Sawing Asphalt	3,136.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1980	690.0250 Sawing Concrete	1,301.000				
		LF	.		.	
1990	715.0415 Incentive Strength Concrete Pavement	2,241.000	1.00000		2241.00	
		DOL				
2000	715.0502 Incentive Strength Concrete Structures	1,710.000	1.00000		1710.00	
		DOL				
2010	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	7,500.000	5.00000		37500.00	
		HRS				
2020	ASP.1T0G On-the-Job Training Graduate at \$5. 00/HR	2,000.000	5.00000		10000.00	
		HRS				
2030	SPV.0035 Special 52. Trench Rock Excavation	1,310.000				
		CY	.		.	
2040	SPV.0045 Special 01. Temporary Curb Ramp	6,904.000				
		DAY	.		.	
2050	SPV.0045 Special 02. Temporary Crosswalk	1,048.000				
		DAY	.		.	
2060	SPV.0060 Special 01. U-Channel Sign Post, 13-FT	36.000				
		EACH	.		.	
2070	SPV.0060 Special 02. U-Channel Sign Post, 14-FT	9.000				
		EACH	.		.	
2080	SPV.0060 Special 03. U-Channel Sign Post, 16-FT	6.000				
		EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2090	SPV.0060 Special 05. Traffic Control Sidewalk Detour	28.000 EACH	.		.	
2100	SPV.0060 Special 16. Connect Private Pipe	29.000 EACH	.		.	
2110	SPV.0060 Special 17. 18"X36" Reducer	1.000 EACH	.		.	
2120	SPV.0060 Special 18. Box Culvert Grate	4.000 EACH	.		.	
2130	SPV.0060 Special 19. Storm Cleanout	9.000 EACH	.		.	
2140	SPV.0060 Special 31. Pole Accessory Weather Proof Duplex Outlet	45.000 EACH	.		.	
2150	SPV.0060 Special 32. Pole Accessory Banner Hanger & Flag Mount	45.000 EACH	.		.	
2160	SPV.0060 Special 33. Accessory Circuit Clock Timer	4.000 EACH	.		.	
2170	SPV.0060 Special 34. Removing Base, Pole & Luminaire	36.000 EACH	.		.	
2180	SPV.0060 Special 41. Traffic Signal Controller & Cabinet Fully Actuated 8 Phase	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2190	SPV.0060 Special 42. Parking Lot Bollard	5.000 EACH	.		.	
2200	SPV.0060 Special 43. Audible-Tactile Pedestrian Signal System	8.000 EACH	.		.	
2210	SPV.0060 Special 51. Utility Line Openings	4.000 EACH	.		.	
2220	SPV.0060 Special 52. Sanitary Manhole Special	17.000 EACH	.		.	
2230	SPV.0060 Special 53. Sanitary Drop Manhole Special	3.000 EACH	.		.	
2240	SPV.0060 Special 54. Sanitary Manhole Covers Type J Special	20.000 EACH	.		.	
2250	SPV.0060 Special 55. Sanitary Wye 8-Inch Main Special	62.000 EACH	.		.	
2260	SPV.0060 Special 56. Sanitary Wye 10-Inch Main Special	14.000 EACH	.		.	
2270	SPV.0060 Special 57. Water Valve & Box 6-Inch Special	20.000 EACH	.		.	
2280	SPV.0060 Special 58. Water Valve & Box 8-Inch Special	13.000 EACH	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2290	SPV.0060 Special 59. Water Valve & Box 10-Inch Special	13.000 EACH	.		.	
2300	SPV.0060 Special 60. Live Tapping Water Valve & Box 4-Inch Special	1.000 EACH	.		.	
2310	SPV.0060 Special 61. Live Tapping Water Valve & Box 8-Inch Special	1.000 EACH	.		.	
2320	SPV.0060 Special 62. Fire Hydrant Special	16.000 EACH	.		.	
2330	SPV.0060 Special 63. Tees 8"X4"X8" Special	1.000 EACH	.		.	
2340	SPV.0060 Special 64. Tees 8"X8"X8" Special	2.000 EACH	.		.	
2350	SPV.0060 Special 65. Tees 10"X6"X10" Special	20.000 EACH	.		.	
2360	SPV.0060 Special 66. Tees 10"X8"X10" Special	6.000 EACH	.		.	
2370	SPV.0060 Special 67. Crosses 10"X8" Special	5.000 EACH	.		.	
2380	SPV.0060 Special 68. Bend 45-Degree 8-Inch Special	23.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2390	SPV.0060 Special 69. Bend 90-Degree 8-Inch Special	2.000 EACH	.		.	
2400	SPV.0060 Special 70. Bend 22.5-Degree 10-Inch Special	4.000 EACH	.		.	
2410	SPV.0060 Special 71. Bend 45-Degree 10-Inch Special	6.000 EACH	.		.	
2420	SPV.0060 Special 72. Reducer 8"X4" Special	1.000 EACH	.		.	
2430	SPV.0060 Special 73. Reducer 8"X6" Special	6.000 EACH	.		.	
2440	SPV.0060 Special 74. Plug 8-Inch Special	2.000 EACH	.		.	
2450	SPV.0060 Special 75. Plug 10-Inch Special	1.000 EACH	.		.	
2460	SPV.0060 Special 76. Corporation, Curb Stop & Box (Set) Special	73.000 EACH	.		.	
2470	SPV.0060 Special 77. Temporary Water Service Special	1.000 EACH	.		.	
2480	SPV.0090 Special 01. Pipe Underdrain Wrapped 6-Inch and Aggregate	12,371.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2490	SPV.0090 Special 02. Concrete Curb & Gutter HES 30-Inch Type A	208.000 LF	.		.	
2500	SPV.0090 Special 03. Concrete Curb & Gutter 30-Inch Type A Special	173.000 LF	.		.	
2510	SPV.0090 Special 04. Concrete Curb & Gutter Type Special Parking Lot	62.000 LF	.		.	
2520	SPV.0090 Special 05. Temporary Pedestrian Safety Fence	1,755.000 LF	.		.	
2530	SPV.0090 Special 16. PVC Pipe 4-Inch	106.000 LF	.		.	
2540	SPV.0090 Special 17. PVC Pipe 8-Inch	472.000 LF	.		.	
2550	SPV.0090 Special 18. PVC Pipe 10-Inch	17.000 LF	.		.	
2560	SPV.0090 Special 19. PVC Pipe 12-Inch	30.000 LF	.		.	
2570	SPV.0090 Special 20. Tracer Wire	625.000 LF	.		.	
2580	SPV.0090 Special 51. Sanitary Sewer Pipe 8-Inch Special	4,462.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2590	SPV.0090 Special 52. Sanitary Sewer Pipe 10-Inch Special	1,093.000 LF	.		.	
2600	SPV.0090 Special 53. Sanitary Lateral 4-Inch or 6-Inch Special	2,782.000 LF	.		.	
2610	SPV.0090 Special 54. Water Main 4-Inch Special	10.000 LF	.		.	
2620	SPV.0090 Special 55. Water Main 6-Inch Special	447.000 LF	.		.	
2630	SPV.0090 Special 56. Water Main 8-Inch Special	1,159.000 LF	.		.	
2640	SPV.0090 Special 57. Water Main 10-Inch Special	6,114.000 LF	.		.	
2650	SPV.0090 Special 58. Steel Casing Pipe 18-Inch Special	80.000 LF	.		.	
2660	SPV.0090 Special 59. Water Service 1-Inch to 2-Inch Special	2,685.000 LF	.		.	
2670	SPV.0105 Special 01. Concrete Pavement Joint Layout	LUMP	LUMP		.	
2680	SPV.0105 Special 16. Railing Steel Type C2 Galvanized Pedestrian C-20-155	LUMP	LUMP		.	

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			DOLLARS	CTS	DOLLARS	CTS
2690	SPV.0105 Special 17. Temporary Bypass Channel	LUMP	LUMP			.
2700	SPV.0105 Special 31. Removing Lighting Conduit & Wire	LUMP	LUMP			.
2710	SPV.0105 Special 51. Remove Existing Sanitary Structures	LUMP	LUMP			.
2720	SPV.0105 Special 52. Remove Existing Water Main Structures	LUMP	LUMP			.
2730	SPV.0165 Special 01. Remove & Reset Pavers	20.000 SF	.			.
2740	SPV.0165 Special 02. Concrete Sidewalk HES 6-Inch	741.000 SF	.			.
2750	SPV.0165 Special 03. Stone Mulch	799.000 SF	.			.
2760	SPV.0180 Special 01. Geogrid Reinforcement	38,490.000 SY	.			.
2770	SPV.0195 Special 01. Excavation Hauling And Disposal of Cont Soil And Mngmt of Cont Groundwater	134.000 TON	.			.
	SECTION 0001 TOTAL					.
	TOTAL BID					.



**PLEASE ATTACH SCHEDULE OF ITEMS HERE**