## **HIGHWAY WORK PROPOSAL**

Proposal Number: 1 3

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

FEDERAL PROJECT ID **PROJECT DESCRIPTION** COUNTY STATE PROJECT ID **HIGHWAY** Zoo IC, 2017 TMP Projects Milwaukee/ 1060-39-90 Var Hwy Various Locations, Mke & Wauk Co Waukesha Milwaukee WISC 2017 102 IH 41 **USH 45** 1360-09-71 Intersection with Capitol Drive

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

Proposal Guaranty Required, \$ 75,000.00	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: March 14, 2017 Time (Local Time): 9:00 AM	SAMPLE
Time (Local Time). 9.00 Aivi	
Contract Completion Time	NOT FOR BIDDING PURPOSES
November 1, 2017	NOTION BIDDING FOR GOLD
Assigned Disadvantaged Business Enterprise Goal	This contract is exempt from federal oversight.
25%	

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.

roposal bid.
n submitting an electronic bid on the Internet.
(Bidder Signature)
(Print or Type Bidder Name)
(Bidder Title)

#### For Department Use Only

Type of Work

Removals, excavation common, base aggregate, concrete pavement, HMA pavement, concrete curb and gutter, concrete sidewalk, storm sewer, erosion control, restoration items, pavement marking, signing, lighting, FTMS, temporary and permanent traffic signals, traffic control and other incidental items.

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

- 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: <a href="http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

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<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/after 5:00 P.M.">http://www.bidx.com/after 5:00 P.M.</a> 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<sup>TM</sup> on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

  <a href="http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

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

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

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

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

- (1) Do the following before submitting the bid:
  - 1. Have a properly executed annual bid bond on file with the department.
  - 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
  - 1. Download the latest schedule of items reflecting all addenda from the Bid Express web site.
  - 2. Use 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 TM software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express Meb site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the 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.
  - 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 Corpor	ate Seal)		
(Signature and Title)			
(Company Name)			
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTARY FOR PRINCIPAL		NOTARY FOR SURETY	
(I)	Date)	(Dat	te)
State of Wisconsin	)	State of Wisconsin	)
	) ss. County )		) ss. _County )
On the above date, this instrument named person(s).	was acknowledged before me by the	On the above date, this instrument w named person(s).	as acknowledged before me by the
(Signature, Notary Pu	ublic, State of Wisconsin)	(Signature, Notary Publ	ic, State of Wisconsin)
(Print or Type Name, Nota	ry Public, State of Wisconsin)	(Print or Type Name, Notary	Public, State of Wisconsin)
(Date Comn	nission Expires)	(Date Commis	sion Expires)

Notary Seal Notary Seal

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

## **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

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

(Signature of Authorized Contractor Representative)

#### March 2010

## LIST OF SUBCONTRACTORS

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

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

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

#### **DECEMBER 2000**

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

## **Instructions for Certification**

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

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

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

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

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

# **Special Provisions**

## **Table of Contents**

Article	e Description	Page #
1.	General	5
2.	Scope of Work.	
3.	Prosecution and Progress.	5
4.	Lane Rental Assessment.	
5.	Traffic.	18
6.	Holiday and Special Event Work Restrictions	21
7.	Utilities	22
8.	Other Contracts.	45
9.	Railroad Insurance and Coordination.	46
10.	Erosion Control.	47
11.	Public Convenience and Safety.	48
12.	Traffic Meetings and Traffic Control Scheduling.	48
13.	Available Documents.	49
14.	Contractor Notification.	49
15.	Contractor Document Submittals.	50
16.	Information to Bidders, Use of Recovered Material.	50
17.	Dust Control Implementation Plan.	50
18.	Maintaining Drainage.	
19.	Notice to Contractor – Incidental Clearing and Grubbing.	53
20.	Notice to Contractor – Traffic Signal Equipment Lead Time.	
21.	Notice to Contractor – Airport Operating Restrictions.	
22.	Notice to Contractor – Contamination Beyond Construction Limits.	
23.	Notice to Contractor – Signs and Signals– Capitol Drive at 118 <sup>th</sup> Street	54
24.	Notice to Contractor – OCIP Exclusions.	55
25.	Owner Controlled Insurance Program.	55
26.	CPM Progress Schedule.	67
27.	Force Account.	67
28.	Clearing and Grubbing, Emerald Ash Borer.	68
29.	Pavement Breaking Equipment.	71
30.	Removing Concrete Barrier.	
31.	Removing Concrete Bases, Item 204.0195.	72
32.	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item	
	205.0501.S.	
33.	Select Crushed Material	76
34.	QMP Base Aggregate.	76
35.	Catch Basins, Manholes, and Inlets.	84
36.	Sign Supports Concrete Masonry.	85
37.	Signs Type I and II.	86
38.	Field Facilities	87
39.	Traffic Control	87

40.	Covering Signs.	88
41.	Temporary Pedestrian Surface Asphalt, Item 644.1410.S.	
42.	Temporary Curb Ramp, Item 644.1601.S	
43.	Pavement Marking Grooved Contrast Wet Reflective Epoxy 4-Inch, Item	
	646.0842.S; 8-Inch 646.0844.S	91
44.	Temporary Pedestrian Safety Fence, Item 644.1616.S.	93
45.	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch, Item	
	646.0843.S.	94
46.	Pavement Marking Grooved Wet Reflective Tape 4-Inch, Item 646.0881.S; 8-Inch,	
	Item 646.0883.S.	
47.	Traffic Signals, General.	
48.	General Requirements for Electrical Work	
49.	Roadway Lighting Systems.	
50.	Install Conduit Into Existing Item, Item 652.0700.S.	
51.	Electrical Wiring.	104
52.	Electrical Service Meter Breaker Pedestal IH 41 SB Ramps & CTH EE, Item	
	656.0200.3001; IH 41 & STH 190, Item 656.0200.3051; W. North Avenue &	
	N. 124th Street, Item 656.0200.3101	
53.	Signal Housings.	
54.	Traffic Signal Faces.	
55.	Pedestrian Signal Face 16-Inch	
56.	Pedestrian Push Buttons	
57.	Intelligent Transportation Systems (ITS) – Control of Materials.	
58.	Intelligent Transportation Systems – General Requirements.	
59.	Install Pole Mounted Cabinet, Item 673.0225.S.	
60.	Install Ethernet Switch, Item 675.0400.S.	
61.	Removing 50-Foot Camera Pole, Item 677.9051.S.	
62.	Removing CCTV Camera, Item 677.9200.S.	
63.	Backfill Slurry, Item SPV.0035.0001.	
64.	Traffic Control Interim Freeway Lane Closure, Item SPV.0060.0001	
65.	Traffic Control Close-Open Freeway Ramp, Item SPV.0060.0002.	
66.	Reconnect Storm Sewer Laterals, Item SPV.0060.0003.	
67.	Concrete Barrier Type S56 End Anchor, Item SPV.0060.0164.	
68.	Removing Distribution Centers, Item SPV.0060.1001	
69.	Removing Luminaires Underdeck, Item SPV.0060.1002.	
70.	Removing Lighting Units, Item SPV.0060.1003	
71.	Lamp Disposal High Intensity Discharge, Item SPV.0060.1004.	
72.	Poles Type F, Item SPV.0060.1005.	
73.	Poles Type 5-Aluminum, Multi Arm Heights, Item SPV.0060.1006	
74.	Ground Rod, Item SPV.0060.2001.	
75.	Install Overhead Freeway DMS Full Matrix, Item SPV.0060.2002	
76. 77.	Pull Box Non-Conductive 24x42-Inch, Item SPV 0060.2004.	
77. 78.	Install 5.8 GHz Ethernet Bridge, Item SPV.0060.2005	
78. 79.	Removing Monotube Concrete Base, Item SPV.0060.3051	
80.	Backplates with Reflective Border 3 Section 12-Inch, Item SPV.0060.3052	
50.	Duckplaces with Reflective Dolder 5 Section 12-men, item 51 v.0000.3032	. 140

81.	Locating Monotube Traffic Signals, Item SPV.0060.3053.	. 129
82.	Concrete Bases Type 1 Spread Footing, Item SPV.0060.3054; Concrete Control	
	Cabinet Base Type 9 Special (Mod.), Item SPV.0060.3055.	. 130
83.	EVP Detector Type I, Item SPV.0060.3101.	
84.	EVP Discriminator Type IV, Item SPV.0060.3102	. 131
85.	EVP Confirmation Light Assembly Type I, Item SPV.0060.3103	. 133
86.	Traffic Signal Controller Programming, Item SPV.0060.3104.	
87.	Concrete Control Cabinet Base Type 9 Modified, Item SPV.0060.3105	
88.	Video Detection System Programming, Item SPV.0060.3106	
89.	Relocation Hydrant Assembly, Item SPV.0060.5001.	. 136
90.	Pavement Cleanup Project 1060-39-90, Item SPV.0075.0001; Project 1360-09-71, Item SPV.0075.0002	. 138
91.	Obstructions Sign Supports Concrete Masonry, Item SPV.0075.4000.	. 140
92.	Pipe Underdrain 6-Inch Special, Item SPV.0090.0001.	. 141
93.	Concrete Curb and Gutter 30-Inch Type A (Modified), Item SPV.0090.0002;	
	Concrete Curb and Gutter Integral 30-Inch Type D (Modified), Item SPV.0090.0003.	. 142
94.	Outdoor Rated Network Cable, Item SPV.0090.2001.	. 143
95.	Cable Type UF 2-14 AWG, Item SPV.0090.3001.	. 144
96.	Install State Supplied Video Detection Cable, Item SPV.0090.3002; Install State Supplied Cat-5e Cable, Item SPV.0090.3003	. 145
97.	Survey Project 1360-09-71, Item SPV.0105.0001; 1060-39-90, Item SPV.0105.0007.	
98.	Maintenance of Lighting Systems, Item SPV.0105.1001	
99.	Lighting System Integrator, Item SPV.0105.1002.	
100.	Lighting System Survey, Item SPV.0105.1003.	
101.	Remove Traffic Signals STH 190 & Industrial Road, Item SPV.0105.3001; IH 41 & STH 190, Item SPV.0105.3051.	
102.	Remove Traffic Signals USH 18 & STH 181, Item SPV.0105.3002.	
103.	Transport and Install State Furnished Traffic Signal Cabinet IH 41 SB Off Ramp & CTH EE, Item SPV.0105.3003; IH 41 & STH 190 SPV.0105.3052	
104.	Transporting Traffic Signal and Lighting Materials IH 41 SB Off Ramp & CTH EE,	. 137
104.	Item SPV.0105.3004; IH 41 & STH 190, SPV.0105.3053; W. North Avenue &	
	N. 124th Street, Item SPV.0105.3104	158
105.	Transporting and Installing State Furnished Radar Detection System IH 41 SB Off	. 150
	Ramp & CTH EE, Item SPV.0105.3005; IH 41 & STH 190, SPV.0105.3054	. 159
106.	Transporting and Installing State Furnished Autoscope Video Detection System USH 18 & STH 181, Item SPV.0105.3006; IH 41 Ramps & W. Burleigh Street,	1.61
107		. 161
107.	Covering Traffic Signal Equipment USH 18 & STH 181, Item SPV.0105.3007; STH 190 & Industrial Road, Item SPV.0105.3009.	. 162
108.	Remove Traffic Signals W. North Avenue & N. 124th Street, Item SPV.0105.3101; W. Center Street & N. 124th Street, Item SPV.0105.3102; W. Burleigh Street & N. 124th Street, Item SPV.0105.3103; W. Burleigh Street & N. 119th Street, Item	
	SPV.0105.3111; W. Burleigh Street & N. 114th Street, Item SPV.0105.3112	. 163

109.	Install State Furnished Municipal Traffic Signal Cabinet W. North Avenue &	
	N. 124th Street, Item SPV.0105.3105; W. Center Street & N. 124th Street, Item	
	SPV.0105.3106; W. Burleigh Street & N. 119th Street, Item SPV.0105.3113; W.	
	Burleigh Street & N. 114th Street, Item SPV.0105.3114.	. 165
110.	Video Vehicle Detection System W. North Avenue & N. 124th Street,	
	Item PV.0105.3107; W. Burleigh Street & N. 124th Street, Item SPV.0105.3109;	
	W. Burleigh Street & N. 119th Street, Item SPV.0105.3115; W. Burleigh Street &	
	N. 114th Street, Item SPV.0105.3116; W. Burleigh Street & N. 112th Street,	
	Item SPV.0105.3117	. 166
111.	Temporary Traffic Signals for Intersection Partial W. North Avenue & N. 124th	
	Street, Item SPV.0105.3108	. 172
112.	Operate and Maintain Traffic Signal W. Burleigh Street & N. 124th Street, Item	
	SPV.0105.3110.	. 173
113.	Concrete Pavement HES 8-Inch Special, Item SPV.0180.0001	. 174

#### SPECIAL PROVISIONS

#### 1. General.

Perform the work under this construction contract for Project 1060-39-90, Zoo IC 2017 TMP Projects, Various Locations, Mke and Wauk Co, Various Highways, Milwaukee and Waukesha County, Wisconsin and for Project 1360-09-71, IH 41, Intersection with Capitol Drive, USH 45, Milwaukee County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2017 Edition, as published by the department, and these special provisions.

Perform the hydrant work according to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest Edition (SSSW) and addendums. 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.

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 (20160607)

# 2. Scope of Work.

The work under this contract shall consist of adding temporary traffic signals, traffic signal upgrades, concrete (sidewalk, curb and gutter, and median) replacement, roadway reconstruction, concrete pavement, base course, grading, storm sewer, curb ramps removing pavement marking, pavement marking, signing, adding an overhead DMS and sign structure and restoration and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

# 3. Prosecution and Progress.

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

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

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

There are numerous existing utility facilities throughout the project limits. Most of these facilities will remain in place without adjustment except for a WE Energies Gas relocation on the southwest corner of STH 18 and STH 181. No other utility relocations are anticipated for this project. Contact Digger's Hotline in order to arrange utility locations. Adjust proposed landscape and any possible signal base locations as necessary and with approval of engineer to avoid conflict with existing utility facilities.

#### **Contractor Coordination**

Attend weekly scheduling meetings to discuss the near term schedule activities, address any long-term schedule issues, and discuss any relevant technical issues. Develop a rolling three-week schedule identifying the previous week worked and a two week "look ahead". Provide sufficient detail to include actual and planned activities and all the subcontractors for offsite and construction activities, addressing all activities including ramp and lane closure schedules to be performed and identifying issues requiring engineering action or input.

## **Portable Changeable Message Signs**

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

## Freeway and Ramp Work Restrictions

#### **Definitions**

The following definitions apply to this contract for freeway work restrictions:

**System Ramps** Freeway to freeway ramps

**Service Ramps** Freeway to/from local road ramps

#### **Weekday Peak Hours**

- 5:30 AM 9:00 AM Monday, Tuesday, Wednesday, Thursday, and Friday
- 2:00 PM 7:00 PM Monday, Tuesday, Wednesday, Thursday, and Friday

#### Weekday Midday

- 9:00 AM – 2:00 PM Monday, Tuesday, Wednesday, Thursday, and Friday

#### **Weekend Peak Hours**

- 10:00 AM – 7:00 PM Saturday, Sunday

## **Weekend Off-Peak Hours**

- 8:00 AM 10:00 AM Saturday, Sunday
- 7:00 PM 11:00 PM Saturday
- 7:00 PM 9:30 PM Sunday

#### **Weekday Off-Peak Hours**

- 7:00 PM 9:30 PM Monday, Tuesday, Wednesday, Thursday
- 7:00 PM 11:00 PM Friday

## **Night Time Hours**

- 9:30 PM 5:30 AM (Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM)
- 11:00 PM 8:00 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

## Full Freeway and System Ramp Closure/Hours

- 11:00 PM 4:30 AM (Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM)
- 11:00 PM 6 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

Do not close freeway lanes or shoulders and ensure that the freeways are entirely clear for traffic during Weekday Peak Hours, Weekday Midday, and Weekend Peak Hours. Close service ramps only during Night Time Hours, unless otherwise specified in the plan, or unless otherwise approved by the engineer for safety or operational reasons associated with other adjacent lane or freeway closures

## **Rolling Closure**

Short term freeway mainline rolling closures may be allowed for a maximum of 15 minutes for the removal and erection of sign structures, equipment moves across the road, or other required work as determined by the engineer. The department will allow short term rolling closures only between 2:00 AM and 4:00 AM, and they may only be performed by freeway law enforcement.

Obtain approval from the engineer before coordinating these closures with freeway law enforcement. Coordinate 14 calendar days in advance of closure. Present the scheduled time for the short term rolling closure at the weekly traffic meeting a minimum of one week prior to the closure.

SEF Rev. 14\_1212

#### **Closure Restrictions**

#### General

Full closure and detouring of freeway roads will be restricted to Full Roadway Closure Hours unless otherwise specified. The freeway may be closed to facilitate the removal of structures and erection of girders, storm sewer trunk line crossings, to perform work related to major traffic shifts and other work approved by the engineer. Provide signed detour routes, as shown in the plans, fully open and free of construction during all full roadway and system ramp closures.

Follow plan details for closures. Lane restrictions of the freeway beyond that shown on the traffic control plans are subject to lane rental assessments and must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer so that approval, or disapproval, is obtained at least three business days prior to any closure.

At any location on IH-41, at least one of the shoulders on either side of the roadway in each direction shall be open at all times. Shoulder closures shall be in accordance with the Standard Detail Drawings (SDD) and have the approval of the engineer.

Do not begin or continue any work that closes traffic lanes or ramps outside the allowed time periods specified in this contract. If the contractor fails to open freeway lanes of traffic and/or ramps to traffic by the specified times, assessments shown in the Lane Rental Assessment Table in the article Lane Rental Assessment will be placed upon the contractor based on the hourly rental rate for the closure type and hourly definition that the noncompliant closure occurs. The total assessment to the contractor will be the summation of the separate assessments for each lane and each ramp closure violation.

Permitting the contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the department of any of its rights under the contract.

#### **Local Street Closure Restrictions**

#### **Definitions**

The following definitions apply to this contract for local street closure restrictions:

#### **Peak Hours**

- 6:00 AM 9:00 AM Monday, Tuesday, Wednesday, Thursday, Friday
- 3:00 PM 7:00 PM Monday, Tuesday, Wednesday, Thursday
- 3:00 PM 9:00 PM Friday
- 11:00 AM 8:00 PM Saturday
- 1:00 PM 5:00 PM Sunday

#### **Off-Peak Hours**

- 9:00 AM 3:00 PM Monday, Tuesday, Wednesday, Thursday, Friday
- 7:00 PM 6:00 AM Monday, Tuesday, Wednesday, Thursday
- 9:00 PM 11:00 AM Friday PM to Saturday AM
- 8:00 PM 1:00 PM Saturday PM to Sunday PM
- 5:00 PM 6:00 AM Sunday PM to Monday AM

#### **Closure Restrictions**

Do not restrict traffic on eastbound US 18 (Bluemound Road) and southbound STH 181 (84<sup>th</sup> Street) prior to June 28, 2017 or as approved by the engineer.

Do not restrict traffic on any portion of the Capitol Drive intersection with IH41 and Capitol Drive Ramps 1 & 2 prior to July 1, 2017 and the activation of the traffic signals at the intersection of the IH41 Southbound ramps and Hampton Avenue, or as approved by the engineer.

Do not close local street traffic lanes or intersections and ensure that the local street traffic lanes are entirely clear for traffic during Peak Hours, except as shown in the traffic control plans. One local street traffic lane and/or the shoulder may be closed, but maintain at least one local street traffic lane open to traffic, during Off-Peak Hours. Close intersections only during Off-Peak Hours, unless otherwise specified in the plan, or unless otherwise approved by the engineer for safety or operational reasons associated with other adjacent local street closures.

Follow plan details for closures. Lane restrictions beyond that shown on the traffic control plans must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer for approval. Once approved, allow at least five business days prior to the closure of local roadway and/or intersection as identified in Contractor Coordination.

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

Do not begin or continue any work that closes local street traffic lanes or intersection outside the allowed time periods specified in this contract. If the contractor fails to open local roadway lanes of traffic and/or intersections to traffic by the specified times, assessments shown in the article Lane Rental Assessment will be placed upon the contractor based on the hourly rental rate that the non-compliant closure occurs. The total assessment to the contractor will be the summation of the separate assessments for each local street traffic lane and local street intersection closure violation.

Permitting the contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the department of any of its rights under the contract.

## **Traffic Signal Restrictions**

#### **Definitions**

The following definitions apply to this contract for traffic signal restrictions:

#### **Peak Hours**

- 6:00 AM 9:00 AM Monday, Tuesday, Wednesday, Thursday, Friday
- 3:00 PM 7:00 PM Monday, Tuesday, Wednesday, Thursday
- 3:00 PM 9:00 PM Friday
- 11:00 AM 8:00 PM Saturday
- 1:00 PM 5:00 PM Sunday

#### **Off-Peak Hours**

- 9:00 AM 3:00 PM Monday, Tuesday, Wednesday, Thursday, Friday
- 7:00 PM 6:00 AM Monday, Tuesday, Wednesday, Thursday
- 9:00 PM 11:00 AM Friday PM to Saturday AM
- 8:00 PM 1:00 PM Saturday PM to Sunday PM
- 5:00 PM 6:00 AM Sunday PM to Monday AM

## **Traffic Signal Restrictions**

Do not remove the traffic signals (S40-1118) at the intersection of STH 190 (Capitol Drive) and 118<sup>th</sup> Street prior to October 1, 2017 and the 30 day evaluation period or as approved by the engineer. This work shall be coordinated with the work shown in Project ID 1360-09-71

Do not remove any traffic signals from service or place the signals into flash mode during Peak Hours. Remove the traffic signals from service or place the signals into flash mode only during Off-Peak Hours, unless otherwise specified in the plan, or unless otherwise approved by the engineer for safety or operational reasons.

Do not begin or continue any work that removes the traffic signals from service or places the signals into flash mode outside the allowed time periods specified in this contract.

Permitting the contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the department of any of its rights under the contract.

#### General

Provide Milwaukee County Transit System - Coordinator of Street Supervision, Melanie Flynn, (414) 343-1764, with a schedule of any closures that effect any MCTS route and/or stop 14 calendar days prior to closure. Also coordinate the location of each Temporary Bus Stop Pad with Melanie MacArthur, 14 calendar days prior to installation.

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

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

Provide adequate temporary sidewalk and bridging between the curb and right-of-way line over freshly paved concrete or other obstructions in the sidewalk area, as directed by the engineer.

Construct temporary sidewalk surfaces with a minimum of 2 inches of temporary asphaltic surface or alternative material as approved by the engineer and a minimum of 4-feet wide. Compact the surface of temporary asphaltic surface until smooth and capable of supporting a wheelchair. The separate payment for the construction of temporary sidewalks including materials, labor, removal and restoration, will be made by the department under the bid item Temporary Pedestrian Surface, unless otherwise shown on the plans.

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

Do not close residential approaches or remove from service without giving sufficient notice to the occupants of the premises to remove their vehicles prior to driveway removal or closing of the driveway approach access. If necessary, make other access arrangements, agreed to in writing and signed by the contractor and the property owner serviced by the driveway. Obtain approval from the engineer prior to alternating construction sequencing.

Existing trees, street light poles, hydrants and other utility poles are to remain in place during construction unless otherwise noted in the plan. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between the trees, hydrants and poles and the paving equipment. No additional compensation will be made.

## **Equipment Parking/Materials Storage, Miscellaneous**

Park or store equipment and materials only at work sites approved by the engineer.

Comply with all local ordinances that apply to work operations pertaining to work during night time work hours. Furnish in writing any ordinance variance issued by the municipality or required permits to the engineer no less than three days before performing such work.

Permitting the contractor to continue and finish the work or any part of after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the department of any of its rights under the contract.

Keep open travel lanes free of construction debris at all times.

All work and operations shall be completed in accordance with WisDOT Standard Detail Drawings, the MUTCD, and as directed by the engineer. Installing construction zone signage on existing sign posts or utility poles is not permitted.

Note that the Oak Hill Burying Grounds (BMI-0020) are near the project area on the northeast corner of the Capitol Drive Interchange. This site shall not be used for borrow, waste disposal, or for the staging of personnel, equipment and/or supplies.

In addition the archaeological site 47MI24 is located on the north side of the interchange and along the Menomonee River extending to the west of the freeway. This site shall not be used for borrow or waste disposal, and the site area not currently capped by asphalt/concrete should not be used for the staging of personnel, equipment and/or supplies.

#### **All Work Restrictions**

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

Provide the Wisconsin State Patrol, Milwaukee County Highway Maintenance, Waukesha County Highway Maintenance, the City of Milwaukee Police Department, the City of Wauwatosa Police Department and Milwaukee County Sheriff's Department with a 24-hour emergency contact number for when maintenance is required.

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

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

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

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

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

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

Supplement standard spec 108.10 with the following:

The department will not grant time extensions for the following:

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

SEF Rev. 14 1211

#### PROJECT 1060-39-90

#### **Interim Completion of Work 06/30/2017**

Complete all work necessary to activate the traffic signals at the intersection of the IH41 Southbound ramps and Hampton Avenue, including but not restricted to all testing, placing the signals in flash mode, installing all equipment and signal timings, intersection signing, pavement marking, sidewalk and restoration in the plans prior to 12:01 AM on July 1, 2017.

If the contractor fails to complete all of the work necessary to activate the traffic signals at the intersection of the IH41 Southbound ramps and Hampton Avenue, including but not restricted to all testing, placing the signals in flash mode, installing all equipment and signal timings, intersection signing, pavement marking, sidewalk and restoration in the plans prior to 12:01 AM on July 1, 2017, the department will assess the contractor \$2,000 in interim liquidated damages per day for each calendar day after 12:01 AM on July 1, 2017. 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 on July 1, 2017.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed according to standard spec 108.11.

#### PROJECT 1360-09-71

## **Completion of Work**

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment. Indicate on the proposed schedule of operations that a large force and adequate equipment will be needed to assure that the work will be completed within the contract time

## **Interim Completion of Work 8/30/2017**

Complete construction operations on Capitol Drive Frontage Road 1 and 2, and the IH-41 Ramps to the stage necessary to reopen it to through traffic prior to 12:01 AM August 31, 2017. Do not reopen until completing the following work: concrete paving, storm sewer, curb and gutter, curb ramps, and signals.

If the contractor fails to complete the work necessary to reopen Capitol Drive Frontage Roads 1 and 2 and the IH-41 Ramps to through traffic prior to 12:01 AM August 31, 2017, the department will assess the contractor \$17,000 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, August 31, 2017. 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.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed according to standard spec 108.11.

## **Schedule of Operations**

The department anticipates that the schedule of each stage shall be as follows:

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

#### Stage I

Stage I is the main stage of this project and consists of all the work included in the contract except the segment of Capitol Drive Frontage Road 2 between Station 20+75 and Station 22+03. The latter segment shall be excluded from Stage I in order to minimize the length of the NB Entrance Ramp closure.

More specifically, Stage I consists of the following work:

- Reconstruction of Capitol Drive Frontage Road 1
- Reconstruction of Capitol Drive Frontage Road 2 from Station 18+10 to Station 20+75
- Reconstruction of the curb and gutter, sidewalk and curb ramps in the inside of the SB Exit Ramp and NB Entrance Ramp.
- Reconstruction of the NB Exit Ramp right turn lane (Station 18+57- Station 19+92).
- Reconstruction of the NB Exit Ramp through lanes (Station 19+65- Station 19+90).
- Reconstruction of the SB Entrance Ramp through lanes (Station 18+28- Station 18+62).

- Addition of sidewalk and curb ramps south of the Frontage Road 1.
- Replacement/addition of lighting units along Capitol Drive and IH-41.
- Installation of the signal equipment.

The major types of work that shall be performed in this stage include:

- Removal of the existing pavement/sidewalk, removal/abandoning of storm sewer and removal of lighting and signal equipment.
- Grading, installation of base course, construction of the new pavement, sidewalk, storm sewer and curb ramps, installation of the signal and lighting equipment, pavement marking and signing.

## **Stage II**

Stage II consists mainly of constructing the segment of Frontage Road 2 from Station 20+75 to Station 22+03. The main purpose for this stage is to extend the duration that the NB Entrance Ramp is open to traffic.

More specifically Stage II consists of the following work:

- Reconstruction of the remaining segment of Frontage Road 2 as specified above.
- Concrete pavement replacement in front of Harley Davidson's driveway with Special High Early Strength in order to minimize the closures for the right turn lane of the SB Exit Ramp.
- Concrete pavement replacement as well as curb and gutter replacement along the right turn lane of the NB Entrance Ramp.
- Replacement of the splitter island at the NB Entrance Ramp.
- Replacement/addition of lighting units along Capitol Drive and IH-41.
- Installation of the signal equipment.

The major types of work that shall be performed in this stage include grading, installation of base course, construction of the new pavement, pavement, curb and gutter, and curb ramp replacement, installation of the signal and lighting equipment, pavement marking and signing.

## **Signal and Lighting Equipment Installation**

Work on signals such as removal of signal equipment and installation of new signal equipment including monotubes, as well as removal and installation of the lighting equipment on Capitol Drive and Capitol Drive Frontage Roads 1 & 2 shall be coordinated with the roadway construction operations and completed by the interim completion date.

## **Concrete Pavement Replacement SHES**

The pavement in front of the Harley Davidson's driveway shall get replaced with SHES to minimize the traffic impacts.

#### **Detours**

Provide signed detour routes, as shown in the plans that are fully open and free of construction during all full freeway closures. Install required traffic control and detour signs as shown on the plans at least 14 calendar days prior to beginning stage construction; remove

the detour after completion of the project. Cover advance-warning signs and detour signs until work begins.

Detour routes are needed due to the partial and full ramp closures at the Capitol Drive Interchange.

## 4. Lane Rental Assessment.

#### A General

This contract includes a lane rental charge procedure under which a rental charge is assessed for each freeway shoulder closure, each freeway lane closure, each service ramp closure, each system ramp closure, and each full closure of a directional freeway roadway from the time of notice to proceed until the project is complete. If a lane is obstructed at any time due to operations, it is considered a closure. The purpose of lane rental is to discourage unnecessary short term closures, especially during time periods outside night time hours.

#### A.1 Lane Rental Assessment Table

The hourly rental rate will be assessed for each shoulder closure, each freeway lane closure, each service ramp closure, each system ramp closure, and each full closure of a freeway roadway as follows:

Lane Rental Assessment Table										
Freeway Closure Type	Weekday Peak Hours		Weekend Peak Hours		Weekday Off-Peak Hours		Weekend Off-Peak Hours		Night Time Hours	
	Hourly Rental	Closure Hour Credits	Hourly Rental	Closure Hour Credits	Hourly Rental	Closure Hour Credits	Hourly Rental	Closure Hour Credits	Hourly Rental	Closure Hour Credits
Shoulder when at least 8 ft, shoulder is reduced to less than 8 ft.	\$2,000	0	\$400	0	\$400	0	\$200	0	\$20	90
Single Lane when 2 or more lanes next to closure are open to traffic	\$20,000	0	\$4,000	0	\$4,000	0	\$2,000	0	\$200	90
Service Ramp	\$10,000	0	\$2,000	0	\$2,000	0	\$1,000	0	\$100	24
Full Roadway Closure (One Direction of the Freeway)	\$120,000	0	\$80,000	0	\$40,000	0	\$28,000	0	\$1650	8

The monetary amount represents the average hourly cost of the interference and inconvenience to the road user for each closure. Lane rental in excess of the maximum credited hours specified will be assessed. The assessment will be the total number of hours

that each shoulder, lane, roadway, or ramp closure exceeds the "closure hour credits", multiplied by the "hourly rental" rate as defined in the Lane Rental Assessment Table.

The rental assessment will be 15-minute increments for closure time periods equal to or less than 60 minutes in length. All shoulder, lane, roadway, or ramp closure event durations will be rounded up or down to the nearest quarter hour for the purposes of this computation except where freeway shoulders or lanes of traffic and/or ramps are not opened to traffic by the specified times, as noted in the article Prosecution and Progress under Freeway Work Restrictions. Deductions will be made from the monies based on the hourly rental rate for the closure type and hourly definition that the non-compliant closure occurs. The deduction will be made based on the applicable rate for any and all closures whether work is being performed or not. The engineer, or designated representative, will be the sole authority in determining time period length for the lane rental charge.

Lane rental for shoulder shall only apply to shoulders along the traveled way of IH-41 NB and SB. A shoulder is considered closed when a paved shoulder area with 8 feet or more of width is reduced to a dimension less than 8-feet wide by contractor's equipment or traffic control devices, excluding spot locations of advance traffic control devices "in use" for other lane or ramp closures. Lane rental for shoulder shall not apply to shoulders along ramps or along closed traffic lane(s).

Lane rentals shall be applied for the single lane closure needed for the lighting installation along IH-41.

Lane rental will not be assessed for maintenance of temporary surfaces, if in the opinion of the engineer, maintenance of the damaged pavement was completed expeditiously, and the lack of maintenance would cause safety concerns to the traveling public.

Lane rental will not be assessed for closures due to crashes, accidents or emergencies.

#### **A1.1 Lane Rental Assessment and Liquidated Damages**

On those days when charged with the liquidated damage fee; and a shoulder, ramp or lane closure is in effect to facilitate construction operations that are exceeding credited hours; both the lane rental assessment and the liquidated damages fee will be charged.

## **B** (Vacant)

## C (Vacant)

## **D** Measurement

The department will assess Lane Rental Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The charge will be the total dollar amount of each freeway closure type category where the total number of hours that each shoulder, lane, ramp, or roadway closure exceeds the project maximum number of "closure hour credits," as defined in the Lane Rental Assessment Table, multiplied by the "hourly rental" as defined in the Lane Rental Assessment total will not be reduced

or offset with freeway closure type categories where the total closure hours were less than "closure hour credits." Lane Rental Assessment will be in effect from the time of notice to proceed until such time that the project is complete.

#### E (Vacant)

#### 5. Traffic.

#### General

Keep IH 41 and all service ramps open to through traffic at all times for the duration of this project except as noted below and in the Prosecution and Progress article in these special provisions.

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

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION			
Lane and shoulder closures	7 calendar days			
Full roadway closures	7 calendar days			
Ramp closures	7 calendar days			
Full ramp closures	7 calendar days			
Detours	7 calendar days			
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION			
Lane and shoulder closures	3 business days			
System and service ramp closures	3 business days			
Modifying all closure types	3 business days			

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date. 108-057 (20160607)

#### PROJECT 1060-39-90

## **Residential and Business Property Access**

Maintain access to properties along Hampton Avenue, Capitol Drive, Burleigh Street, 124<sup>th</sup> Street, North Avenue, Watertown Plank Road, Bluemound Road, 84<sup>th</sup> Street and any other

local road effected by construction for local residents, businesses, and emergency vehicles. Maintain and keep open the access to all driveways and parking lots.

#### **Pedestrian Access**

Maintain sidewalk at all times except under direction of the engineer. Maintain sidewalk access to all businesses and residences at all times.

Maintain pedestrian movements crossing the construction zone at all intersections at all times, unless otherwise directed by the engineer. At all times, ADAAG accessible pedestrian walkways shall be maintained free from mud, sand, and construction debris. Closures of sidewalk must be approved by the engineer and conform to signing shown on the traffic control plan. At locations where crosswalks crossing Hampton Avenue, Capitol Drive, Burleigh Street, 124<sup>th</sup> Street, North Avenue, Watertown Plank Road, Bluemound Road, 84<sup>th</sup> Street and any other local road exist on both sides of the intersection, closure of one of the two crosswalks is permitted as long as all other crossings are completely open. At intersections where only one crosswalk exists crossing Hampton Avenue, Capitol Drive, Burleigh Street, 124<sup>th</sup> Street, North Avenue, Watertown Plank Road, Bluemound Road, 84<sup>th</sup> Street and any other local road, stage work to maintain a crosswalk at all times.

#### PROJECT 1360-09-71

Construction will be performed in two Stages. Stage I is the major stage where all of the work in the contract is being performed except the segment of Capitol Drive Frontage Road 2 from Station 20+75 to Station 22+03. The latter segment will be constructed in Stage II with full closure of the northbound entrance ramp. Stage II shall fully overlap with Stage I and take place at the end of Stage I in order for both stages to be completed at the same time.

#### Stage I

During this stage the following closures shall apply:

<u>Capitol Drive Frontage Road 1</u>: Through and left shall be closed for the entire duration of the project. The right turn lane to the southbound entrance ramp shall be open at all times.

<u>Capitol Drive Frontage Road 2</u>: Through and left shall be closed for the entire duration of the project. The right turn lane to the northbound entrance ramp shall be open at all times during this stage.

IH-41 NB Exit Ramp: This ramp shall be closed for the entire duration of the project.

<u>IH-41 SB Exit Ramp</u>: Through and left shall be closed for the entire duration of the project. The right turn from northbound to westbound will be open at all times during this stage.

#### Stage II

During this stage the closures outlined in Stage I remain. In addition the following closure shall apply:

<u>Capitol Drive Frontage Road 2</u>: The right turn lane to the northbound entrance ramp shall be closed.

<u>IH-41 SB Exit Ramp</u>: The ramp will be closed during nighttime only for 2-3 nights to replace the pavement on Capitol Drive Frontage Road 2 in front of Harley Davidson's driveway.

#### **Sidewalks**

The existing sidewalk on the north side of Frontage Road 2 shall be closed during the entire duration of the construction. Free MCTS rides will be provided in the following bus stations:

- Capitol Drive westbound and 110th Street, #6120
- Pick & Save at Capitol Drive and 127th Street, #6122
- Capitol Drive eastbound and Target, #2497
- · Capitol Drive eastbound and Mayfair Road, #5999

#### **Detours**

#### **Stage I:**

<u>Detour 1</u>: This detour shall be established to guide traffic from IH-41 northbound to Capitol Drive eastbound due to the northbound exit ramp closure at Capitol Drive. Traffic will exit at the Burleigh Exit Ramp, turn right to eastbound Burleigh Street, and then turn left to HWY 100. The detour ends at the intersection of HWY 100 and Capitol Drive.

<u>Detour 2</u>: This detour shall be established to guide traffic from Capitol Drive westbound to the IH-41 southbound due to closure of the left and through at the middle level of the interchange which restricts access to the southbound entrance ramp. This detour starts at the intersection of HWY 100 and Capitol Drive, follows southbound HWY 100, turns right to westbound Burleigh Street and then left to the IH-41 southbound ramps.

<u>Detour 3</u>: This detour shall be established to guide traffic from IH-41 northbound to Capitol Drive westbound due to the northbound exit ramp closure at Capitol Drive. Traffic will exit on the Burleigh Exit Ramp, turn left to westbound Burleigh Street, and then turn right to 124th Street. The detour ends at the intersection of 124th Street and Capitol Drive.

<u>Detour 4:</u> This detour shall be established to guide traffic from Capitol Drive westbound to the IH-41 southbound due the closure of the left and through at the middle level of the interchange that restricts access to southbound entrance ramp. This detour is supplemental to detour 2, to guide traffic on Capitol Drive westbound that missed the earlier signs stating that there is no access to southbound entrance ramp. This detour starts at the intersection of 124th Street and Capitol Drive, follows SB 124th Street, turns left to eastbound Burleigh Street and then right to the IH-41 southbound ramps.

<u>Detour 5</u>: This detour shall be established to guide traffic from Capitol Drive eastbound that missed the signs that indicate that the access to northbound entrance ramp is closed. The traffic will continue on eastbound Capitol Drive, turn left on northbound HWY 100, and then left on Hampton Avenue and turn right to access the northbound entrance ramp.

<u>Detour 6</u>: This detour shall be established to guide traffic from IH-41 southbound to Capitol Drive eastbound due to the closure of the left turning movement at the southbound exit ramp at Capitol Drive. The traffic will take the southbound exit ramp at Hampton Avenue, then turn left at Hampton Avenue and turn right at southbound HWY 100. The detour ends at the intersection of Capitol Drive and HWY 100.

<u>Detour 7</u>: This detour shall be established to guide traffic from Capitol Drive eastbound to IH-41 NB due to the closure of the left and through at the middle level of the interchange which restricts access to the northbound entrance ramp. The traffic will turn left on 124th Street, right on eastbound Hampton Avenue and then left to the northbound entrance ramp. This detour will also serve as a secondary detour for people who missed the signs on Capitol Drive westbound indicating the northbound entrance ramp is closed.

## **Stage II:**

The detours established in Stage I will remain during this Stage. The detours that pertain to the closure the right turn lane from Frontage Road 2 to IH-41 NB are Detours 5 and 7.

<u>Detour 5</u>: In Stage II this detour will be utilized to guide drivers on all quadrants of the HWY 100 and Capitol Drive intersection to IH-41 northbound when the northbound entrance ramp (right turn) will be closed for 2 to 3 weeks for the construction of pavement in front of it.

<u>Detour 7:</u> In Stage II this detour will be utilized to guide traffic on westbound Capitol Drive that missed the signs for the closure of the northbound entrance ramp at Capitol Drive.

<u>Detour 8</u>: This detour shall be established to guide traffic from IH-41 SB to Capitol Drive westbound during the nighttime closure of the right turn lane at the Capitol Drive southbound exit ramp. These nighttime closures are anticipated to take place only for 2 to 3 nights.

# 6. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 41 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 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day;
- From noon Friday, July 2, 2017 to 6:00 AM Tuesday, July 6, 2017 for Independence Day;
- From noon Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

## **Freeway Special Event Restrictions**

- No work permitted on the southbound IH 41 lanes within three hours before the start of Milwaukee Brewers home games;
- No work permitted on the northbound IH 41 lanes within two hours after the end of Milwaukee Brewers home games;
- No work permitted on the northbound IH 41 lanes within four hours before the start of Green Bay Packers home games;
- No work permitted on the southbound IH 41 lanes within four hours after the end of Green Bay Packers home games.

## 7. Utilities.

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

Additional information regarding recently relocated utility facilities may be available on permits issued to the utility companies. These permits can be viewed at the Region Office during normal working hours. Contact WisDOT SE Freeways Utility Coordinator Douglas Gendron at (414) 750-4362 for further information.

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

Some utility work, as described below, is dependent on prior work being performed by the contractor at a specific site. Provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Notice shall be given 14 to 16 calendar days in advance of when 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.

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

Utility companies will be performing utility work and adjustments within the limits and during the life of the project. The contractor shall cooperate and coordinate construction activities with these companies.

There may be discontinued utility facilities within the project limits. If a conflict with a discontinued utility facility is encountered, contact the appropriate utility owner/representative to coordinate construction activities and proper removal and disposal of said facility as necessary.

Utility working days shown herein are as defined in Wisconsin Administrative Code Chapter Trans 220.

#### PROJECT 1060-39-90

Known utilities in the projects are as follows:

#### USH 18 (Bluemound Road) & STH 181 (Glenview Avenue)

**Milwaukee, City of - Cable** has an existing underground communication line beginning beyond the westerly project limits and running easterly beyond the easterly project limits. This line will remain in place without adjustment.

Contact Brian Pawlak, (414) 286-5970 office, of the City of Milwaukee - Cable 7 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of - Conduit** has an existing underground communication line beginning beyond the westerly project limits and running easterly beyond the easterly project limits. This line will remain in place without adjustment.

Contact Karen Rogney, (414) 286-3243, of the City of Milwaukee – Conduit 7 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of - Lighting** has existing underground and overhead lighting facilities throughout the project limits. The City will reinstall permanent lighting facilities prior to sidewalk construction. Allow 15 working days for the reinstallation of permanent overhead lighting facilities.

Contact Dennis Miller, (414) 286-5942 office / (414) 708-4251 cell, George Berdine, (414) 708-4245, or Thomas Hughs, (414) 286-3457 office / (414) 708-3175 cell, of the City of Milwaukee - Lighting 10 days in advance to coordinate removals, installation of temporary lighting and reinstallation of the street lighting system.

**MMSD** has an underground sanitary sewer main beginning beyond the southerly project limits and running northerly in the median of Glenview Avenue to beyond the northerly project limits. This sewer will remain in place without adjustment.

Contact Micki Klappa-Sullivan, (414) 225-2178, of MMSD 21 days in advance to coordinate locations and any excavations near their facilities.

**TCA** has underground facilities within the project limits. This communication line will remain in place without adjustment.

Contact Jennifer Navarro, (414) 459-3564, of Northwind Technical Services 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Sewer** has underground sewer facilities within the project limits in the following locations:

- An existing underground sanitary sewer main beginning at the manhole at Station 243BL+12, 31'RT and running westerly down the eastbound lanes of Bluemound Road to beyond the westerly project limits. This main will remain in place without adjustment.
- An existing underground sanitary sewer main beginning at the manhole at Station 72F+24, 27'LT and running southerly down the southbound lanes of Glenview Avenue to beyond the southerly project limits. This sanitary sewer main will remain in place without adjustment.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities

There is also a private sanitary sewer lateral in the project limits beginning at Station 71F+85, 29'LT and running northwesterly to Station 71F+85, 37'LT. From there the lateral turns and runs westerly to beyond the project limits. This lateral will remain in place without adjustment.

Wauwatosa Water Utility has underground water facilities within the project limits in the following locations:

- A water main beginning beyond the southerly limits and running northerly in the southbound lanes of Glenview Avenue and crosses Bluemound Road at Station 243BL+38, then continues northerly down the middle of Glenview Avenue to beyond the northerly project limits. This main will remain in place without adjustment.
- A water main beginning beyond the westerly project limits and running easterly in the eastbound parking lane of Bluemound Road to where it ties into the north-south water main in Glenview Avenue. This main will remain in place without adjustment.
- A water main beginning at a water valve at Station 242BL+96, 41'RT and running southerly to Station 242BL+93, 59'RT to a hydrant. Relocate the hydrant assembly at the southwest corner of the W. Bluemound Road and Glenview Avenue intersection the new hydrant at the location as shown in the plans. Contact the Wauwatosa Water Utility to arrange for pickup of the salvaged hydrant.

Wauwatosa Water Utility also has discontinued underground water facilities within the project limits at the following locations:

- A discontinued water main beginning beyond the southerly project limits and running northerly in Glenview Avenue along the west curb line, then crosses Bluemound Road at Station 243BL+35, then continues running northerly beyond the northerly project limits. This main will remain in place without adjustment.

Contact David Simpson, (414) 471-8422, of the Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities and to arrange for pickup of the salvaged hydrant.

We Energies - Gas has existing underground gas facilities within the project locations at the following locations:

- An underground gas main beginning beyond the southerly project limits and running northerly in the west sidewalk of Glenview Avenue to the south side of Bluemound Road at Station 71F+70, 49'LT where it turns and runs westerly to Station 71F+70, 54'LT. From there it turns and runs northerly in the west sidewalk of Glenview Avenue to Station 242BL+99, 65'RT where it turns and runs westerly to Station 242BL+46, 62'RT. From there it turns and runs northerly to Station 242BL+46, 56'RT. From there it runs westerly to beyond the westerly project limits.

We Energies - Gas will relocate, construct and reconstruct underground gas facilities beginning at Station 242BL+65, 62'RT and running southeasterly and ending at Station 71F+67, 48'LT. The existing gas line between Station 242BL+65, 62'RT and Station 71F+67, 48'LT will be discontinued in place.

We Energies - Gas also has discontinued underground gas facilities within the project limits at the following locations:

- A discontinued underground gas main running along the south side of Bluemound Road starting at Station 242BL+46, 56'RT and running easterly to beyond the easterly project limits.
- WE Energies Gas also has a discontinued underground gas main beginning along the west sidewalk of Glenview Avenue at Station 71F+70, 49'LT and running northerly where the gas main connects to an east-west discontinued gas main.

Contact Erich Wuestenhagen, (414) 651-3948 of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WisDOT - Signals** has existing overhead and underground signal facilities within the project area. Remove, reconstruct, discontinue and leave in place the signal facilities as shown in the plans.

Contact WisDOT Traffic Signal Operations, (414) 750-2605, 7 days in advance to coordinate construction activities.

#### **Walnut Road west of STH 100**

There are utilities within the project area, but the project will not conflict with or impact the utilities. This part of the project is located on private property.

#### IH 41 & W. Watertown Plank Road

There are utilities within the project area, but the project will not conflict with or impact the utilities.

#### W. Watertown Plank Road & N. 113th Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

#### W. Watertown Plank Road & N. 115th Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

## W. Watertown Plank Road & N. 124th Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

## W. North Avenue & N. 124th Street

**AT&T Wisconsin** has existing underground communications facilities within the project limits in the following locations:

- An underground communications line beginning at the easterly project limits in the westbound left turn lane of W. North Avenue where it runs west to Station 424NR+35. It then turns north and continues northerly to beyond the project limits. This line will remain in place without adjustment.
- A underground communications line beginning at Station 424NR+35 runs southwest to the eastbound lanes of North Avenue at Station 423NR+50 and continues west to beyond the westerly project limits. This line will remain in place without adjustment.
- An underground communications line beginning at the northerly project limits runs south in the northbound lanes of N. 124<sup>th</sup> Street to beyond the southerly project limits. A line splits off at Station 152TU+50 and curves west and ends at Station 152TU+33, 62'LT. These lines will remain in place without adjustment.

Contact Jay Bulanek, (414) 535-7407 office, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Brookfield, City of – Sewer** has an underground sanitary sewer beginning at the westerly project limits. It runs easterly in the westbound outside shoulder of W. North Avenue and ends at a manhole at Station 425NR+80, 45'LT. This main will remain in place without adjustment.

Contact Ron Gillenardo, (262) 782-0199, of City of Brookfield 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has existing overhead and underground communications facilities within the project limits at the following locations:

- An underground communications line beginning at a point 190 feet south of W. North Avenue and runs north about 5 feet behind the westerly curb of 124<sup>th</sup> Street to a We Energies pole at Station 152TU+16, 48'LT. From this location Time Warner Cable facilities are attached to We Energies' poles. These facilities will remain in place without adjustment.

**Wauwatosa, City of - Lighting** has existing underground and overhead lighting facilities throughout the project limits, including lighting on signal poles at the intersection. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Randy Michelz, (414) 479-8429 office, of the City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Sewer** has an existing underground sanitary sewer main beginning at the manhole at Station 425NR+80, 45'LT and running easterly along the outer westbound shoulder of W. North Avenue to beyond the easterly project limits. This main will remain in place without adjustment.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Signals** has existing underground and overhead signal facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the signal facilities as shown in the plans.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa Water Utility has existing underground water facilities within the project limits at the following locations:

- A water main beginning beyond the northerly project limits and running southerly along the easterly most northbound lane of N. 124<sup>th</sup> Street to a point at the southeast corner of the intersection. From there it runs easterly and continues to beyond the east project limits. This main will remain in place without adjustment.
- A water main beginning at the easterly project limits and runs west along the northerly westbound lanes of W. North Avenue to a tee with main described above at Station 426NR+48, 38'LT. This main will remain in place without adjustment.

- There are fire hydrants in the northeast and southeast quadrants of the intersection. These will remain in place without adjustment. There are no valves requiring adjustment.

Contact David Simpson, (414) 471-8422, of Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies - Electric has existing underground and overhead electric facilities within the project limits in the following locations:

- An overhead electric line beginning beyond the southerly project limits and running northerly along the east right of way of N. 124<sup>th</sup> Street to a pole at Station 150TU+61, 61'RT. From there it angles northwest and runs across N. 124<sup>th</sup> Street to a pole at Station 152TU+16, 48'LT. It continues north to a pole in the northwest quadrant at Station 153TU+56, 48'LT and then continues to the northerly project limits about 5 feet west of the west curb and gutter. This line will remain in place without adjustment. Contact Erich Wuestenhagen (414-651-3948) of We Energies 10 days in advance of signal pole installation to coordinate clearance requirements for this line.
- An underground electric line beginning at the westerly project limits of North Avenue at the north sidewalk where it runs east along the northerly right of way line. At N. 124<sup>th</sup> Street it turns north and runs northerly just west of the westerly right of way line. At Station 155TU+75 it turns east and continues 14 feet to a power pole where it terminates. This line will remain in place without adjustment.
- An underground electric line beginning at the easterly project limits in the median of North Avenue. It runs west to Station 426NR+72 and turn turns north crossing the westbound lanes of North Avenue. It continues running north on the east side of N. 124<sup>th</sup> Street under the sidewalk to beyond the northerly project limits. This line will remain in place without adjustment.
- An underground electric line crosses N. 124<sup>th</sup> Street at Station 154TU+53. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies – Gas has existing underground gas facilities within the project limits t at the following locations:

- An underground gas line beginning beyond the westerly project limits and running easterly in the eastbound lanes of W. North Avenue to N. 124<sup>th</sup> Street where it tees into a north/ south gas line. This line will remain in place without adjustment.
- An underground gas line beginning at N. 124<sup>th</sup> Street running easterly approximately 8 feet behind the north curb and gutter of W. North Avenue to the easterly project limits. There is gas lateral crossing eastbound W. North Avenue at Station 423NR+81. This line will remain in place without adjustment.

- An underground gas line crosses W. North Avenue at 427NR+26, where it turns east at a point just south of the south curb and gutter. It then runs east to the project limits. This line will remain in place without adjustment.
- An underground gas line beginning beyond the southerly project limits and running northerly in the southbound lanes of N 124<sup>th</sup> Street to the north side of W. North Avenue. From there it turns northwesterly to about 8 feet west of the curb and gutter on N. 124<sup>th</sup> Street and continues north to the northerly project limits. This line will remain in place without adjustment.
- An underground gas line crosses N. 124<sup>th</sup> Street at Station 155TU+34 and continues to the east project limits. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**Westshore Pipeline** has existing underground gas facility that begins south of the southerly project limits in the northbound lanes of N. 124<sup>th</sup> Street and runs north to the northerly project limits. The gas line crosses W. North Avenue at Station 426NR+33. This pipeline will remain in place without adjustment.

Contact Aric Aufdermauer, (414) 391-8102, of Westshore Pipeline 7 days in advance to coordinate locations and any excavation near their facilities.

#### W. Center Street & N. 124<sup>th</sup> Street

**AT&T Wisconsin** has an existing underground communications line beginning at the easterly project limits in the terrace area of W. Center Street about 10 feet behind the north curb and gutter. It turns north about 80 feet east of the N. 124<sup>th</sup> Street intersection to beyond the north project limits. This line will remain in place without adjustment.

Contact Jay Bulanek, (414) 535-7407 office, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Brookfield, City of – Sewer** has an existing underground sanitary line in the southbound shoulder of N. 124<sup>th</sup> Street beginning at the southerly project limits and continuing to the northerly until it terminates at Station 181+75. This line will remain in place without adjustment.

Brookfield, City of -Sewer also has a discontinued sanitary sewer in the westbound lanes of W. Center Street. This line will remain in place without adjustment.

Contact Ron Gillenardo, (262) 782-0199, of City of Brookfield 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has existing overhead and communications facilities within the project limits at the following locations:

- An overhead communications line attached to We Energies' poles beginning beyond the southerly project limits and running northerly about 3 feet behind the westerly curb and gutter of N. 124<sup>th</sup> Street to beyond the northerly project limits. This line will remain in place without adjustment.
- An overhead communications line crossing attached to We Energies' poles N. 124<sup>th</sup> Street at Station 177TU+53. This line will remain in place without adjustment.
- An overhead communications line attached to We Energies' poles crossing N. 124<sup>th</sup> Street at Station 181TU+43. This line will remain in place without adjustment.

**Wauwatosa, City of - Lighting** has existing underground and overhead lighting facilities throughout the project limits, including lighting on signal poles at the intersection. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Randy Michelz, (414) 479-8429 office, of the City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa, City of - Signals has existing underground and overhead signal facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the signal facilities as shown in the plans.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa Water Utility has existing underground water facilities within the project limits at the following locations:

- A water main beginning beyond the northerly project limits and running southerly within the northbound lanes of N. 124<sup>th</sup> Street to beyond the southerly project limits. This main will remain in place without adjustment.
- A water main beginning at a Tee at Station 179TU+40, 30'RT in the previously described line and continues east in the middle of W. Center Street. This main will remain in place without adjustment.
- There is a fire hydrant in the northeast quadrant of the intersection. This line will remain in place without adjustment.

Contact David Simpson, (414) 471-8422, of Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities.

**We Energies - Electric** has existing underground and overhead electric facilities within the project limits in the following locations:

- An overhead electric line beginning beyond the southerly project limits and running northerly about 3 feet behind the westerly curb and gutter of N. 124<sup>th</sup> Street to beyond the northerly project limits. This line will remain in place without adjustment.
- An underground electric line beginning at the southerly project limits about 6 feet behind the outside easterly curb and gutter and running north along N. 124<sup>th</sup> Street to beyond the northerly project limits. This line will remain in place without adjustment.
- An overhead electric line crossing N. 124<sup>th</sup> Street at Station 177TU+53. This line will remain in place without adjustment.
- An overhead electric line crossing N. 124<sup>th</sup> Street at Station 181TU+43. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies – Gas has existing underground gas facilities within the project limits that will remain in place without adjustment at the following locations:

- An underground gas line beginning beyond the southerly project limits and running northerly about 7 feet behind the outside curb of the southbound lanes of N. 124<sup>th</sup> Street where it continues to beyond the northerly project limits. This line will remain in place without adjustment.
- An underground gas line beginning at a Tee in the previously described line at Station 179TU+70, 54'LT and running easterly along W. Center Street approximate 6 feet behind the curb and gutter. This line will remain in place without adjustment.
- An underground gas line crosses W. North Avenue at 427NR+26, where it turns east at a point just south of the south curb and gutter. It then runs east to the project limits.
- An underground gas line beginning beyond the southerly project limits and running northerly approximately 7 feet behind the outside curb of the northbound lanes of N 124<sup>th</sup> Street to a point about 80 feet south of W. Center Street. This line will remain in place without adjustment.
- An underground gas line crosses N. 124<sup>th</sup> Street at Station 176TU+83. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**Westshore Pipeline** has existing underground gas facility that begins south of the southerly project limits in the northbound lanes of N. 124<sup>th</sup> Street and runs north to the northerly project limits. This pipeline will remain in place without adjustment.

Contact Aric Aufdermauer, (414) 391-8102, of Westshore Pipeline 7 days in advance to coordinate locations and any excavation near their facilities.

## W. Burleigh Street & N. 124th Street

**AT&T Wisconsin** has an existing underground communications line beginning at the southerly project limits in the northbound lanes of N. 124<sup>th</sup> Street crossing Burleigh Street at Station 526BR+61 and continues north to a manhole at Station 206TU+21. From there it turns northwest to Station 206TU+49, 43'RT where it turns and continues north beyond the northerly project limits. A second line splits off at a manhole at Station 205TU+66, 16'RT and runs easterly in the eastbound lanes of W. Burleigh Street to beyond the easterly project limits. These lines will remain in place without adjustment.

Contact Jay Bulanek, (414) 535-7407 office, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Brookfield, City of - Sewer** has existing underground sanitary facilities within the project limits in the following locations:

- An underground sanitary line in the southbound shoulder of N. 124<sup>th</sup> Street beginning at the southerly project limits and continuing to the northerly project limits. This line will remain in place without adjustment.
- An underground sanitary line runs along the centerline of W. Burleigh Street from beyond the westerly project to a manhole at Station 526BR+11, 1'LT. This line will remain in place without adjustment.

Contact Tom Grisa (262-796-6644) of City of Brookfield 7 days in advance to coordinate locations and any excavation near their facilities.

**Brookfield, City of - Water** has existing underground water facilities within the project limits at the following locations:

- An underground water main beginning beyond the westerly project limits and running easterly along the north side of W. Burleigh Street to Station 525BR+22, 35'LT where it turns and runs northeasterly to Station 206TU+93, 55'LT. From there the line runs northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An underground water main beginning at Station 525BR+22, 35'LT runs southerly to Station 525BR+25, 25'RT where it turns and runs southeasterly to Station 204TU+94, 56'LT. From there the water main runs southerly along the west side of N. 124<sup>th</sup> Street beyond the southerly limits. This line will remain in place without adjustment.

Contact Tom Grisa, (262) 796-6644, of City of Brookfield 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has existing overhead and underground communications facilities within the project limits at the following locations:

- An overhead communications line on We Energies' poles beginning beyond the southerly project limits and running northerly along the west right of way of N. 124<sup>th</sup> Street, crossing W. Burleigh Street at Station 525BR+90. From there is runs northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An overhead communications line on We Energies' poles beginning at a pole at Station 525BR+96, 51'RT running westerly along the south side of W. Burleigh Street beyond the westerly project limits. This line will remain in place without adjustment.
- An overhead communications line on We Energies' poles beginning at a pole at Station 525BR+84, 50'LT running easterly along the north side of W. Burleigh Street beyond the easterly project limits. This line will remain in place without adjustment.
- An underground communications line beginning at a pole located at Station 525BR+84, 50'LT running westerly beyond the westerly project limits. This line will remain in place without adjustment.

Contact Steve Cramer, (414) 277-4045 office, of Time Warner Cable 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Lighting** has existing underground and overhead lighting facilities throughout the project limits, including lighting on signal poles at the intersection. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Randy Michelz, (414) 479-8429 office, of the City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Sewer** has an existing underground sanitary sewer line beginning beyond the southerly project limits and continuing northerly in northbound lanes of N. 24th Street to a manhole at Station 526BR+75, 36'RT. From there the sewer turns easterly and continues in the eastbound lanes of Burleigh Street to beyond the easterly project limits. This line will remain in place without adjustment.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa, City of - Signals has existing underground and overhead signal facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the signal facilities as shown in the plans.

Contact Bill Wehrley, (414) 479-8929, of City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa Water Utility has existing underground water facilities within the project limits at the following locations:

- A water main beginning beyond the northerly project limits and running southerly within the northbound lanes of N. 124<sup>th</sup> Street to beyond the southerly project limits. This main will remain in place without adjustment.
- A water main beginning at a Tee at Station 526BR+85, 10'LT in the previously described line and continues east in the middle of W. Burleigh Street continuing beyond the easterly project limits. This main will remain in place without adjustment.
- There is a fire hydrant in the northeast and southeast quadrant of the intersection. This line will remain in place without adjustment. A water valve in the southeast quadrant will be adjusted as needed by the Wauwatosa Water Utility.

Contact David Simpson, (414) 471-8422, of Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies - Electric has existing overhead and underground electric facilities within the project limits at the following locations:

- An overhead electric line beginning beyond the southerly project limits and running northerly along the west right of way of N. 124<sup>th</sup> Street, crossing W. Burleigh Street at Station 525BR+90. From there is runs northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An overhead electric line beginning at a pole at Station 527BR+56, 46'RT running westerly along the south side of W. Burleigh Street, crossing N. 124<sup>th</sup> Street at Station 205TU+39 and continuing beyond the westerly project limits. This line will remain in place without adjustment.
- An overhead electric line beginning at a pole at Station 524BR+60, 47'LT running easterly along the north side of W. Burleigh Street, crossing N. 124<sup>th</sup> Street at Station 526BR+47, 55'LT and continuing beyond the easterly project limits. This line will remain in place without adjustment.
- An underground electric line beginning beyond the southerly project limits and running northerly along the east right of way of N. 124<sup>th</sup> Street, crossing W. Burleigh Street at Station 205TU+88. From there is runs northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An underground electric line beginning beyond the southerly project limits and running northerly in the southbound lanes of N. 124<sup>th</sup> Street to a manhole at Station 204TU+62,15'LT. From there the line continues northeasterly to Station 205TU+36, 70'RT where it turns and continues easterly beyond the easterly project limits. This line will remain in place without adjustment.

Proper clearances between temporary signal lines and overhead electric lines must be maintained at all times. Contact Jason Chapin, (414) 944-5575 office / (414) 587-0655 cell, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies - Gas has existing underground gas facilities within the project limits in the following locations:

- An underground gas line beginning beyond the southerly project limits and running northerly along the west side of N. 124<sup>th</sup> Street, crossing W. Burleigh Street at Station 526BR+05. From there is runs northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An underground gas line beginning at Station 207TU+53, 51'LT running easterly, crossing N. 124<sup>th</sup> Street at Station 207TU+53, to Station 207TU+53, 55'RT where the line turns running southerly along the east side of W. Burleigh Street to Station 206TU+39, 56'RT. From there the line runs easterly along the north side of W. Burleigh Street beyond the easterly project limits. This line will remain in place without adjustment. We Energies Gas will adjust three gas valves located in the sidewalk and curb and gutter area in the northeast quadrant of this intersection during construction. Allow 3 working days for the adjustment of the gas valves.
- An underground gas line beginning beyond the westerly project limits and running easterly along the south side of W. Burleigh Street, crossing N. 124<sup>th</sup> Street at Station 205TU+38. From there the line runs easterly along the south side of W. Burleigh Street beyond the easterly project limits. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate adjustment of valves, locations and any excavation near their facilities.

**Westshore Pipeline** has existing underground gas facility that begins south of the southerly project limits in the northbound lanes of N. 124<sup>th</sup> Street and runs north to the northerly project limits. This pipeline will remain in place without adjustment.

Contact Aric Aufdermauer, (414) 391-8102, of Westshore Pipeline 7 days in advance to coordinate locations and any excavation near their facilities.

#### W. Burleigh Street & N. 119th Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

#### W. Burleigh Street & N. 114th Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

## W. Burleigh Street & N. 112<sup>th</sup> Street

There are utilities within the project area, but the project will not conflict with or impact the utilities.

# W. Capitol Drive & 118th Street (Industrial Road)

**AT&T Wisconsin** has an existing underground communications line beginning beyond the westerly project limits and running easterly along the north side of westbound frontage road along Capitol Drive continuing easterly beyond the project limits. This line will remain in place without adjustment.

Contact Jay Bulanek, (262) 896-7669 office / (414) 491-2855 cell, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Level 3 Communications** has an underground communication line in WisDOT FTMS facilities as described hereafter in the southwest quadrant of the IH 41/ Capitol Drive interchange. This line will remain in place without adjustment.

Contact Brahim Gaddour. (414) 908-1027 office / (414) 704-1026 cell, of Level 3 Communications 7 days in advance to coordinate locations and any excavation near their facilities.

**MMSD** has a 21-inch MIS sanitary sewer beginning beyond the westerly project limits and running easterly along the south side of westbound frontage road of Capitol Drive. The facility runs east through three manhole and continues easterly to beyond the project limits. This line will remain in place without adjustment.

Contact Bob Rebitski, (414) 225-2214, of MMSD 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has overhead communication line on We Energies poles beginning beyondthe westerly project limits and running easterly along the north side of the westbound Capitol Drive frontage road (approximately 55' to 85' north of the curb line) to a pole just west of the southbound exit ramp. This line will remain in place without adjustment.

Contact Steve Cramer, (414) 227-4045 office / (414) 688-2385 cell, of Time Warner Cable 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Sanitary** has an underground sanitary sewer beginning at a manhole in the westbound frontage road about 115' east of 118<sup>th</sup> Street and running northerly to beyond the northerly project limits. This line will remain in place without adjustment.

Contact Bill Wehrley, (414) 479-8929, of the City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa Water Utility has existing underground water facilities within the project limits in the following locations:

- An underground water main beginning beyond the westerly project limits and running easterly along the north side of the westbound Capitol Drive frontage road (40' to 55' north of the curb line), crossing the IH 41 southbound exit ramp and continuing easterly to the east project limits. This line will remain in place without adjustment.
- An underground water teeing into the above described line approximately 72' east of 118<sup>th</sup> St centerline and running southerly to a hydrant just north of the westbound north curb. This line will remain in place without adjustment.

Contact David Simpson, (414) 471-8422, of the Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities.

**WE Energies** – **Electric** has existing overhead electric facilities beginning beyond the westerly project limits and running easterly along the north side of the westbound Capitol Drive frontage road (approximately 55' to 85' north of the curb line) to a pole just west of the southbound exit ramp. The line continues east across IH 41 to beyond the east project limits. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 944-8765 office, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WE Energies** – **Gas** has underground gas facilities within the project limits in the following locations:

- An underground gas line beginning beyond the westerly project limits and running easterly along a line approximately 95' south of the north right of way of Capitol Drive Frontage Road 2, to Station 21FR2+26, 23'RT where it turns and runs southeasterly to Station 21FR2+57, 53'RT. From there the line turns and runs easterly to beyond the project limits. This line will remain in place without adjustment.

Prior to construction, We Energies will construct a new gas line beginning beyond the westerly project limits and running easterly on private property south of the southerly right of way of the Capitol Drive to beyond the easterly project limits.

Contact Erich Wuestenhagen, (414) 944-8765 office, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WisDOT Lighting** has existing underground and overhead lighting facilities throughout the project limits. This line will remain in place without adjustment.

Contact Eric Perea, (262) 574-5422 office / (414) 750-0935 cell, of WisDOT 7 days in advance to coordinate construction activities, locations and any excavation near their facilities

**WisDOT** – **Signals** has existing signal facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact WisDOT Traffic Signal Operations, (414) 750-2605, 7 days in advance to coordinate construction activities, locations and any excavation near their facilities.

**WisDOT STOC** has existing communication facilities on the south edge of the eastbound frontage road extending from the west project limits to the east project limits. This line will remain in place without adjustment. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Jeff Madson, (414) 225-3723, of WisDOT 7 days in advance to coordinate locations and any excavation near their facilities.

#### IH 41 / USH 45 Sign Bridge

**WisDOT Lighting** has existing underground and overhead lighting facilities throughout the project limits. This line will remain in place without adjustment.

Contact Eric Perea, (262) 574-5422 office / (414) 750-0935 cell, of WisDOT 7 days in advance to coordinate construction activities, locations and any excavation near their facilities.

**WisDOT STOC** has existing communication facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Jeff Madson, (414) 225-3723, of WisDOT 7 days in advance to coordinate locations and any excavation near their facilities.

#### CTH EE (W. Hampton Ave) & IH 41 Southbound Ramps

**AT&T Wisconsin** has existing underground communications facilities within the project limits in the following locations:

- An underground communications line beginning beyond the westerly project limits and running easterly along the median of W. Hampton Avenue to a manhole at Station 619HP+37, 13'RT and continuing beyond the easterly project limits. This line will remain in place without adjustment.

- An underground communications line beginning beyond the southerly project limits and running northeasterly along the IH 41 southbound entrance ramp to a manhole at Station 619HP+37, 13'RT where it runs northerly to Station 619HP+34, 64'LT, where the line turns and runs westerly along the north side of W. Hampton Avenue beyond the westerly project limits. This line will remain in place without adjustment.

Contact Jay Bulanek, (414) 535-7407 office, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of - Lighting** has existing underground and overhead lighting facilities throughout the project limits. This line will remain in place without adjustment.

Contact Dennis Miller, (414) 286-5942 office / (414) 708-4251 cell, George Berdine, (414) 708-4245, or Thomas Hughs, (414) 286-3457 office / (414) 708-3175 cell, of the City of Milwaukee - Lighting 10 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of - Signals** has existing signal facilities within the project limits. This signals will remain in place without adjustment.

Contact Al Nichols, Traffic Operations Supervisor, (414) 286-3686 office / (414) 708-5148 cell, of City of Milwaukee – Signals 7 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of – Sanitary** has an existing underground sanitary sewer beginning at Station 618HP+67, 35'LT and runs westerly to beyond the project limits. This line will remain in place without adjustment.

Contact Jason Barman, (414) 286-3267 office, of the City of Milwaukee - Sanitary 7 days in advance to coordinate locations and any excavation near their facilities.

Milwaukee County – Electric & Communications has an existing underground electric line and communication facilities within the project locations at the following locations:

- An existing underground electric line and communication line beginning beyond the westerly project limits and running easterly along the median of W. Hampton Avenue to a pull box at Station 618HP+93, 4'RT and continuing northeasterly to a pull box at Station 619HP+93, 55'LT. From there the line runs easterly beyond the easterly project limits. This line will remain in place without adjustment.
- An existing underground electric line and communication line beginning at a pull box at Station 618HP+93, 4'RT and continuing southerly beyond the southerly project limits. This line will remain in place without adjustment.

Contact Karen Rogney, (414) 286-3243, of the City of Milwaukee – Conduit 7 days in advance to coordinate locations and any excavation near their facilities.

**Milwaukee, City of - Water** has an existing underground water main beginning beyond the westerly project limits and running easterly along the westbound lanes of W. Hampton Avenue to Station 619HP+70, 12'LT and turns running southerly to Station 619HP+70, 77'RT. From there the line continues easterly beyond the project limits. This line will remain in place without adjustment.

Contact Dave Goldapp, (414) 286-6301, of the City of Milwaukee 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has an existing overhead communications line on We Energies poles beginning beyond the northerly project limits and running southerly along the west right of way of IH 41 southbound, crossing W. Hampton Avenue at Station 618HP+90 and continuing southerly beyond the southerly project limits. This line will remain in place without adjustment.

Contact Steve Cramer, (414) 277-4045 office, of Time Warner Cable 7 days in advance to coordinate locations and any excavation near their facilities.

**We Energies - Electric** has underground and overhead electric facilities within the project limits at the following locations:

- An overhead electric line beginning beyond the northerly project limits and running southerly along the west right of way of IH 41 southbound, crossing W. Hampton Avenue at Station 618HP+90 and continuing southerly beyond the southerly project limits. This line will remain in place without adjustment.
- An underground electric line beginning beyond the westerly project limits and running easterly along the eastbound lanes of W. Hampton Avenue beyond the easterly project limits. This line will remain in place without adjustment.

Proper clearances between temporary signal lines and overhead electric lines must be maintained at all times. Contact Jason Chapin, (414) 944-5575 office / (414) 587-0655 cell, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities

We Energies - Gas has existing underground gas facilities within the project limits in the following locations:

- An underground gas line beginning beyond the westerly project limits and running easterly along the westbound lanes of W. Hampton Avenue beyond the easterly project limits. This line will remain in place without adjustment.
- An underground gas line beginning at Station 618HP+74, 22'LT and running northerly along the west right of way of IH 41 southbound beyond the northerly project limits. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 651-3948, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WisDOT Lighting** has existing underground and overhead lighting facilities throughout the project limits. This line will remain in place without adjustment.

Contact Eric Perea, (262) 574-5422 office / (414) 750-0935 cell, of WisDOT 7 days in advance to coordinate construction activities, locations and any excavation near their facilities

**WisDOT** – **Signals** has existing signal facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact WisDOT Traffic Signal Operations, (414) 750-2605, 7 days in advance to coordinate construction.

**WisDOT STOC** has existing communication facilities throughout the project limits. Remove, adjust, reconstruct, discontinue and leave in place the lighting facilities as shown in the plans.

Contact Jeff Madson, (414) 225-3723, of WisDOT 7 days in advance to coordinate locations and any excavation near their facilities.

#### PROJECT 1360-09-71

Known utilities in the project area are as follows:

**AT&T Wisconsin** has an underground communications line beginning beyond the westerly project limits and running easterly along the north side of Capitol Drive Frontage Road 2 to a manhole at Station 23FR2+95, 1'RT and continuing easterly beyond the project limits. This line will remain in place without adjustment.

Contact Jay Bulanek, (262) 896-7669 office / (414) 491-2855 cell, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

**Level 3 Communications** has an underground communication line in WisDOT FTMS facilities as described hereafter in the southwest quadrant of the IH 41 / Capitol Drive interchange. This line will remain in place without adjustment.

Contact Brahim Gaddour, (414) 908-1027 office / (414) 704-1026 cell, of Level 3 Communications 7 days in advance to coordinate locations and any excavation near their facilities.

MMSD has a 21-inch MIS sanitary sewer beginning beyond the westerly project limits and running easterly along the south side of westbound Capitol Drive Frontage Road 2 to a manhole at Station 16FR2+95, 8'RT and continuing easterly to a manhole at Station

18FR2+55, 15'RT and continuing easterly to a manhole at Station 23FR2+25, 68'RT. From there the sewer continues easterly to beyond the project limits. This line will remain in place without adjustment.

Contact Bob Rebitski, (414) 225-2214, of MMSD 7 days in advance to coordinate locations and any excavation near their facilities.

**Time Warner Cable** has overhead and underground communication facilities within the project limits in the following locations:

- An overhead communications line on We Energies poles beginning beyond the westerly project limits and running easterly along the north side of westbound Capitol Drive Frontage Road 2 to a pole at Station 17FR2+68, 101'LT. This line will remain in place without adjustment.
- An underground communications line beginning at a pole at Station 17FR2+68, 101'LT and running northeasterly to Station 17FR2+95, 106' LT and continuing northerly to beyond the project limits. This line will remain in place without adjustment.

Contact Steve Cramer, (414) 227-4045 office / (414) 688-2385 cell, of Time Warner Cable 7 days in advance to coordinate locations and any excavation near their facilities.

**Wauwatosa, City of - Sanitary** has an underground sanitary sewer beginning at a manhole at Station 16FR2+95, 8'RT and running northerly to beyond the northerly project limits. This line will remain in place without adjustment.

Contact Bill Wehrley, (414) 479-8929, of the City of Wauwatosa 7 days in advance to coordinate locations and any excavation near their facilities.

Wauwatosa Water Utility has underground water facilities within the project limits in the following locations:

- An underground water main beginning beyond the westerly project limits and running easterly along the north side of Capitol Drive Frontage Road 2, crossing the IH 41 southbound exit ramp and continuing easterly to Station 18FR2+32, 67'LT where it turns and runs northeasterly to Station 18FR2+56, 90'LT. From there the main runs easterly, crossing USH 41 at Station 235+19, and continues easterly to Station 20FR2+16, 76'LT. From there it turns and runs southeasterly across the IH 41 northbound entrance ramp to Station 20FR2+41, 40'LT where it turns and runs easterly to beyond the easterly project limits. This line will remain in place without adjustment.
- An underground water main beginning at Station 16FR2+63, 76'LT and running southerly to a hydrant at Station 16FR2+60, 22'LT. This line will remain in place without adjustment.

- An underground water main beginning at Station 17FR2+28, 73'LT and running northerly and northeasterly to beyond the project limits. This line will remain in place without adjustment.

Contact David Simpson, (414) 471-8422, of the Wauwatosa Water Utility 7 days in advance to coordinate locations and any excavation near their facilities.

**WE Energies** – **Electric** has overhead and underground electric facilities within the project limits in the following locations:

- An overhead electric line beginning beyond the westerly project limits and running easterly along the north side of Capitol Drive Frontage Road 2 to a pole at Station 17FR2+68, 101'LT. From there the line continues easterly, crossing IH 41 at Station 235+26, and continuing easterly to a pole at Station 20FR2+65, 80'LT. From there it continues easterly to beyond the easterly project limits. This line will remain in place without adjustment.
- An underground electric line beginning beyond the westerly project limits and running easterly along the southerly right of way of Capitol Drive Frontage Road 1 and ending at a transformer at Station 21FR1+30, 47'RT. This line will remain in place without adjustment.

Contact Erich Wuestenhagen, (414) 944-8765 office, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WE Energies** – **Gas** has underground gas facilities within the project limits in the following locations:

- An underground gas line beginning beyond the westerly project limits and running easterly along a line approximately 95' south of the north right of way of Capitol Drive Frontage Road 2, to Station 21FR2+26, 23' RT where it turns and runs southeasterly to Station 21FR2+57, 53'RT. From there the line turns and runs easterly to beyond the project limits. This line will remain in place without adjustment.
- An underground gas line beginning beyond the southerly project limits and running northerly along the westerly right of way of IH 41 to Station 21FR1+66, 88'RT where it turns and runs easterly to Station 24FR1+18 ,78'RT. From it runs northeasterly to Station 24FR1+93 , 23'RT, where it turns and runs northerly to Station 24FR1+90 , 130'LT. We Energies will discontinue this line in place prior to construction.

Additionally, We Energies will remove discontinued gas main in conflict with proposed construction in locations where the gas main coating may contain hazardous material. The removal of such discontinued gas main will occur during construction. There is an anticipated conflict in a locations where the proposed storm sewer crosses the existing gas main at Station 19C2+66, 1'RT, Allow 1 day for We Energies to remove the discontinued

main. Contact Paul Osmanski, (414) 944-5796, of We Energies 10 days prior to any activity that will expose the existing gas main to coordinate removal activities.

Prior to construction, We Energies will relocate, construct and reconstruct gas facilities beginning west of the westerly project limits south of the right of way line of the Capitol Drive Frontage Road 1 and running east on private property to Station 21FR1+37, 76' RT. The line will turn south and continue along the southbound entrance ramp, west of the right of way line, on private property to beyond the southerly project limits.

Contact Erich Wuestenhagen, (414) 944-8765 office, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

**WisDOT - Lighting** has overhead and underground lighting facilities within the project limits in the following locations:

- Underground electric lines and light poles beginning beyond the southerly project limits and running northerly along the median of IH 41 beyond the northerly project limits. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.
- Underground electric lines and light poles along the ramps of the IH 41/ Capitol Drive interchange throughout the project limits. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.
- Underground electric lines, light poles, wall mounted conduits and lighting beginning beyond the westerly project limits and running easterly along the retaining wall between westbound Capitol Drive and the westbound Capitol Drive Frontage Road 2, crossing IH 41, and continuing easterly to beyond the easterly project limits. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.
- Underground electric lines, light poles, wall mounted conduits and lighting beginning beyond the westerly project limits and running easterly along the retaining wall between eastbound Capitol Drive and the eastbound Capitol Drive Frontage Road 1, crossing IH 41, and continuing easterly to beyond the easterly project limits. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.

Contact Eric Perea, (262) 574-5422 office / (414) 750-0935 cell, of WisDOT 7 days in advance to coordinate locations, construction activities and any excavation near their facilities.

**WisDOT – Signals** has signal facilities at the eastbound Capitol Drive Frontage Road 1 and westbound Capitol Drive Frontage Road 2 intersections with the IH 41/ Capitol Drive interchange ramps and at the intersections of the eastbound and westbound frontage roads with N. 118<sup>th</sup> Street. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.

Contact WisDOT Traffic Signal Operations, (414) 750-2605, 7 days in advance to coordinate construction.

**WisDOT - STOC** has FTMS facilities within the project limits in the following locations:

- An underground communications line beginning beyond the southerly project limits and running northerly along the west side of the IH 41 southbound entrance ramp to a cabinet at Station 22FR1+03, 158'RT. From there the line runs northwesterly to a pull box at the northeast corner of the N. 118<sup>th</sup> Street/ eastbound Capitol Drive Frontage Road 1 intersection. The line continues northerly along the east side of N. 118<sup>th</sup> Street, crossing Capitol Drive, to a pull box at the southeast corner of the N. 118<sup>th</sup> Street/ westbound Capitol Drive Frontage Road 2 intersection. From there the line continues easterly to a pull box at Station 18FR2+37, 20'RT, where it turns and runs northerly along the west side of the IH 41 southbound exit ramp to beyond the project limits. This line will remain in place without adjustment.
- An underground communication line beginning at a ramp meter at Station 22FR2+72, 10'LT and running westerly and northwesterly along the IH 41 northbound entrance ramp to a cabinet at Station 20FR2+60, 96'LT. From there the line continues northerly beyond the project limits. This line will remain in place without adjustment.

Contact Jeff Madson, (414) 225-3723, of WisDOT 7 days in advance to coordinate locations and any excavation near their facilities.

#### 8. Other Contracts.

It is expected that routine maintenance by the city and county personnel may be required at certain times concurrently with the work being done under this contract.

The following contracts are anticipated to be under construction within the time period of this contract, unless otherwise indicated:

Contract ID 1060-33-81, Zoo Interchange Phase 2 reconstruction. The WisDOT contact is Mark Klipstein at (414) 750-1496; mark.klipstein@dot.wi.gov.

Contract ID 1060-33-82, IH 94 Auxiliary Lanes reconstruction from Moorland Road to Underwood Parkway. The WisDOT contact is Mark Klipstein at (414) 750-1496; <a href="mark.klipstein@dot.wi.gov">mark.klipstein@dot.wi.gov</a>.

Contract ID 1060-34-83, IH 894 southbound Noise Wall reconstruction from UPRR Bridge to Lincoln Avenue. The WisDOT contact is Mark Klipstein at (414) 750-1496; mark.klipstein@dot.wi.gov.

#### 9. Railroad Insurance and Coordination.

## A Description

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

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

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

Notify evidence of the required coverage, and duration to John Venice at (312) 777-2043, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606. Include the following information on the insurance document:

Project: 1360-09-71

Route Name: STH 180, Capitol Drive, Milwaukee County

Crossing: ID 177270P

Railroad Subdivision: Milwaukee

Railroad Milepost: 94.3

#### A.2 Work by Railroad

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

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

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

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

#### A.4 Temporary Grade Crossing

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

#### A.5 Train Operation

Approximately 20-25 through freight trains operate daily through the construction site. Through freight trains operate at up to 30 mph. In addition to through movements, there are switching movements at slower speeds.

#### A.6 Rail Security Awareness and Contractor Orientation

Prior to entry on railroad right-of-way, the contractor shall arrange for on-line security awareness and contractor orientation training and testing, and be registered through "e-RAILSAFE" for all contractor and subcontractor employees working on railroad right-of-way. See e-railsafe.com "Information". The security awareness and contractor orientation training is shown under the railroad's name. The department has secured right of entry to railroad property; neither the contractor nor subcontractors or their employees will be required to sign a right-of-entry form. The security awareness and contractor orientation certification is valid for 1 year(s) and must be renewed for projects that will carry over beyond the 1 year period. Contractor and subcontractor employees shall wear the identification badge issued by e-RAILSAFE when on railroad right-of-way. Costs associated with training and registration are incidental to other items in the contract

#### 10. Erosion Control.

*Supplement standard spec 107.20 with the following:* 

Erosion control best management practices (BMP's) shown on the plans are at suggested locations. The actual locations will be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP will supplement information shown on the plans and not reproduce it. The ECIP will identify how to implement the project's erosion control plan. ECIP will demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of top soil to minimize the period of exposure to possible erosion.

Provide the ECIP 14 days prior to the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison, Kristina Betzold, (414) 263-8517, Kristina.betzold@wisconsin.gov. Do not implement the ECIP until department approval, and perform all work according to the approved ECIP.

Maintain Erosion Control BMP's until permanent vegetation is established or until the engineer determines that the BMP is no longer required.

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Immediately install perimeter silt fence protection around stockpiles. If stockpiled materials will be left for more than 14 days, install temporary seed or other temporary erosion control measures the engineer orders.

Re-apply topsoil on graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 days after placement of topsoil. If graded areas are left not completed and exposed for more than 14 days, seed those areas with temporary seed.

Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering(mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system

without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering will be paid for under other bid items in this contract.

SEF Rev. 15 0120

## 11. Public Convenience and Safety.

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

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 8:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer. 107-001 (20060512)

# 12. Traffic Meetings and Traffic Control Scheduling.

Every Wednesday by 9:00 AM, submit a detailed proposed 2-week look-ahead traffic closure schedule to the engineer. Type the detailed proposed 2-week look-ahead closure schedule into an excel spreadsheet provided by the engineer. Enter information such as closure dates, duration, work causing the closure and detours to be used. Also enter information such as ongoing long-term closures, emergency contacts and general 2-month look-ahead closure information into the excel spreadsheet.

Meet with the engineer at 10:00 AM on Wednesdays at the Zoo Interchange project office on 2424 S. 102nd Street; West Allis to discuss and answer questions on the proposed schedule. Edit, delete and add closures to the detailed proposed 2-week look-ahead schedule, as directed by the engineer, so that proposed closures meet specification requirements. Other edits, deletions or additions unrelated to meeting specification requirements may also be agreed upon with the engineer during the 10:00 AM meeting.

Every Wednesday at 2:00 PM, attend a weekly traffic meeting. The meeting will bring local agencies, project stakeholders, owner managers, owner engineers, contractors, document control and construction engineering personnel together to discuss traffic staging, closures and general impacts. Upon obtaining feedback from the meeting attendees, edit, delete and add information to the detailed 2-week look-ahead closure schedule, as needed. Submit the revised 2-week look-ahead to the engineer by 12:00 PM on Thursdays.

Obtain approval from the engineer for any changes to the closure schedule that is proposed outside the Wednesday meetings, including additional closures or cancellations. Submit requests for additional closures or cancellations for Friday, Saturday, Sunday or Monday of the current schedule week by 12:00 PM on Thursday. Revise the 2-week look-ahead as needed to reflect these changes and submit to the engineer.

#### 13. Available Documents.

The department will make all its information available to bidding contractors. The list of documents that are available for contractors' information includes but is not limited to:

- Design Study Report
- Environmental Document
- As-Built Drawings
- Preconstruction survey
- Traffic Management Plan

These documents for Project 1060-39-90 are available from Christopher Hager at 141 NW Barstow Street, Waukesha, WI 53187, (414) 750-1487; <a href="mailto:christopher.hager@dot.wi.gov">christopher.hager@dot.wi.gov</a>.

These documents for Project 1360-09-71 are available from Georgia Vergou-Ornek at 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-8812.

Reproduction costs will be applied to any copies requested. SEF Rev. 15 0619

#### 14. Contractor Notification.

*Replace standard spec 104.2.2.2(2) with the following:* 

If the contractor discovers the differing condition, provide a written notice, as specified in standard spec 104.3.3, of the specific differing condition before further disturbing the site and before further performing the affected work.

#### **104.3.2** (Vacant)

#### **104.3.3** Contractor Initial Written Notice

Replace standard spec 104.3.2 and 104.3.3 with the following:

If required by standard spec 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, promptly provide a written notice to the engineer. At a minimum, provide the following:

- 1. A written description of the nature of the issue.
- 2. The time and date of discovering the problem or issue.
- 3. If appropriate, the location of the issue.

Provide the additional information specified in standard spec 104.3.5 as early as possible to assist the engineer in the timely resolution of an identified issue. The engineer will not require, in subsequent submissions, duplication of information already provided. SEF Rev. 14 1211

#### 15. Contractor Document Submittals.

This special provision describes minimum requirements for submitting project documents to the department. This special provision does not apply to shop drawing submittals.

Provide one electronic copy of all documents requiring department review, acceptance, or approval. Attach a completed engineer-provided transmittal sheet to each email submittal. The department will reject submittals with incomplete transmittal sheets and require resubmittal.

The department will return one reviewed, accepted, or approved original to the contractor. Additional return originals can be requested. Submit an additional original for each additional return original requested.

Submit electronic copies in Adobe Acrobat (.pdf) format via email to an account the engineer determines. If possible, translate original documents from their native format (e.g. Word, Excel, AutoCAD, etc.) using a translation routine. Scan other documents to PDF format with a minimum resolution of 600 dpi.

All costs for contractor document submittals are incidental to the contract. SEF Rev. 15 0619

# 16. Information to Bidders, Use of Recovered Material.

The department encourages the use of waste materials and recovered industrial byproducts as material substitutions (106.2.1), provided they meet standard specification gradation requirements, conform to NR 538 requirements, and follow standard engineering practice for their intended use.

SEF Rev. 14 1211

# 17. Dust Control Implementation Plan.

#### **A** Description

This special provision describes developing, updating, and implementing a detailed Dust Control Implementation Plan (DCIP) for all land-disturbing construction activities and associated impacts both within the project site boundaries and outside the project site boundaries. Incorporate contract bid items that this article specifies into the DCIP.

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

#### **C** Construction

#### C.1 General

Control dust on the project as specified in standard spec 107.18. Minimize dust emissions resulting from land disturbing activities. Do not generate excessive air borne particulate matter (PM) or nuisance dust conditions. Control dust at all times during the contract.

Submit a DCIP to the engineer for review at least 14 calendar days before the preconstruction conference. Coordinate with the department, if requested, to resolve DCIP related issues before the preconstruction conference. The department will either approve the DCIP or request revisions. Do not initiate any land-disturbing activities without the department's approval of the DCIP.

#### **C.2 DCIP Contents**

Develop a DCIP tailored to the specific needs of the project. Consider potential impacts to businesses and residences adjacent to the job site. Describe in detail all land disturbing, dust generating activities. Identify strategies to prevent, mitigate, and collect excess dust. Establish clear lines of communication with the engineer to ensure that all dust control issues can be dealt with promptly.

Include all of the following:

- 1. A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Provide:
  - Name, firm, address, and working-hours phone number.
  - Non-working-hours phone number.
  - Email address.
- 2. A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and immediately adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where employing various dust control or prevention strategies.
- 3. A matrix, or plan, for each anticipated land disturbing, dust generating activity, showing the following:
  - Preventive measures that shall be employed.
  - The applicable contact person.
  - The contractor's timetable and surveillance measures used to determine when remediation is required.
  - The specific dust control and remediation measures that shall be employed. Identify the specific contract bid items that shall be used for payment. Indicate costs and practices that are incidental to the contract.
  - Both maintenance and cleanup schedules and procedures.
    - Excess and waste materials disposal strategy.
- 4. A description of monitoring and resolving off-site impacts.

# **C.3** Updating the DCIP

Update the DCIP during the contract or as the engineer directs. Obtain the engineer's approval for all DCIP alterations. Also obtain the engineer's approval for routine DCIP adjustments for weather, job conditions, or emergencies that will have an impact on payment under the bid items listed in the approved DCIP.

#### C.4 Dust Control Deficiencies

Coordinate with engineer to determine deadlines for resolving dust control deficiencies. Deficiencies include actions or lack of actions resulting in excessive dust, failing to comply with the contractor's DCIP or associated special provisions, and failing to properly maintain equipment.

#### **D** Measurement

The department will measure the various bid items associated with dust control as specified in the applicable measurement subsections of either the standard specifications or other contract special provisions. The department will not measure work performed under a DCIP alteration unless the engineer specifically approves that alteration.

Measurement under the DCIP includes the contract bid items listed below:

623.0200 Dust Control Surface	e Treatment
-------------------------------	-------------

624.0100 Water

SPV.0075.0001 Pavement Cleanup Project 1060-39-90 SPV.0075.0002 Pavement Cleanup Project 1360-09-71

The department will measure work completed under other existing contract bid items if approved as a part of the DCIP. The department will consider new bid items to the contract if proposed under the DCIP. The department will not measure work required under the DCIP that is not included in contract bid items

#### E Payment

All costs associated with the development and updating of the DCIP are incidental to the contract. The department will pay separately for the work required to implement the actions approved in the DCIP under the contract bid items approved as a part of the DCIP. All other costs associated with work approved under the DCIP are incidental to the contract. SEF Rev. 16 0414

# 18. Maintaining Drainage.

Maintain drainage at and through worksite during construction according to standard spec 107.22, 204, 205 and 520.

Use existing storm sewers, existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps is considered incidental to the project.

#### **Dewatering (Mechanical Pumping) for Bypass Water (sediment-free) Operations**

If dewatering bypass operations are required from one pipe structure to another downstream pipe structure or from the upstream to downstream end of a culvert and the bypass flow is not transporting sediments (sand, silt, and clay particles) from a tributary work site area, bypass pumping operations will be allowed provided that the department has been made aware of and approves operation. When pumping bypass flows, the discharge location will need to be stable and not produce any erosion from the discharge velocity that would cause release of sediment downstream.

**Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations** If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to article Erosion Control in these special provisions for additional requirements. SEF Rev. 15 0209

# 19. Notice to Contractor – Incidental Clearing and Grubbing.

The plans include several locations in which small trees and shrubs are marked for removal. These were included for clarity for their need for removal, but are of such small size that they are considered incidental per standard spec 201.4.1(4) and 201.5(4).

# 20. Notice to Contractor – Traffic Signal Equipment Lead Time.

Lead time for traffic signal equipment specified for this project has been ranging from 12-weeks to 18-weeks. Order equipment as soon as possible to assure the equipment is procured in a timely fashion and, therefore, installed, inspected, and ready for turn-on at the required date.

# 21. Notice to Contractor – Airport Operating Restrictions.

Fill out the FAA Notice Criteria tool for any permanent structure (bridge, light pole, etc.) or equipment (crane, etc.) used during construction.

http://oeaaa.faa.gov/oeaaa/external/portal.jsp

If required by the Notice Criteria tool, and for any crane or construction equipment higher than 200 feet above the ground, submit completed form 7460-1 (Notice of Proposed Construction or Alteration) to The Federal Aviation Administration (FAA) at least 45 days before starting construction.

SEF Rev. 14 0609

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

Petroleum-contaminated soil is present at the following sites:

- 1. Northeast corner of W. Burleigh St. and N. 124<sup>th</sup> St.
- 2. Northwest corner of W. Burleigh St. and N. 124th St.
- 3. Southeast corner of W. Burleigh St. and N. 124th St.
- 4. Southwest corner of W. Burleigh St. and N. 124th St.

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

The Hazardous Materials Report is available by contacting:

Andrew Malsom
Wisconsin Department of Transportation
141 NW Barstow
Waukesha, WI 53187
(262) 548- 6705
Andrew.Malsom@dot.wi.gov.

# 23. Notice to Contractor – Signs and Signals– Capitol Drive at 118th Street.

Standard spec 637.1 is herein modified to require that signs # 6-10, 6-11, 6-12, 6-13, 6-14, 6-15, 6-16, 6-17 6-2, 6-3, 6-4, 6-5, 6-24, 6-25, 6-26, and 6-27 (STOP signs) and Signs 6-1, 6-7, 6-22, 6-23, and 6-18 (NEW TRAFFIC PATTERN signs) shown on sheet 15 of 15 of the signing plans at Capitol Drive and 118th be installed by July 1, 2017 or as directed by the engineer.

Power off the traffic signals at the main breaker of the intersection of Capitol Drive and 118th Street and cover all traffic signal heads after all of the signs are placed. Coordinate the powering off of the traffic signals and covering of the signal heads with the SE Region Traffic Signals Group. After the intersection of Capitol Drive and the IH-41 Ramps are reopened to traffic, the SE Region Traffic Signal Group will begin a 30 day evaluation of the Capitol Drive and 118th Street intersection. At the end of this evaluation period, the department will determine if the signals will be removed as shown in the plans or if they will remain in place with other improvements.

#### 24. Notice to Contractor – OCIP Exclusions.

The Owner Controlled Insurance Program (OCIP) insurance coverage excludes environmental/abatement work, including but not limited to hazardous materials/chemicals, lead and other materials considered hazardous – see Article – Owner Controlled Insurance Program for additional information. Environmental/abatement work must be performed by a qualified contractor and the work will not be covered under OCIP. The contractor performing Environmental/abatement work may potentially be enrolled in the OCIP if also performing other work not excluded from the OCIP umbrella. The qualified subcontractor must carry Construction Pollution Liability insurance with limits of at least \$1,000,000 per Occurrence and \$2,000,000 Aggregate.

Report only payroll from non-environmental work under the OCIP. Do not report payroll generated from environmental/abatement work.

Direct questions regarding this or any other aspects of OCIP to Chris Luttrell at (608) 381-2340, or <a href="mailto:chris.luttrell@dot.wi.gov">chris.luttrell@dot.wi.gov</a>. SEF Rev. 14 0529

# 25. Owner Controlled Insurance Program.

Standard spec 107.26, "Standard Insurance Requirements" is deleted in its entirety and the following standard spec 107.26 is substituted thereof:

#### **107.26 Standard Insurance Requirements**

#### 107.26(1)(a) Owner Controlled Insurance Program

- 1. Overview. The State of Wisconsin, Department of Transportation ("the WisDOT") has arranged with Aon Risk Solutions, (the "OCIP administrator") for this Project to be insured under its Owner Controlled Insurance Program ("OCIP"). The OCIP is more fully described in the Mega Projects manual for the Owner Controlled Insurance Program (the "Insurance Manual") and the Safety and Health Plan Manual that are incorporated in this Special Provision and the Contract by this reference. Parties performing labor or services at the Project Site (as defined by the OCIP Policies) are eligible to enroll in the OCIP unless the party is an excluded party (as defined below). The OCIP will provide to enrolled parties(as defined below) workers' compensation and employer's liability insurance, commercial general liability insurance, Builders Risk and Excess Liability insurance as summarily described below in connection with the performance of the Work ("OCIP coverage's").
- 2. Enrolled Parties and Their Insurance Obligations. OCIP coverage applies only to Enrolled Parties. Enrolled Parties include the WisDOT and its employees, non-excluded Contractors and Subcontractors of all tiers who enroll in the OCIP, all employees of Enrolled Contractor's and Subcontractor's who perform Work at the Project Site, and such other persons or entities that the WisDOT, in its sole discretion, may designate (each such party who is insured under the OCIP is collectively referred to as an "Enrolled Party").

Enrolled Parties shall obtain and maintain, and shall require each of its Subcontractors to obtain and maintain, the insurance coverage specified in 107.26(1)(a) 8 below.

- **3. Excluded Parties and Their Insurance Obligations.** OCIP coverage's do not apply to the following "Excluded Parties":
  - a. Hazardous materials remediation, removal and/or transport companies;
  - b. Vendors \*, suppliers, fabricators, material dealers, truckers\*\*, haulers, drivers and others who merely transport, pickup, deliver, or carry materials, personnel, parts or equipment or any other items or persons to or from the Project;
    - \* WisDOT is requiring all vendors who perform maintenance on an enrolled contractor's equipment to be enrolled in the OCIP. Please see "WisDOT OCIP Enrollment Guidance Relating to Service Vendors" to determine whether they will be enrolled per project id number or on a Miscellaneous blanket basis.
    - \*\* Truckers that come on site must remain in the cab of the vehicle.

Refer to the "Enrollment Matrix" which clearly outlines the requirements contingent upon the category that the entity falls under, such as: Contractor; Subcontractor; Consultant; Visitor; etc.

- c. Sanitary disposal facility providers, if the only function is to drop off the units and pick them up later, they are material suppliers and are excluded. If the company also services/cleans the units on site, that is no longer being a material supplier. (Refer to "Enrollment Matrix", Vendors Providing Maintenance On Site).
- d. Contractors and Subcontractors of any tier that do not perform any actual labor on the Project site;
- e. Any party or entity not specifically identified in this special provision or excluded by the WisDOT as permitted by law, even if otherwise eligible.
- f. If you are not employed by an Enrolled Party, but performing services of an Excluded Party, you are not covered by the OCIP.

Excluded Parties and parties not enrolled in the OCIP shall obtain and maintain, and shall require each of its excluded Subcontractors to obtain and maintain, the insurance coverage specified in standard spec 107.26(1)(a) 8 below and in the Insurance Manual. Excluded Parties shall comply with all of the safety requirements pursuant to 107.26(1)(a) 16.

- **4. OCIP Insurance Policies Establish OCIP coverage's**. The OCIP coverage's and exclusions summarized in this special provision and the other contract documents are set forth in full in their respective insurance policy forms. The summary descriptions of the OCIP coverage's in this special provision or the Insurance Manual are not intended to be complete or to alter or amend any provision of the actual OCIP coverage's. In the event any provision of this special provision, the Insurance Manual, or the contract documents, conflicts with the OCIP insurance policies, the provisions of the actual OCIP insurance policies shall govern.
- **5. Summary of OCIP Coverage's**. OCIP coverage's will apply only to those operations of each Enrolled Party performed at the Project Site (as defined in the OCIP insurance Policies) in connection with the Work and only to Enrolled Parties that are eligible for the OCIP.

The OCIP coverage's are primary insurance for all Enrolled Parties for occurrences during the policy period at the Project Site (as defined in the OCIP Policies). The OCIP will provide at least the following insurance to Enrolled Parties:

#### **Summary of OCIP Coverages**

This is a brief description of OCIP Insurance Coverage. Enrolled Parties should refer to the actual policies for details concerning coverage, exclusions and limitations.

- a. Workers' Compensation Insurance -Statutory Limit including Jones Act and USL&H coverage, as applicable.
- b. Employer's Liability Insurance \$1,000,000 Bodily Injury by Accident, each accident \$1,000,000 Bodily Injury by Disease, each employee \$1,000,000 Bodily Injury by Disease, policy limits
- c. Commercial General Liability (ISO Occurrence Form Limits Shared By All Insureds) \$2,000,000 Each Occurrence Limit (Annual Limit) \$2,000,000 Personal/Advertising Injury Aggregate \$4,000,000 General Aggregate Limit for all Enrolled Parties (Annual Limit)

\$4,000,000 Products and Completed Operations Aggregate for all Enrolled Parties (Single Limit Applies to Entire Products and Completed Operations Extension)

10 yr. Products and Completed Operations Extension

- d. The OCIP Commercial General Liability policy will not provide coverage for any claim that could be covered under a property policy or Builder's Risk policy.
- e. Excess Liability insurance (over Employer's Liability and General Liability Limits Shared by All Insureds)

\$100,000,000 Each Occurrence Limit

\$100,000,000 Aggregate (Annual Limit)

\$100,000,000 Products and Completed Operations Aggregate Limit (Single Limit Applies to Entire Products and Completed Operations Extension).

#### f. Builder's Risk Insurance Coverage:

This is a brief description of Builder's Risk Insurance Coverage. Contractor should refer to the actual policies for details concerning coverage, exclusions and limitations.

The Builder's Risk insurance covers insures property, including materials, supplies, machinery, fixtures and equipment which will become a permanent part of the Work (excluding road work at grade level) in the course of construction.

#### The Builder's Risk coverage insures WisDOT and Enrolled Parties.

Builders Risk:

Limit

Each Occurrence Limit \$100,000,000

#### Builder's Risk Obligation:

- 1. Contractor or Subcontractor shall pay to the WisDOT's designee within five (5) days
- 2. Written notice a maximum of up to twenty-five thousand dollars (\$25,000.00) for each loss payable under the Builder's Risk Policy attributable to Contractor's Work, acts or omissions, or the Work, acts or omissions of any of Contractor's Subcontractors, or any other entity or party for whom contractor may be responsible ("builder's risk obligation").

#### 6. The WisDOT's Insurance Obligations.

- a. The WisDOT will pay the costs of premiums for the OCIP coverage's and WisDOT will receive or pay, as the case may be, all adjustments to such costs, whether by way of dividends, retroactive adjustments, return premiums, other moneys due, audits or otherwise.
- b. The WisDOT assumes no obligation to provide insurance other than that specified in this special provision and the OCIP insurance policies.
- c. Except as provided by applicable law, the WisDOT's furnishing of OCIP coverage's will in no way relieve or limit, or be construed to relieve or limit, contractor or any of its Subcontractors of any responsibility, liability, or obligation imposed by the contract

documents, the OCIP insurance policies, or by law, including without limitation any indemnification obligations which contractor or any of its Subcontractors has to the WisDOT there under. The WisDOT reserves the right at its option, to furnish other insurance coverage of various types and limits provided that such coverage is not less than that specified in the contract documents.

# 7. Contractor's OCIP Obligations. Contractor shall:

- a. Assign to WisDOT the right to receive all such adjustments, and shall require that each of its Subcontractors of every tier assigns to WisDOT the right to receive all such adjustments.
- b. Incorporate the terms of this special provision in all subcontract agreements.
- c. Enroll and maintain enrollment in the OCIP, and shall ensure that each non-Excluded subcontractor, enrolls and maintains enrollment in the OCIP. Enrollment shall take place within five days of a receipt of a Notice to Proceed, and prior to commencement of work. Comply with all of the administrative, safety, insurance, and other requirements outlined in this special provision, the Insurance Manual, the OCIP insurance policies, the Safety and Health Plan Manual, or elsewhere in the contract documents.
- d. Provide each of its Subcontractors with a copy of the Insurance Manual and ensure Subcontractor compliance with the provisions of the OCIP insurance policies, the Insurance Manual, this special provision, and the contract documents. The failure of (a) the WisDOT to include the Insurance Manual in the bid documents or (b) Contractor to provide each of its eligible Subcontractors with a copy of same shall not relieve Contractor or any of its Subcontractors from any of the obligations contained therein.
- e. Acknowledge, and require all of its Subcontractors to acknowledge in writing, that the WisDOT and the OCIP administrator are not agents, partners or guarantors of the insurance companies providing coverage under the OCIP (each such insurer, an "OCIP insurer") and that the WisDOT is not responsible for any claims or disputes between or among Contractor, its Subcontractors, and any OCIP insurer(s). Any type of insurance coverage or limits of liability in addition to the OCIP coverage's that Contractor or any Subcontractor requires for its or their own protection, or that is required by applicable laws or regulations, shall be Contractor's or its Subcontractor's sole responsibility and expense and shall not be billed to the WisDOT.
- f. Cooperate fully with the OCIP administrator and the OCIP insurers, as applicable, in its or their administration of the OCIP.
- g. Provide, within five business days of the WisDOT's or the OCIP administrator's request, all documents or information as requested of Contractor or its Subcontractors. Such information may include but not be limited to, payroll records, certified copies of insurance coverage's, declaration pages of coverage's, certificates of insurance, underwriting data, prior loss history information, insurance audits, safety records or history, OSHA citations, or such other data or information as the WisDOT, the OCIP

- administrator, or OCIP insurers may request in the administration of the OCIP, or as required by the Insurance Manual.
- h. Pay to the WisDOT's designee within five (5) days of written notification, a sum of up to \$10,000 of each claim, including court costs, attorneys fees and costs of defense for property damage to the extent losses are insured under the OCIP Commercial General Liability policy for those losses that are attributable to Contractor's Work, acts or omissions, or the Work, acts or omissions of any of its Subcontractors, or any other entity or party for whom Contractor may be responsible ("contractor General Liability obligation"). The contractor General Liability obligation will not be insured by the OCIP Coverage's.
- **8.** Additional Insurance Required From Enrolled Parties and Excluded Parties. Contractor shall obtain and maintain, and shall require each of its Subcontractors of every tier to obtain and maintain, the insurance coverage specified in this Section in a form and from insurance companies reasonably acceptable to the WisDOT. The insurance limits may be provided through a combination of primary and excess policies, including the umbrella form of policy. The insurance required by this Section shall conform to the WisDOT's requirements outlined in the Insurance Manual and be written by companies authorized to do business in the state of Wisconsin with an **AM Best rating of A-or better**. Contractor shall provide certificates of insurance coverage to the WisDOT as required below and by the Insurance Manual.

As to Enrolled Parties, the Workers' Compensation, Employer's Liability, and Commercial General Liability insurance required by this section shall only be for operations away from the Project Site (as defined by OCIP Policies). The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.

#### TYPE OF INSURANCE MINIMUM LIMITS REQUIRED

- 1. Commercial General Liability insurance shall be endorsed to include Blanket Contractual Liability coverage.
  - a. \$2,000,000 Combined Single Limits per occurrence with an annual aggregate limit of not less than \$4,000,000.
  - b. The OCIP Coverage's shall exclude blasting or explosion operations. If blasting or explosion operations are used in connection with the Work, Commercial General Liability insurance shall not contain an exclusion for blasting or explosion and shall be provided in limits established by the WisDOT at the time such blasting or explosion methods are elected. Such coverage shall apply to operations whether the operations occur on the Project site or away from the Project site.
  - c. Wisconsin Department of Transportation, their respective officers, agents and employees, and any additional entities as the WisDOT may request as additional insureds must be named as an Additional Insured which shall include: i) liability arising out of the Work performed by the named insured; ii) liability arising out of the supervision of the Work performed by or operations of the named insured; and

- iii) liability of the acts or omissions of the Additional Insureds relating to Work performed by the named insured for the Project, except for sole negligence of the Additional Insureds iv) will state that coverage is afforded on a primary and non-contributory basis.
- d. Ongoing Construction Operation(s) in effect at all times while work is being performed by Contractor;
- e. Subcontractors and Independent Contractors (if any);
- f. Products and Completed Operations, including coverage applicable to additional insureds (as required by this agreement) with Completed Operations coverage to remain in force, whether by endorsement or renewal of coverage, including the Contractor, any party required to be indemnified by this Contract and any other party required by this Contract to be named as an additional insured, for at least two (2) years from the date of final completion of the Project and WisDOT's acceptance of the work; and
- g. Explosion, collapse, and underground hazards.
- h. Contractual Liability (insured contract) coverage sufficient to meet the requirements of this Contract (including defense costs and attorney's fees assumed under contract);
- i. Personal and Advertising Injury Liability coverage (with the standard contractual and employee exclusions deleted);
- j. Notice and Knowledge of Occurrence conditions limited to the knowledge of relevant corporate officers or risk managers with an Unintentional Errors and Omissions provision (providing that the insurer may not deny coverage unless it can show that it has been prejudiced by a failure of the insured to comply with a condition of the policy); and
- k. CG 22 79 07 98 (or equivalent) is the only acceptable Professional Liability Exclusion.
- 1. Operations performed within 50' of railroad
- m. Contractors must provide their own insurance for owned, leased, rented and borrowed equipment, whether such equipment is located at a Project Site or "in transit". Contractors are solely responsible for any loss or damage to their personal property including, without limitation, property or materials created or provided under the Contract until installed at the Project Site, Contractor tools and equipment, scaffolding and temporary structures.
- 2. Workers' Compensation and Employer's Liability insurance.
  - a. Workers' Compensation Limits: Statutory Limits
  - b. Employer's Liability limits:
    - \$1,000,000 Bodily Injury by Accident, each accident \$1,000,000 Bodily Injury by Disease, each employee \$1,000,000 Bodily Injury by Disease, policy limits

Terms and conditions shall include:

- USL&H where applicable.
- Jones Act where applicable.
- · All states endorsement -where applicable.
- 3. Commercial Automobile Liability insurance as specified by Insurance Services Office (ISO), form CA 00 01, symbol 1 (any auto) with the following limits and endorsements:
  - a. No Trucking or Hauling: \$1,000,000 Each Accident
  - b. Trucking or Hauling (Non Hazardous Materials): \$2,000,000 Each Accident
  - c. Trucking or Hauling Hazardous Materials: \$5,000,000 Each Accident with an MCS 90 Endorsement and ISO Endorsement CA 99 48.
- 4. For any work over water, whether deemed navigable or otherwise, Contractors Pollution Liability insurance with \$2,000,000 per occurrence and \$2,000,000 aggregate policy limits
- 5. Aviation and/or Watercraft Liability insurance, as appropriate, including hull and protection and indemnity for watercraft, or other insurance, in form and with limits of liability and from an insuring entity reasonably satisfactory to the WisDOT.

Contractor's failure to procure or maintain the insurance required by this Section and to assure all its Subcontractors of every tier maintain the required insurance during the entire term of the contract shall constitute a material breach of this contract under which the WisDOT may immediately suspend or terminate this contract or, at its discretion, procure or renew such insurance to protect the WisDOT's interests and pay any and all premiums in connection therewith, and withhold or recover all monies so paid from the Contractor.

Contractor shall provide the WisDOT with certificates of insurance as evidence that required coverage's for insurance detailed in this section are in force. The bidder shall provide certificates of insurance in their pre-qualification statement as specified in standard spec 102.1.

Contractor shall notify the WisDOT at least 60 calendar days before a cancellation or material change in coverage and only obtain coverage from insurance companies licensed to do business in the state that have an AM Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The WisDOT will make no additional or special payment for providing insurance.

The above insurance requirements shall apply with equal force whether the Contractor or a Subcontractor, or anyone directly or indirectly employed by either, performs the work under the Project.

#### 9. Additional Insureds:

All insurance required by this agreement (excluding only workers compensation insurance) shall name WisDOT, all parties required to be indemnified by this Contract and all other parties as reasonably requested by the WisDOT, as additional insureds. All policies (including primary, excess and/or umbrella) must provide that coverage shall be primary and non-contributory to any insurance maintained by the Contractor or the additional insured, all of which shall be stated on the Certificate of Insurance provided by the Contractor. The Additional Insured Endorsement shall be on Form CG 20 10 11/85, or CG 20 33 10/01 plus CG 20 37 10/01, or equivalent, and shall include ongoing and completed operations coverage, which shall not contain any restrictions.

IN THE EVENT THAT THE LAW OF THE STATE IN WHICH THE PROJECT IS LOCATED (OR APPLICABLE LAW) LIMITS THE ADDITIONAL INSURED COVERAGE THAT WISDOT MAY REQUIRE FROM THE CONTRACTOR, THEN THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ADDITIONAL INSURED COVERAGE TO THE FULLEST EXTENT OF COVERAGE AND LIMITS ALLOWED BY APPLICABLE LAW AND THIS CONTRACT SHALL BE READ TO CONFORM TO SUCH LAW.

- **10. Contractor Representations and Warranties to the WisDOT.** Contractor represents and warrants to the WisDOT or behalf of itself and its Subcontractors:
- a. That all information it submits to the WisDOT or the OCIP administrator shall be accurate and complete.
- b. That Contractor, on behalf of itself and its Subcontractors, has had the opportunity to read and analyze copies of the OCIP binders and specimen policies that are on file in the WisDOT's office. Any reference or summary in the contract, this special provision, the Insurance Manual, or elsewhere in any other contract document as to amount, nature, type or extent of OCIP coverage's and/or potential applicability to any potential claim or loss is for reference only. Contractor and its Subcontractors have not relied upon said reference but solely upon their own independent review and analysis of the OCIP coverage's in formulating any understanding and/or belief as to amount, nature, type or extent of any OCIP coverage's and/or its potential applicability to any potential claim or loss.
- c. That the costs of OCIP coverage's were not included in Contractor's bid or proposal for the Work, the contract price, and will not be included in any change order, change modification, or any request for payment for the Work or extra work. The "costs of OCIP coverage's" is defined as the dollar amount of premiums, costs and fees the Contractor and its Subcontractors would have paid its insurance carrier to insure the operations and exposures which are being insured under the OCIP.
- d. That Contractor acknowledges that the WisDOT will not pay or compensate Contractor or any Subcontractor, in any manner, for costs of OCIP coverage's or for "insurance costs" except as specifically required to be maintained by Contractor by the terms of this special provision.

#### 11. Severability of Interests (Cross Liability):

All insurance required by this agreement (excluding only workers compensation insurance) shall include a provision or be endorsed to provide that, inasmuch as the policy is written to cover more than one insured, all terms, conditions, insuring agreements and endorsements, with the exception of limits of liability, shall operate in the same manner as if there were a separate policy covering each insured. No cross liability exclusions are permitted and there may not be any restrictions in any policies that limit coverage for a claim brought by an additional insured against a named insured. Also, there shall not be any provision in any insurance policy which excludes or conditions coverage on the existence of a contract or other agreement requiring insurance.

# 12. Breach of Insurance Requirements:

The Contractor's failure to obtain and maintain insurance coverages as required by this agreement shall constitute a material breach of the Contract. In such event WisDOT may at its option: (i) terminate the Contractor for default; or (ii) purchase such coverage and backcharge the premium and associated costs to the Contractor; or (iii) at their respective option, WisDOT and/or an additional insured can require the Contractor and/or its Subcontractors to pay for attorney's fees, expenses, damages and liability as a result of any claim or lawsuit to the extent coverage would have been provided to them under the Contractor's insurance but for the Contractor's breach WisDOT has the right to backcharge the Contractor for such sums. Furthermore, to the extent of their respective interest, the Insurers of those entities that were to be included as additional insureds are deemed to be third-party beneficiaries of the insurance procurement obligation.

#### 13 Subcontractor

Before permitting any Subcontractor to perform work under a subcontract, the Contractor shall require by written contract that the Subcontractor maintain insurance in like form and amounts to that required herein. The Contractor shall be responsible to ensure that each Subcontractor maintains insurance in like form and amounts and shall Provide evidence of same if requested. Contractor shall provide copies of its Subcontractor's certificates of insurance coverage to WisDOT or the OCIP Administrator upon request.

#### 14. Notice of Cancellation:

All insurance coverages required by this agreement shall contain a provision that the coverage afforded thereunder cannot be cancelled, non-renewed, allowed to lapse, or have any restricted modifications added unless at least thirty (30) days prior written notice has been given to WisDOT. The Contractor is responsible to provide replacement coverage conforming with the requirements of this agreement in the event of any cancellation, non-renewal or modification of any insurance coverages required by this agreement.

#### 15. Limits of Insurance:

The Contractor's insurance coverage and any additional insured coverage provided to WisDOT and any additional insured shall be for the full amount of any loss up to the policy(s) limits of liability and shall not be limited to the minimum insurance requirements

of this Contract. The Contractor is responsible for notifying its insurance carriers in the event of a loss or potential loss involving coverage for the additional insureds. However, this does not prohibit any additional insureds from reporting a claim directly to the Contractor's insurance carriers.

#### 16. Deductibles/Denial of Claims:

The Contractor shall be responsible, at no additional cost to WisDOT, for the payment of any deductibles or self-insured retention in connection with the insurance coverages required by this agreement, both for itself and all additional insureds. Any self-insured retention or deductible must be declared in writing at the time the Contractor submits its bid and must be specifically approved by WisDOT prior to execution of the Contract. The Contractor shall be responsible for any loss arising out of coverage denial by its insurance carrier. The Contractor may not procure policies that limit who may pay the SIR or deductible; rather, any SIR shall be payable by either the Contractor or the Subcontractor and the Contractor may not have a policy that prevents WisDOT from accessing or triggering coverage unless the SIR is paid by the Contractor. Contractor shall also ensure that similar conditions are incorporated into all subcontracts. In the event that WisDOT is required to pay any deductible and/or SIR to access any insurance policy, Subcontractor shall promptly reimburse the Contractor for such payment.

# 17. No Waiver of Insurance Requirements:

IT IS EXPRESSLY AGREED BETWEEN WISDOT AND THE CONTRACTOR THAT THE FAILURE OF WISDOT TO REOUIRE OR VERIFY COMPLETE AND TIMELY PERFORMANCE OF THE CONTRACTOR'S OBLIGATIONS UNDER THIS CONTRACT SHALL NOT BE A WAIVER BY WISDOT OF ANY RIGHT OF WISDOT TO REQUIRE THE CONTRACTOR TO COMPLY WITH THESE INSURANCE REOUIREMENTS SEEK AND/OR TO **DAMAGES** BECAUSE OF THE CONTRACTOR'S **FAILURE** TO **COMPLY** WITH THE **INSURANCE** REQUIREMENTS IN THIS CONTRACT.

- **18. Audits.** Contractor agrees that the WisDOT, the OCIP administrator, and/or any OCIP insurer may audit Contractor's or any of its Subcontractor's Project payroll records, books and records, insurance coverage's, insurance cost information, or any other information that Contractor provides to the WisDOT, the OCIP administrator, or the OCIP insurers to confirm their accuracy and to assure that costs of OCIP coverage's are not included in any payment for the work.
- 19. The WisDOT's Election to Modify or Discontinue OCIP. The WisDOT may, for any reason, modify the OCIP coverage's, discontinue the OCIP, or request that Contractor or any of its Subcontractors withdraw from the OCIP upon thirty (30) days written notice. Upon such notice Contractor and/or one or more of its Subcontractors, as specified by the WisDOT in such notice, shall obtain and thereafter maintain at the WisDOT's expense, Contractor Maintained Coverages (or a portion thereof as specified by the WisDOT) of the OCIP coverage's. The form, content, limits of liability, cost, and the insurer issuing such replacement insurance shall be subject to the WisDOT's approval.

- **20.** Withhold of Payments. The WisDOT may withhold from any payment owing to Contractor the costs of OCIP coverage's if included in a request for payment. In the event the WisDOT audit of Contractor's records and information as permitted in the Contract, this special provision, or other contract documents reveals a discrepancy in the insurance, payroll, safety, or any other information required by the contract documents to be provided by Contractor to the WisDOT, or to the OCIP administrator, or reveals the inclusion of costs of OCIP coverage's in any payment for the work, the WisDOT will have the right to full deduction from the Contract Price of all such costs of OCIP coverage's and all audit costs. Audit costs will include but not be limited to the fees of the OCIP administrator, and the fees of attorneys and accountants conducting the audit and review. If the Contractor or its Subcontractors fail to timely comply with the provisions of this special provision or the requirements of the Insurance Manual, the WisDOT may withhold any payments due Contractor and its Subcontractors until such time as they have performed the requirements of this special provision. Such withholding by the WisDOT will not be deemed to be a default hereunder.
- 21. Waiver of Claim and Waiver of Subrogation: Where permitted by law, Contractor hereby waives all rights of recovery under subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against the WisDOT, the State of Wisconsin and any of its Agencies or Officer's, Agents or employees including without limitation, the OCIP administrator, its or their officers, agents, shareholders or employees of each, if any, and any other Contractor or Subcontractor performing work or rendering services on behalf of the WisDOT in connection with the planning, development and construction of the Project, and Contractor shall require that all Contractor maintained insurance coverage related to the work include clauses providing that each insurer shall waive all of its rights of recovery by subrogation for claims described above.
- 22. Waiver of Subrogation. Where permitted by law, Contractor shall also require that all Contractor maintained insurance coverage related to the work include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against the WisDOT, the State of Wisconsin and any of its Agencies or Officer's, Agents or employees including without limitation, the OCIP administrator, its or their officers, agents, shareholders or employees of each, if any. Contractor shall require similar written express waivers and insurance clauses from each of its Subcontractors. A waiver of subrogation shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.
- **23.** Conflicts. In the event of a conflict, the provisions of this special provision shall govern, then the provisions of the contract and its other related contact documents, then the provisions of the Insurance Manual.

**24. Safety.** Contractor shall be solely responsible for safety on the Project and safety relating to the Work. Contractor shall establish a safety program that, at a minimum, complies with all local, state and federal safety standards, and any safety standards established by the WisDOT for the Project, including the Project Safety and Health Plan Manual. SEF-ZOO IC 13 0114

# 26. CPM Progress Schedule.

Modify the standard specs as follows:

Submit a CPM Progress Schedule and updates according to standard spec 108.4.4, and as hereinafter provided.

To ensure compatibility with the Master Program Schedule, use the latest version of Primavera Project Planner (P6), by Primavera Systems, Inc., Bala Cynwyd, PA to prepare the Initial CPM Progress Schedule, Monthly CPM Progress Updates and other CPM Progress Revisions requested by the engineer.

Within five business days after award, the department will provide its current standard Work Breakdown Structure and activity codes to use to develop the Initial CPM Progress Schedule.

Designate a Project Scheduler who will be responsible for scheduling the Work and submit a professional resume describing a minimum of three years of scheduling experience on interstate-highway reconstruction work of similar size and complexity, including recent experience with P6. Obtain approval of the submitted resume prior to scheduling the work.

With each Monthly CPM Progress Schedule Update also include:

- 1. Activities underway and as-built dates for the past month.
- 2. On a monthly basis, agree on the as-built dates with the department depicted in the Monthly CPM Progress Schedule Update or document any disagreements. Use the as-built dates from the Monthly CPM Progress Schedule Update for the month when updating the CPM schedule.
- 3. Provide actual as-built dates for completed activities through final acceptance of the project.

SEF Rev. 14 1211

## 27. Force Account.

*Supplement standard spec* 109.4.5.1 (3)1 *with the following:* 

Include accumulation of wages to date for each employee performing force account work and identify allowable Federal Unemployment Tax (FUTA) and State Unemployment Tax (SUTA) multipliers.

SEF Rev. 14 1211

# 28. Clearing and Grubbing, Emerald Ash Borer.

This applies to projects in the emerald ash borer (EAB) quarantined zones to include Fond du Lac, Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties.

Supplement standard spec 201.3 with the following:

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

Ash trees species attacked by emerald ash borer include the following:

- (a) Green ash (F. pennsylvanica) is found throughout the state, but is most common in southern Wisconsin. It may form pure stands or grow in association with black ash, red maple, swamp white oak, and elm. It grows as an associate in upland hardwood stands, but is most common in and around stream banks, floodplains, and swamps.
- (b) Black ash (F. nigra) is distributed over the entire state but is most frequently found in northern Wisconsin. It is most common in swamps, but is also found in other wet forest types.
- (c) Blue ash (F. quadrangulata) is a threatened species that is currently found only at a few sites in Waukesha County. The species is at the edge of its range in Wisconsin, but is common in states farther south. The species is not of commercial importance. Blue ash twigs are 4-sided.
- (d) White ash (F. americana) tends to occur primarily in upland forests, often with Acer saccharum.

The quarantine of ash trees includes all horticultural cultivars of the species listed above.

Note that blue ash twigs are 4-sided. All other Wisconsin ash trees have round stems. Also, Mountain ash (*Sorbus americana and S. decora*) is not a true ash and is not susceptible to EAB infestation.

The contractor shall be responsible for hiring a certified arborist to identify all ash trees that will be cleared and grubbed for the project. In addition, prior to scheduled clearing and grubbing activities, the arborist shall mark all ash trees with florescent lime flagging tied around the trunk perimeter.

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

## ATCP 21.17 Emerald ash borer; import controls and quarantine.

#### Importing or Moving Regulated Items from Infested Areas; Prohibition.

Except as provided in subparagraph (3), no person may do any of the following:

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

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

**Regulated Items**. The following are regulated items for purposes of subparagraph (1):

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

Ash trees.

Ash limbs, branches, and roots.

Ash logs, slabs or untreated lumber with bark attached.

Cut firewood of all non-coniferous species.

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

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

#### **Regulatory Considerations**

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

Clearing and grubbing includes all ash trees that are to be removed from within the project footprint. If ash trees are identified within clearing and grubbing limits of the project, the following measures are required for the disposal:

# **Chipped Ash Trees**

May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.

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

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

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

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

Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled temporarily if they will be used for project mulching and are not readily accessible to the public.

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

## Ash logs, Branches, and Roots

May be buried without chipping within the existing RIGHT-OF-WAY or on adjacent properties according to standard spec 201.3 (14)(15).

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

Burning is optional if in compliance with standard spec 201.3.

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

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

Do not bury or use mulch in an area that will be disturbed again during later phases of the project.

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

# **Furnishing and Planting Plant Materials**

Supplement standard spec 632.2.2 with the following:

Ash trees may be obtained from inside or outside the quarantine area and planted within the quarantined area. Ash trees from within the quarantine area may not be transported and planted into the non-quarantined area.

# **Updates for Compliance**

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

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

# **Regulated Items**

More frequent updates, if any, are available on the DATCP website at <a href="https://www.datcp.state.wi.us">www.datcp.state.wi.us</a>. Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from DATCP. Persons may request update notices by calling (608) 224–4573, by visiting the DATCP website, or by writing to the above address. 201-SER1 (20100401)

# 29. Pavement Breaking Equipment.

Use only hydraulic pavement breaking equipment for breaking pavement within 300 feet of any structure. Do not use guillotine, drop hammer, falling weight, gravity impact breakers or equivalent equipment. A multi-head hydraulic drop hammer is allowed unless a structure is within 50 feet of the roadway. SEF Rev. 14\_0415

# 30. Removing Concrete Barrier.

*Modify the standard specs as follows:* 

*Supplement standard spec 204.3.2.2 with the following:* 

Under the Removing Concrete Barrier bid item, remove barrier and footing, unless specified in the plans, at the locations the plans show. Removal includes all required sawing according to standard spec 690.

*Supplement standard spec 204.5.1(2) with the following:* 

Payment for Removing Concrete Barrier is full compensation for furnishing all required sawing and removal of existing barrier and footing, and sludge removal. SEF Rev 14 1212

# 31. Removing Concrete Bases, Item 204.0195.

This special provision applies only to W. North Avenue and N. 124<sup>th</sup> Street and W. Burleigh Street and N. 124<sup>th</sup> Street.

Append standard spec 204.3.2.1 (2) with the following:

At locations of new concrete bases in close proximity to existing concrete bases, where complete removal of the existing concrete base will impact proposed concrete bases that are in service, break down and remove the concrete material to a depth of 2' below grade. Fill the area to grade with similar material as adjacent to the base (topsoil/seed, concrete sidewalk, asphalt, etc). Repair any damage to curb ramps caused by the removal process to match pre-construction conditions. No additional payment will be made for repair to areas damaged by the contractor's operations.

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

# **A Description**

#### A.1 General

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

Advanced Disposal Emerald Park Landfill W124S10629 South 124<sup>th</sup> Street Muskego, WI 53150 (414) 529-1360

Waste Management Orchard Ridge Landfill N96W13503 County Line Road Menomonee Falls, WI 53051 (262) 532-6200

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.

#### **A.2** Notice to the Contractor – Contaminated Soil Location(s)

The department and others completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following location(s) as shown on the plans:

- 1. Southwest corner of W. North Ave. and N. 124<sup>th</sup> St., Station 151TU+95 to 52TU+90, from 15 feet left of reference line to 130 feet left of reference line, from approximately 0 to 4+ feet bgs. Soil at this location is contaminated with petroleum. Approximately 6.28 cubic yards (approximately 10.7 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated from this location.
- 2. Southeast corner of W. North Ave. and N. 124<sup>th</sup> St., Station 151TU+70 to 152TU+90, from 15 feet left of reference line to 40 feet right of reference line, from approximately 4 to 12.5+ feet bgs. Soil at this location is contaminated with petroleum. Approximately 3.32 cubic yards (approximately 5.64 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated from this location.
- 3. Southeast corner of W. North Ave. and N. 124th St., Station 152TU+10 to 152TU+30, from 40 feet right of reference line to 60 feet right of reference line, from approximately 0 to 4+ feet bgs. Soil at this location is contaminated with arsenic. Approximately 2.10 cubic yards (approximately 3.5 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated from this location.
- 4. Northeast corner of W. North Ave. and N. 124<sup>th</sup> St., Station 152TU+90 to 154TU+10, from 15 feet right of reference line to project limits right, from approximately 0 to 4+ feet bgs. Soil at this location is contaminated with petroleum. Approximately 5.27 cubic yards (approximately 9.0 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated from this location.

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

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Andrew Malsom, HAZMAT & Environmental Engineer

Address: WisDOT SE Region, 141 NW Barstow St., Waukesha WI 53187

Phone: (262) 548-6705 Fax: (262) 548-6891

e-mail: Andrew.Malsom@dot.wi.gov

# A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation

Address: 150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045

Contact: Bryan Bergmann, P.G.

Phone: 262-879-1212 Fax: 262-879-1220

E-mail: bbergmann@trcsolutions.com

The role of the environmental consultant will be limited to:

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

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

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.

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

#### A.4 Health and Safety Requirements

Add the following to standard spec 107.1:

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

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

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

#### C Construction

Add the following to standard spec 205.3:

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

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

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

If dewatering is required in an area of known contamination, water generated from dewatering activities may contain petroleum VOCs and metals. Such water may, with approval of the Milwaukee Metropolitan Sewerage District (MMSD), be discharged to the sanitary sewer as follows:

- 1. Meet all applicable requirements of the MMSD including the control of suspended solids. Perform all necessary monitoring to document compliance with MMSD's requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with MMSD's requirements.
- 2. 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.

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

#### **D** Measurement

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

## E Payment

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

ITEM NUMBER DESCRIPTION UNIT 205.0501.S Excavation, Hauling, and Disposal of Petroleum Ton

Contaminated Soil

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

## 33. Select Crushed Material.

*Replace standard spec 312.2(6) with the following:* 

The department will assess Select Crushed Material acceptability based primarily on the engineer's visual inspection. The department may require the contractor to sample, test, and report gradation or the fracture results to show conformance of the material. One test per source, production process or change of production process may be required.

*Replace standard spec 312.5(2) with the following:* 

Payment for Select Crushed Material is full compensation for providing and compacting Select Crushed Material and all work necessary to provide gradation or fracture test results. SER-312.1 (20160831)

# 34. QMP Base Aggregate.

#### A Description

#### A.1 General

- 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.
- 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.

- 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.
- 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:

 $\underline{http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx}$ 

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

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

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

- [1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.
- [2] For 3-inch material, obtain samples at load-out.
- [3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

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

#### **B** Materials

# **B.1 Quality Control Plan**

- 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.
- 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

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

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

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

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://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-

prod/qual-labs.aspx

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

#### **B.4.1** General

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**

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**

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

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

# **B.5** Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- 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.
- 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.
- The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- 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.
- 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

- 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.
- 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.
- Ensure the material conforms to the limits specified in standard spec table 301-2.

#### **B.7** Corrective Action

#### **B.7.1** General

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.
- 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.
- 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.
- 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.
- 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

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

# **B.8.2 Verification Testing**

#### B.8.2.1 General

- 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.
- 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.
- 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.
- 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

- 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**

- 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.
- 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

- 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.
- For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2. 301-010 (20151210)

# 35. Catch Basins, Manholes, and Inlets.

*Supplement standard spec 611.3.3 with the following:* 

Use monolithic concrete shimming as the plans show for final adjustment of drainage structures located within the roadway concrete pavement, concrete shoulders, concrete curb and gutter and concrete barrier wall. If the adjustment is less than 4-inches, the engineer may

choose to direct the contractor to use grade rings for adjustments for storm sewer structures outside the roadway concrete pavement and other locations.

Supplement standard spec 611.3.7 with the following:

Construct height adjustments of 4-inches or more with concrete grade rings. Never use grade rings less than 2-inches thick.

*Replace standard spec 611.5.2 (1) with the following:* 

Payment for Catch Basins, Manholes, and Inlets bid items is full compensation for providing all submittals; materials, including all masonry, for mortar adjustments and monolithic concrete shimming; adjusting rings; conduit and sewer connections, steps, and other fittings; for furnishing backfill, backfilling, all excavating, disposing of surplus material, and for cleaning out and restoring the work site; except that the department will pay for covers, including frames, grates and lids separately.

# **36.** Sign Supports Concrete Masonry.

*Modify the standard specs as follows:* 

Supplement standard spec 636.3.2 with the following:

(3) Drill or excavate and maintain a stable open excavation for subsequent installation of drilled footings for sign structure foundations as shown in the plans. The subsurface conditions vary across the project site and are not necessarily the same at each sign structure foundation in the project. Anticipate the possibility of encountering randomly interlaced seams of loose, permeable sand or gravel of substantial thickness situated within glacial clays and till deposits; saturated soils; ground water; isolated cobbles or boulders; and nested cobbles and boulders at any sign structure foundation when selecting equipment and methods for drilling or otherwise excavating. Partial or full depth temporary casing may be required to maintain the stability of the excavation prior to placement of reinforcement and filling the excavation with concrete.

It is strongly advised to obtain and review the Geotechnical Exploration and Foundation Evaluation Reports for the sign structures and as well as nearby structures to the sign structure foundation being constructed. See article "Geotechnical Investigation Information" in these special provisions for information on obtaining geotechnical reports.

*Supplement standard spec 636.3.3 with the following:* 

(8) For drilled foundations, no more than 3 inches of standing water is permitted in the bottom of the drilled excavation immediately prior to placing concrete masonry in the excavation

*Replace standard spec 636.5.2(1) with the following:* 

Payment for Sign Supports Concrete Masonry is full compensation for providing, transporting, placing and curing the concrete; for providing and removing casing if applicable; for providing required ground rods; for furnishing all required excavating; for placing post stubs or anchor bolts, and for providing and placing electrical conduit if required; for pumping of ground water seepage if applicable; for cleaning-up, repairing damage, and for disposing of excavation and surplus materials.

SEF Rev. 14 1212

#### **37.** Signs Type I and II.

Furnish and install mounting brackets per approved product list for type II signs on overhead sign supports incidental to sign. For type II signs on sign bridges use aluminum vertical support beams noted above incidental to sign.

*Modify standard spec 637.2.4 with the following:* 

Use stainless steel bolts, washers and nuts for type I and type II signs mounted on sign bridges or type I signs mounted on overhead sign supports. Use clips on every joint for Sign Plate A 4-6 when mounted on a sign bridge or overhead sign support. Inspect installation of clips and assure bolts and nuts are tightened to manufacturers recommended torque values.

Use aluminum vertical sign support beams that have a 5-inch wide flange and weigh 3.7 pounds per foot, if the L-brackets are 4 inches wide then use 4 inch wide flange beams weighing 3.06 pounds per foot. Contractor shall measure the width of the L-brackets on existing structures of determine the width needed for sign support beams

Use beams a minimum of 6 feet in length or equal to the height of the sign to be supported, whichever is greater. Use U-bolts that are made of stainless steel, 1/2 inch diameter and of the proper size to fit the truss cords of each sign bridge. Install vertical sign support beams on each sign and use new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss.

For type II signs on overhead sign supports follow the approved product list for mounting brackets.

*Replace standard spec 637.2.4.1(2)2 with the following:* 

Clips may be either stainless steel or ASTM B 108, aluminum alloy, 356.0-T6.

*Append standard spec 637.3.2.1(3) with the following:* 

Provide the engineer with 3 copies of drawings of the signs proposed to be furnished under this contract for approval.

Append standard spec 637.3.3.2(2) with the following:

Install Type I Signs at the offset stated in the plan, which shall be the clear distance between the edge of mainline pavement right edgeline and the near edge of the sign.

Append standard spec 637.3.3.3(3) with the following:

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type I or Type II Signs and Type I signs on overhead sign supports incidental to sign. 637-SER1 (20120401)

#### 38. Field Facilities.

Replace standard spec 642 with the following:

The department has procured its own Field Facilities located at 2424 S. 102nd Street; West Allis, WI 53227. SEF-ZOO IC 12 0723

# 39. Traffic Control.

Supplement standard spec 643.3.1 with the following:

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to route traffic in order to perform the operations.

Place traffic control devices for work in the proper location before operations proceed. Traffic Control is subject to change at the direction of the engineer in the event of an emergency.

Provide the Milwaukee County Sheriff's Department, Waukesha County Sheriff's Department, the Wisconsin State Patrol, Wauwatosa City Police Department, Brookfield City Police Department and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Do not park or store equipment, contractor's and personal vehicles or construction materials within the clear zone as designated in the plans on any roadway carrying traffic during working and non-working hours except at locations and periods of time approved by the engineer.

Do not permit construction or personnel equipment or vehicles to directly cross the live traffic lanes of the freeway. Yield to all through traffic at all locations. Equip all vehicles or equipment operating in the live traffic lanes with a hazard identification beam (flashing yellow signal light) that is visible from 360 degrees. Operate the flashing yellow beam only when merging or exiting live traffic lanes or when parked or operating on shoulders. Do not

park personal vehicles within the access control limits of the freeway. Do not cross live freeway traffic lanes with equipment or vehicles

Obtain prior approval from the engineer for the locations of egress or ingress for construction vehicles to prosecute the work.

Do not disturb, remove or obliterate any traffic control signs, advisory signs, sand barrel array, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

Do not use flag persons to direct, control, or stop freeway traffic. Obtain approval from the engineer to use a flag person to direct, control, or stop local street traffic. Adhere to the Manual of Uniform Traffic Control Devices chapter 6E standard requirements for flagger control.

*Replace standard spec 643.3.1(6) with the following:* 

Provide 24-hour a day availability of equipment, forces and materials to promptly restore barricades, lights, or other traffic control devices that are damaged or disturbed.

# 40. Covering Signs.

Modify the standard specs as follows:

*Replace standard spec 643.2.9.5 (2) with the following:* 

Ensure that covers are flat black, blank and opaque.

*Supplement standard spec 643.3.8.2(1) with the following:* 

- Place rivets or screws at the corners of each sign cover. Space additional rivets or screws ≥ 12" apart to minimize damage to the sign.

*Supplement standard spec 643.3.8.2(3) with the following:* 

If multiple messages on a single sign are required to be covered, minimize the number of holes created for aluminum rivets, aluminum self-tapping screws, or wood screws by covering the sign with a single rectangular shaped covering. Multiple coverings on a single sign is only permissible where necessary to avoid covering necessary content or as directed by the engineer. Submit sign covering plans to the engineer for single signs requiring multiple coverings three days before performing work. Obtain engineer approval before covering signs. Remove any sign coverings before placing fixed messages signs unless directed by the engineer.

SEF Rev. 16 1003

# 41. Temporary Pedestrian Surface Asphalt, Item 644.1410.S.

# A Description

This special provision describes providing, maintaining, and removing temporary pedestrian surface.

#### **B** Materials

Furnish 1 1/4-inch dense graded aggregate conforming to standard spec 305.2. Furnish:

- Asphaltic surface conforming to standard spec 465.2.
- Pressure treated 2x4 framing lumber, pressure treated 3/4-inch plywood with skid resistant surface coating, and weather resistant deck screws 3-1/2-inch minimum for framing and 1-5/8-inch minimum for plywood.
- 1/4 inch minimum steel plate or commercially available prefabricated plates with skid resistant surface coating conforming to Americans with Disabilities Act Accessibility Guidelines. If placed in the roadway, must be able to handle a vehicle weight of 88,000 lbs.

#### C Construction

Place, compact, and level a dense graded aggregate foundation before placing the surface.

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than 1/4 inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Asphalt may also be used to ramp up to materials up to 1 inch thick. Construct conforming to the following:

- Asphalt surface a minimum of 2 inches thick compacted with compactors, tampers, or rollers.
- Framed plywood panels 4 feet wide with a skid resistant surface coating.
- Steel or prefabricated plate with a skid resistant surface coating.

Align parallel to the existing roadway grade or, if outside of a street or highway right-of-way, do not exceed 5 percent longitudinal slope. Provide cross slope of 1 to 2 percent unless the engineer approves a steeper cross slope in writing.

Maintain the surface with a 4-foot minimum clear width and the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 203.3.4 when no longer required.

#### **D** Measurement

The department will measure temporary pedestrian surface by the square foot, acceptably completed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1410.S	Temporary Pedestrian Surface Asphalt	SF

Payment is full compensation for providing, maintaining, and removing temporary pedestrian surface.

644-010 (20150630)

# 42. Temporary Curb Ramp, Item 644.1601.S.

# **A** Description

This special provision describes providing, maintaining, and removing temporary curb ramps.

#### **B** Materials

Furnish materials as follows:

- Asphaltic surface conforming to standard spec 465.2.
- Engineer-approved ready mixed concrete or ancillary concrete conforming to standard spec 602.2 except no QMP is required.
- Commercially available prefabricated curb ramps conforming to Americans with Disabilities Act Accessibility Guidelines.

Furnish yellow detectable warning fields conforming to Americans with Disabilities Act Accessibility Guidelines. Use either an engineer-approved surface-applied type or cast iron from the department's approved products list.

#### **C** Construction

Provide and maintain temporary curb ramps, including detectable warning fields, throughout the project duration. Place and compact a dense graded aggregate foundation before placing the curb ramp, unless the curb ramp is to be placed on existing roadway surface.

Remove and dispose temporary curb ramps and associated detectable warning fields when no longer required.

#### **D** Measurement

The department will measure temporary curb ramps by each individual ramp, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT644.1601.STemporary Curb RampEach

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.

644-020 (20150630)

# 43. Pavement Marking Grooved Contrast Wet Reflective Epoxy 4-Inch, Item 646.0842.S; 8-Inch 646.0844.S.

# A Description

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

#### **B** Materials

Furnish a 20 mils application of modified epoxy binder pavement marking, from the Wisconsin's Approved Products List, in a grooved slot. Provide a double drop system of 5.3 pounds per gallon of wet reflective elements from Wisconsin's Approved Products List and Utah Performance beads mixture at a drop rate of 12-22 pounds per gallon.

Replace standard spec 646.2.3 (1) with the following:

Furnish Utah Performance beads with the following gradation:

#### Utah Bead Gradation

US Mesh	Percent Passing (ASTM D1214)
18	65-80
20	
25	
30	30-50
40	
50	0-5

Beads **shall** achieve a minimum of 275 mcd (dry reading), initial for white and 180 mcd (dry reading) for yellow.

#### **C** Construction

#### C.1 General

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

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

## C.2 Groove Depth

Cut the groove to a depth of 80 mils  $\pm 10$  mils from the pavement surface. The department may periodically check groove depths.

# **C.4** Groove Width – Longitudinal Markings

Cut the groove 1inch wider than the width of the pavement marking.

## **C.5** Groove Position

Position the groove edge according to Standard Detail Drawing Pavement Marking (Mainline). If necessary, groove a minimum of 4 inches from both ends of the pavement marking segment. Achieve straight alignment with the grooving equipment.

# **C.6** Groove Cleaning

#### C.6.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the marking. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove.

# C. 6.2 Asphalt

Groove pavement five or more days after paving.

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

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

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove.

#### **D** Measurement

The department will measure Pavement Marking Grooved Wet Reflective Epoxy (Width) bid items by the linear foot of line, 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
646.0842.S	Pavement Marking Grooved Contrast Wet Reflective	LF
	Epoxy 4-Inch	
646.0844.S	Pavement Marking Grooved Contrast Wet Reflective	LF
	Epoxy 8-Inch	

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the epoxy, 3M elements and beads; and for removing existing or temporary marking, if necessary.

646-024 (20160607)

# 44. Temporary Pedestrian Safety Fence, Item 644.1616.S.

# **A Description**

This special provision describes providing, maintaining, and removing the temporary pedestrian safety fence.

#### **B** Materials

Furnish notched metal "T" or "U" shaped fence posts weighing 1 1/3 pounds per foot or more.

Furnish select 2x4 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

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

The engineer may allow prefabricated fencing systems conforming to Americans with Disabilities Act Accessibility Guidelines.

#### **C** Construction

Provide a continuous safety fence with the top edge free of sharp or rough edges.

Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

#### **D** Measurement

The department will measure Temporary Pedestrian Safety Fence by the linear foot, acceptably completed.

#### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNIT644.1616.STemporary Pedestrian Safety FenceLF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence.

644-025 (20150630)

# 45. Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch, Item 646.0843.S.

# **A** Description

This special provision describes furnishing, grooving and installing preformed wet reflective pavement marking contrast tape for grooved applications as shown on the plans, according to standard spec 646, and as hereinafter provided.

#### **B** Materials

Furnish wet reflective pavement marking contrast tape and adhesive material, per manufacturer's recommendation if required, from the department's approved products list.

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

#### **C** Construction

#### C.1 General

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

Plane the grooved lines according to details in the plan and per manufacturer's recommendations. Use grooving equipment with a free-floating, independent cutting head. Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

### **C.2** Groove Depth

Cut the groove to a depth of  $120 \text{ mils} \pm 10 \text{ mils}$  from the pavement surface or, if tined, from the high point of the tined surface. To measure the depth, the contractor may use a depth plate placed in the groove and a straightedge placed across the plate and groove, or the contractor may use a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

#### **C.3** Groove Width – Longitudinal Markings

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

#### C.4 Groove Position

Position the groove edge according to plan details. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the tape segment. Achieve straight alignment with the grooving equipment.

#### **C.5** Groove Cleaning

#### C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and the pavement marking tape. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

## C.5.2 New Asphalt

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove.

## C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove.

## **C.6 Tape Application**

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive

- 1) For the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee:
  - Apply SPA-60 during May 1 to September 30, both dates inclusive due to Volatile Organic Compound Limitations..
  - Apply P-50 during October 1 to April 30, both dates inclusive. –
- 2) For the remainder counties:
  - · Apply either adhesive.

Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

Tamp the wet reflective pavement marking contrast tape with a tamper cart roller, with a minimum of a 200-lb load, cut to fit the groove. Tamp a minimum of three complete cycles (6 passes) with grooved modified tamper roller cart.

#### **D** Measurement

The department will measure Pavement Marking Grooved Wet Reflective Contrast Tape (Width) for grooved applications in length by the linear foot of tape, placed according to the contract and accepted.

#### **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT 646.0843.S Pavement Marking Grooved Wet Reflective Contrast LF

Tape 8-Inch

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary. 646-022 (20120615)

# 46. Pavement Marking Grooved Wet Reflective Tape 4-Inch, Item 646.0881.S; 8-Inch, Item 646.0883.S.

#### A Description

This special provision describes furnishing, grooving and installing preformed wet reflective pavement marking tape for grooved applications as shown on the plans, according to standard spec 646, and as hereinafter provided.

#### **B** Materials

Furnish grooved wet reflective pavement marking tape and adhesive material per manufacturer's recommendations, if required, from the department's approved products list.

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

#### **C** Construction

#### C.1 General

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

Plane the grooved lines according to details in the plan and per manufacturer's recommendations. Use grooving equipment with a free-floating, independent cutting head.

Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

#### C.2 Groove Depth

Cut the groove to a depth of  $120 \text{ mils} \pm 10 \text{ mils}$  from the pavement surface or, if tined, from the high point of the tined surface. To measure the depth, the contractor may use a depth plate placed in the groove and a straightedge placed across the plate and groove, or the contractor may use a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

## **C.3** Groove Width – Longitudinal Markings

Cut the groove one-inch wider than the width of the tape.

#### **C.4** Groove Position

Position the groove edge according to plan details. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the tape segment. Achieve straight alignment with the grooving equipment.

#### **C.5** Groove Cleaning

#### C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and pavement marking tape. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

#### C.5.2 New Asphalt

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove.

#### C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove.

## **C.6 Tape Application**

Apply the wet reflective pavement marking tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive

- 1) For the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee:
  - Apply SPA-60 during May 1 to September 30, both dates inclusive due to Volatile Organic Compound Limitations.
  - Apply P-50 during October 1 to April 30, both dates inclusive.
- 2) For the remainder counties:
  - Apply either adhesive.

Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

Tamp the wet reflective pavement marking tape with a tamper cart roller, with a minimum of a 200-lb load, cut to fit the groove. Tamp a minimum of three complete cycles (6 passes) with grooved modified tamper roller cart.

#### **D** Measurement

The department will measure Pavement Marking Grooved Wet Reflective Tape (Width) for grooved applications in length by the linear foot of tape, placed according to the contract and accepted.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch	LF
646.0883.S	Pavement Marking Grooved Wet Reflective Tape 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary. 646-018 (20120615)

## 47. Traffic Signals, General.

## **State Owned Traffic Signals**

Work under this item shall consist of furnishing and installing all materials, except for the traffic signal cabinet, monotube equipment, and non-intrusive detection system for the department owned traffic signals at the intersections of IH 41 and STH 190 in the City of Milwaukee, IH 41 southbound Off Ramp and CTH EE in the City of Milwaukee, USH 18 and STH 181 in the Cities of Milwaukee and Wauwatosa and IH 41 Ramps and W. Burleigh Street in the City of Wauwatosa. Install the traffic signal cabinet, monotube equipment, and non-intrusive detection system furnished by the department.

## City of Wauwatosa Owned Traffic Signals

The existing traffic signals at the intersections of W. North Avenue and N. 124<sup>th</sup> Street, W. Center Street and N. 124<sup>th</sup> Street, W. Burleigh Street and N. 124<sup>th</sup> Street, W. Burleigh and N. 119<sup>th</sup> Street, W. Burleigh Street and N. 114<sup>th</sup> Street and W. Burleigh Street and N. 112<sup>th</sup> Street are owned and operated by the City of Wauwatosa. Obtain any necessary electrical permits from the City of Wauwatosa prior to beginning the work. Pay any fines, penalties, damage done to property, etc., billed by the City of Wauwatosa.

The installation includes the construction of underground and above ground equipment. Stake the proposed locations of traffic signal items and notify the City of Wauwatosa Public Works Department at least ten days prior to starting work so that the locations of the proposed facilities can be approved by the City of Wauwatosa. Any field changes regarding the location of the signal poles, pull boxes, etc. shall be approved by the City of Wauwatosa.

Work under this item shall consist of furnishing and installing all materials, except for the traffic signal cabinet and monotube equipment for the City of Wauwatosa owned traffic signals. Install the traffic signal cabinet and monotube equipment furnished by the department.

## 48. General Requirements for Electrical Work.

*Replace standard spec 651.3.3 (3) with the following:* 

Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region Electrical personnel will perform the inspection. In the event of deficiencies, request a reinspection when the work is corrected. The engineer will not authorize continuation to aboveground work or turn-on until the contractor corrects all deficiencies.

Notify the City of Wauwatosa Public Works Department at (414) 471-8422 to coordinate the inspection for City of Wauwatosa owned traffic signals. The City of Wauwatosa will perform the inspection for the City of Wauwatosa owned and maintained traffic signals.

## 49. Roadway Lighting Systems.

#### A General

Add the following to standard spec 651, 652, 653, 654, 655, 656, 657 and 659.

All the work necessary to comply with revisions to standards specifications mentioned herewith shall be incidental to associated pay items or to the project including coordination, materials, and labor. No additional payment shall be made to the contractor.

Add the following to standard spec 651.2:

Materials indicated to be returned to the department shall be hauled to one of the following two locations:

- 1. State Electrical Shop at 935 South 60th street, West Allis, as directed by Mr. Mike Prebish, tel. (414) 266-1170.
- 2. Milwaukee County Grounds, 10191 West Watertown Plank Road, Wauwatosa, as directed by Mr. Pat Stoetzel, tel. (414) 750-5306.

Arrange pickups and deliveries three days in advance and during regular business hours (Monday – Thursday 7:00 AM to 3:45 PM).

Add the following to standard spec 651.3.1:

Any circuit that the contractor does not personally tag out at the disconnect shall be considered live, and will be subject to being activated by another person with no notice to the contractor. Make tagouts with manufactured tags, and endorse them with the date and the name of the contractor. Clear tagouts at the end of the workday. The department does not employ a load dispatcher and has no intent to do so. Each electrical worker is responsible for their own protection from automatic switching and from switching by others.

The plans show required disconnections of existing lighting circuits, most in the form of abandoning existing underground conductors in place. The contractor may need to mobilize several times per each existing lighting distribution center. The contractor is expected to build these costs into the various paid items for removals and installations.

Replace all existing slotted junction box cover screws with stainless hex head cover screws at each location where it is required to open the cover of an existing lighting junction box.

Add the following to standard spec 651.5:

Work to disconnect and connect conductors will be incidental to the paid measurement of footage.

There will be no measurement for payment for abandoning conductors or removing conductors for scrap.

Work to disconnect and connect electrical system, splice through, or to connect conductors are incidental to the installation or removal of the freeway lighting pay items included in this contract. The department will not measure conductors or conduits that have been abandoned in place or removed for scrap. The department will allow, at the contractor's discretion, for the salvaging of conductors to be abandoned, if possible.

Add the following to standard spec 652.3.1:

Install minimum 3-inch diameter PVC conduit elbows in a ground mounted concrete bases to accommodate Cable in Duct (CID) type cable.

Add the following to standard spec 652.3.1.2:

Furnish and install an UL-listed liquid tight flexible metallic conduit transition wherever a conduit exits from below grade.

Furnish a UL-listed fitting appropriate for the purpose at each transition from one type of conduit to another type. Couplings will not be individually measured for payment.

Add the following to standard spec 652.3.1.4:

Support conductors at the top of the vertical raceway or as close as practical if the vertical rise exceeds 40-feet. Provide additional supports as shown; in no case shall the distance between supports exceed that shown in Table 300.19(A) of the Wisconsin State Electric Code.

*Add the following to standard spec 653.3(1):* 

This provision modifies the standard detail drawing for pull boxes and thereby both the standard items and SPV pay item for pull boxes. Lighting pull box covers shall read "LIGHTING".

Add the following to standard spec 655.3.1:

Wet location splices are not anticipated on this project and not shown in the plans. In the event that the engineer allows wet location splices, make pull box splices with engineer approved epoxy kit.

At each pull point or access point, indicate the line side bundle with a lap of blue tape.

*Add the following to standard spec 655.3.7(4):* 

Where two or more wire networks pass through a pull point, tag each circuit network (i.e. A/B/N and C/D/N) with approved all-weather tags.

Add the following to standard spec 657.2:

Non-breakaway poles (mounted on structures, concrete bases or behind noise wall barriers without transformer base), as well as at stems of sign bridges containing electrical wires are to be double nutted and contractor shall install galvanized rat screen enclosing the bottom of pole area; extra nuts and screen incidental.

Add the following to standard spec 657.3.1 and 657.3.5:

Corrosion protection measures described in standard spec 657.3.1 and 657.3.5 are invoked for breakaway transformer bases and aluminum light poles. The contractor shall avoid contact of dissimilar metals in erecting the pole on its foundation and/or breakaway device. Any concern of trapped moisture or potential corrosion cell shall be resolved to the satisfaction of the engineer.

**Manufacturer's Warranty for LED luminaires:** The manufacturer shall warrant to the department that each complete luminaire (consisting of the housing, optical assembly, LED drivers, surge protection and wiring) will be free from defects in material and workmanship for five years from the date that the luminaire are put into service. Luminaires shall be installed within one year of manufacture.

If any luminaires fail to meet the above warranty, the department shall provide the manufacturer with a written notice of any defect within 30 days after discovery of the defect. The manufacturer shall provide all materials, luminaires, replacement component parts, labor and all incidentals necessary to restore the luminaire to a fully operational, installed condition.

**Submittal Requirements for LED luminaires:** Considering the rapid advancement in LED technology, the overall project construction and duration of construction, within 10 calendar days after contract execution, the contractor is responsible to coordinate the lead time for LED luminaires purchase and installation schedule for LED luminaires with the engineer and the department's Lighting engineer, Eric Perea, at <a href="mailto:eric.perea@dot.wi.gov">eric.perea@dot.wi.gov</a> or at (262) 574-5422 prior to order LED luminaires. The LED luminaires purchasing may be done during later stage of construction as directed by the department which shall not delay the construction.

Add the following to standard spec 659.3:

Provide and install / replace Plaques Light Pole on all poles located in the median at a mounting height of 6-inch above the highest adjacent safety barrier or obstruction.

High mast tower luminaires shall be 1000 Watts, High Pressure Sodium, M-C-II type distribution or LED equivalent.

Add the following to standard spec 659.3.1:

Contractor shall be responsible to provide adequate temporary roadway lighting during all the construction stages not shown on the temporary lighting plans, but which are necessitated by field conditions or by any construction phasing changes. Installation of temporary lighting not shown on temporary lighting plans shall be paid according to appropriate pay items included in this contract. Contractor shall be responsible to submit a redline markup plans for any additional temporary lighting to the engineer for approval prior to installation.

## 50. Install Conduit Into Existing Item, Item 652.0700.S.

## **A Description**

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

#### **B** Materials

Use nonmetallic conduit, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

#### C Construction

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

#### **D** Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT652.0700.SInstall Conduit Into Existing ItemEach

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections. 652-070 (20100709)

## 51. Electrical Wiring.

This special provision applies only to USH 18 and STH 181.

Append standard spec 655.3.1 with the following:

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to pulling traffic signal cable/wire in the active traffic signal. Pull all traffic signal cable, EVP cable, and Equipment Grounding Conductor to the respective pedestal bases, monotube handholes, or control cabinet. Contact the department's Electrical Field Unit at (414) 266-1170 to access the traffic signal cabinet. Strip cables/wires on both ends and wire nut individual conductors in the field. Label both conductor ends per the cable routing chart. All connections to the traffic signal equipment and control cabinet will be made by the WisDOT EFU. Notify the department's Electrical Field Unit at (414) 266-1170 once all traffic signal cable/wire has been installed.

# 52. Electrical Service Meter Breaker Pedestal IH 41 SB Ramps & CTH EE, Item 656.0200.3001; IH 41 & STH 190, Item 656.0200.3051; W. North Avenue & N. 124th Street, Item 656.0200.3101.

Append standard spec 656.2.3 with the following:

The department will be responsible for the electric service installation request for all facilities.

Electric utility company service installation and energy cost will be billed to and paid for by the maintaining authority.

Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Install a 3" conduit from the point of service from the utility to the meter breaker pedestal. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electrical utility company.

*Append standard spec 656.5(3) with the following:* 

Payment is full compensation for grading the service trench; replacing topsoil; and for fertilizing, seeding, and mulching to restore the disturbed area of the service trench.

## 53. Signal Housings.

*Replace standard spec 658.2.3.2(1) with the following:* 

Furnish polycarbonate resin housings, doors, and visors. Use yellow, Federal Standard 595 - FS13538, housings and dull black door faces and visors. For 16-inch heads, mount a z-crate visor and gasket to the door with stainless steel tabs. Drill the housing for top and bottom pipe mounting with the ability to rotate 270 degrees on the poly mounting brackets.

## 54. Traffic Signal Faces.

Append standard spec 658.3.2 with the following:

Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Connect the neutral conductors to the terminal strip. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

## 55. Pedestrian Signal Face 16-Inch.

*Append standard spec 658.3.4(3) with the following:* 

Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Connect the neutral conductors to the terminal strip. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

## 56. Pedestrian Push Buttons.

This special provision applies only to the state owned traffic signals.

*Replace standard spec 658.2.5 with the following:* 

Furnish freeze-proof ADA compliant pedestrian push buttons made by a department-approved manufacturer. The contractor shall place a Size 1, Type H reflective (R10-3EL, R, D) sign sticker (per state sign plate), message series – B directly above each push button. Include a directional arrow or arrows on the sign as the plans show.

## 57. Intelligent Transportation Systems (ITS) – Control of Materials.

## Standard spec 106.2 – Supply Source and Quality

Add the following to standard spec 106.2:

The department will furnish a portion of equipment to be installed by the contractor. This department-furnished equipment includes the following:

<b>Department-Furnished Items</b>		
Ethernet Switch		
6-Count Fiber Optic Cable		
12-Count Fiber Optic Cable		
Splice Enclosure		
CCTV Camera Assembly		
DMS Full Matrix		
Microwave Detector Assembly		
5.8 GHz Ethernet Bridge		

Pick-up small department-furnished equipment, such as communications devices, cameras, and controllers, from the department's Statewide Traffic Operations Center (STOC), 433 W. St. Paul Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the department's STOC at (414) 227-2166 to coordinate pick-up of equipment.

Large department-furnished equipment, such as camera poles will be delivered by the supplier to a contractor-controlled site within Milwaukee County. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation. Provide location details and a contact for delivery coordination upon receiving the contract's Notice to Proceed.

Transportation of the equipment between the electric shop and the field or interim location(s) shall be the responsibility of the contractor.

## Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

#### **Design/Shop Drawings**

Prior to the purchase and/or fabrication of any of the components listed herein, and for any non-catalog item shown on the Material and Equipment List specified above, and no more than 30 days after notice to proceed, submit five copies of design drawings and shop drawings, as required, to the department for review. The items and the drawings that represent them shall meet the requirements of the standard specifications.

Design drawing submissions shall consist of signed and certified designs, design drawings, calculations, and material specifications for required items.

Shop drawings will be required for, but not limited to the following:

- 1. Mounting assemblies for the vehicle speed and classification sensors, including their attachment to the structure.
- 2. Mounting LED warning signs to the sign structure.
- 3. Mounting detail for dynamic message signs.
- 4. Any contractor-designed structure or foundation.

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again. 670-005 (20150630)

## 58. Intelligent Transportation Systems – General Requirements.

## **A Description**

## A.1 General

This contract includes furnishing and installing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as shown on the plans.

Unusual aspects of this project include:

- 1. The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Statewide Traffic Operations Center (STOC). Interruption of this service is not expected to perform this work. If an interruption is determined necessary, it must be done on a weekend, and must be done in a way that minimizes communication outages for the existing equipment. Notify the department's STOC at least 48 hours in advance of the planned interruption.
- 2. The department will furnish some of the equipment to be installed. Make a reasonable effort to discover defects in that equipment prior to installing it.

#### **A.2 Surge Protection**

Equip every ungrounded conductor wire entering or leaving any equipment cabinet with a surge protector. For purposes of this section, multiple cabinets on a single pole or foundation are considered a single cabinet.

#### **B** Materials

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

Only furnish equipment and component parts for this work that are new and have high quality workmanship. All controls, indicators, and connectors shall be clearly and permanently labeled in a manner approved by the engineer. All equipment of each type shall be identical.

All electrical equipment shall conform to the standards and requirements of the Wisconsin Electrical Code, the National Electrical Manufacturers Association (NEMA), National Electric Safety Council (NESC), Underwriter's Laboratory Inc. (UL) or the Electronic Industries Association (EIA), when applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code (NEC), Rural Electrification Administration (REA), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the plans these special provisions, the standard specifications, and to any

other codes, standards, or ordinances that may apply. All system wiring, conduit, grounding hardware and circuit breakers shall be in conformance with the National Electrical Code. Whenever reference is made to any of the standards mentioned, the reference shall be considered to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement

#### **B.2** Outdoor Equipment

All conductive connectors, pins (except pins connected by soldering), and socket contacts shall be gold plated. Acrylic conformal coating shall protect each circuit board side that has conductive traces. Except for integrated circuits containing custom firmware, all components shall be soldered to the printed circuit board.

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

#### **B.3** Custom Equipment

Equipment that is not part of the manufacturer's standard product line, or that is made or modified specifically for this project, shall conform to the following requirements:

Where practical, electronics shall be modular plug-in assemblies to facilitate maintenance. Such assemblies shall be keyed to prevent incorrect insertion of modules into sockets.

All components shall be available from multiple manufacturers as part of the manufacturers' standard product lines. All must be clearly labeled with the value, part number, tolerance, or other information sufficient to enable a technician to order an exact replacement part.

Lamps used for indicator purposes shall be light-emitting diodes.

The printed circuit boards shall be composed of "two-ounce" copper on 1/16-inch thick fiberglass epoxy or equivalent type construction. Holes that carry electrical connections from one side of the boards to the other shall be completely plated through. Multilayer printed circuit boards shall not be used. The name or reference number used for the board in the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

All components shall be mounted so that the identifying markings are visible without moving or removing any part, if practical.

#### **B.4** Environmental Conditions

Equipment shall continue to operate as specified under the following ranges of environmental conditions, except as noted in the specifications for individual pieces of equipment.

- 1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
- 2. **Duty Cycle:** Continuous
- 3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.

#### 4. Electrical Power:

- a. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
- b. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
- c. **Line voltage transients:** The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.

## 5. Temperature and Humidity:

- a. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
- b. **Equipment in Controlled Environments** shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

#### **B.5** Patch Cables and Wiring

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

## **B.6 Surge Protection**

Low-voltage signal pairs, including twisted pair communication cable(s) entering each cabinet shall be protected by two-stage, plug-in surge protectors and shall be installed on both ends of camera control cables. The protectors shall meet or exceed the following minimum requirements:

- 1. The protectors shall suppress a peak surge current of up to 10k amps.
- 2. The protectors shall have a response time less than one nanosecond.
- 3. The protector shall clamp the voltage between the two wires at a voltage that is no more than twice the peak signal voltage, and clamp the voltage between each wire and ground at 50 volts.
- 4. The first stage of protection shall be a three-element gas discharge tube, and the second stage shall consist of silicon clamping devices.
- 5. The protector shall also contain a resettable fuse (PTC) to protect against excessive current.
- 6. There shall be no more than two pairs per protector.
- 7. It shall be possible to replace the protector without using tools.

Cables carrying power to curve signs shall be protected at the cabinet by grounded metal oxide varistors of appropriate voltages. The varistors must be at least 0.8 inch in diameter.

#### **C** Construction

#### **C.1 Thread Protection**

Provide rust, corrosion, and anti-seize protection at all thread assemblies of metallic parts by coating (non-spray) the mating surfaces with an approved compound. Failure to use an approved compound will result in no payment for the items to which coating was to have been applied.

#### **C.2** Cable Installation

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

#### C.3 Wiring

Every conductor, except a conductor contained entirely within a single piece of equipment, must terminate either in a connector or on a terminal block. Provide and install the connectors and terminal blocks where needed, without separate payment. Use approved splice kits instead of connectors and terminal blocks for underground power cable splices.

Permanently label and key connectors to preclude improper connection. Obtain prior engineer approval for the labeling method(s) prior to use.

Terminal blocks must be affixed to panels that permanently identify the block and what wire connects to each terminal. This may be accomplished by silk screening or by installing a laminated printed card under the terminal block, with the labels on portions of the card that extend beyond the block. Installation of terminal blocks by drilling holes in the exterior wall of the cabinet is not acceptable.

Use barriers to protect personnel from accidental contact with all dangerous voltages.

Do not install conductors carrying AC power in the same wiring harness as conductors carrying control or communication signals.

Arrange wiring, including fiber optic pigtails, so that any removable assembly can be removed without disturbing wiring that is not associated with the assembly being removed.

Communication and control cables may not be spliced underground, except where indicated on the plans.

Cables in the Statewide Traffic Operations Center or in communication hubs, which are not contained within a single cabinet, shall have at least 10 feet of slack.

## **C.4 System Operations**

If the contractor's operations unexpectedly interrupt Intelligent Transportation Systems (ITS) service, notify the engineer immediately and restore service within 24 hours. Repair all damaged facilities to the condition existing before the interruption. If service is not restored within 24 hours, the department may restore service to any operating device and deduct restoration costs from payments due the contractor.

#### **C.5** Surge Protection

Arrange the equipment and cabinet wiring to minimize the distance between each conductor's point of entry and its protector. Locate the protector as far as possible from electronic equipment. Ensure that all wiring between the surge protectors and the point of entry is free from sharp bends.

#### **D** Measurement

No separate measurement will be made for the work described in this article.

#### **E** Payment

No separate payment will be made for the work described in this article. All work described in this article shall be included under the ITS items in the contract. 670-010 (20100709)

## 59. Install Pole Mounted Cabinet, Item 673.0225.S.

#### **A Description**

This special provision describes installing department furnished aluminum enclosures on poles for intelligent transportation systems equipment.

#### **B** Materials

Use stainless steel bolts, nuts, and washers unless otherwise specified.

All conductors, terminals, and parts that could be hazardous to maintenance personnel shall be protected with suitable insulating material.

The cabinet will be equipped with service panels. Two panels shall be provided and mounted on the cabinet sidewalls. The left side panel shall be designated as "Input/Communications," and the right side panel shall be designated as the "Service Panel."

The service panel will be equipped with a four-outlet handi-box. Wire the handi-box to the series portion of the filtering surge protector.

Use metallic conduit, fittings, and adapters required from the underground conduit transition point to the cabinet as part of this item. A typical installation requires on 2-inch conduit. Use metallic conduit according to standard spec 652.

#### **C** Construction

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as shown in the plans, and according to the applicable requirements of standard spec 652

#### **D** Measurement

The department will measure Install Pole Mounted Cabinet as each individual assembly, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT673.0225.SInstall Pole Mounted CabinetEach

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for furnishing all testing. 673-010 (20100630)

## 60. Install Ethernet Switch, Item 675.0400.S.

## **A Description**

This special provision describes installing an Ethernet switch, and providing all necessary associated wiring.

#### **B** Materials

The department will furnish the Ethernet switch. Provide all necessary cables between the Ethernet switch and terminal server or other device.

#### **C** Construction

Install the Ethernet switch in a new or existing field cabinet. Connect it to devices as shown on the plans, or as directed by the engineer.

#### **D** Measurement

The department will measure Install Ethernet Switch by the unit, installed according to the contract, tested, and accepted.

## E Payment

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

ITEM NUMBER DESCRIPTION UNIT 675.0400.S Install Ethernet Switch Each

Payment is full compensation for installing an Ethernet switch; furnishing all necessary incidental hardware; and making all necessary connections. 675-040 (20100630)

## 61. Removing 50-Foot Camera Pole, Item 677.9051.S.

#### A Description

This special provision describes removing an existing camera pole.

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

#### **C** Construction

Disconnect all cables, wiring and equipment that are mounted on or in the poles, and remove the pole from the concrete footing. The department will pick up any antennae, cameras, or other equipment mounted on the pole; contact maintenance staff at 414-227-2166 at the department's Statewide Traffic Operations Center, when the material is ready to be picked up. Properly dispose of the pole, conduit, cabling, and wiring away from the project site.

#### **D** Measurement

The department will measure Removing (Height) Camera Pole by the unit, acceptably removed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT677.9051.SRemoving 50-Foot Camera PoleEach

Payment is full compensation for removing and disposing of the existing camera pole; disconnecting any necessary wiring; removing the equipment mounted on the poles; disposing of cabling and wiring; and transportation.

677-901 (20100630)

## 62. Removing CCTV Camera, Item 677.9200.S.

#### **A Description**

This special provision describes removing an existing CCTV camera from an existing camera pole as described in the plan.

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

#### **C** Construction

Disconnect all wiring at the control cabinet and at the top of the camera pole. Remove all fastening hardware and remove the existing camera and pan, tilt, and zoom mechanisms from the top of the pole. Salvage and store the cameras for pick up by the department; contact maintenance staff at (414) 227-2166 at the department's Statewide Traffic Operations Center to coordinate when the materials will be picked up.

The contractor may request a meeting with the engineer to assess the condition and operability of the camera prior to beginning work on removing the camera. Any damage or improper operation not noted at the meeting, or prior to the contractor starting work on the removal, will be assumed to be the fault of the contractor; repair or replace the camera at no additional cost to the department. Store the camera until the department picks up the camera.

#### **D** Measurement

The department will measure Removing CCTV Camera by the unit, acceptably and completely removed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 677.9200.S Removing CCTV Camera Each

Payment is full compensation for removing an existing CCTV camera; for disconnecting all necessary cables and wiring; and properly storing the materials. 677-902 (20100630)

## 63. Backfill Slurry, Item SPV.0035.0001.

#### **A Description**

This special provision describes furnishing and placing Backfill Slurry. Conform to standard spec 209 except as hereinafter modified.

#### **B** Materials

Replace standard spec 209.2.2 with the following:

Use aggregates that conform to the gradation conforming to standard spec 501.2.5.3 for fine aggregate and for Size No. 1 in standard spec 501.2.5.4 of the standard specs. Provide aggregates in the same proportion by weight as for Grade A concrete as in standard spec 501.3.2.2. Weigh aggregates at a batch plant suitable for batching concrete masonry. Mix and deliver to the project site using a truck mixer. Add enough water meeting the requirements of standard spec 501.2.4 to enable the mixture to flow readily.

#### **C** Construction

Replace standard spec 209.3 with the following:

Prior to placement of Backfill Slurry, secure all plastic pipes in a manner to prevent any change in location or elevation of the pipe.

Discharge from the truck in a manner to prevent segregation. Completely fill excavation in a single operation. Consolidation or compaction effort will not be required. Twelve hours shall elapse before paving over the backfill.

#### **D** Measurement

Replace standard spec 209.4 with the following:

The department will measure Backfill Slurry 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.

The department will only include material within the limits and in the places the plans show, the contract designates, or the engineer directs.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.0001	Backfill Slurry	CY

Payment for Backfill Slurry is full compensation for providing the backfill slurry; for transporting it to the jobsite; placement and for disposing of surplus materials conforming to standard spec 209.5(2) and 209.5.(5). SER-209.1 (20161208)

## 64. Traffic Control Interim Freeway Lane Closure, Item SPV.0060.0001.

## **A** Description

This special provision describes adjusting and readjusting existing traffic control items that were placed on the freeway for a lane closure, intended lane closure, or staged construction. This applies to an additional one, two or three lane closure as the plans show, the engineer directs, and according to standard spec 643.

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

#### **C** Construction

Return the traffic control items within a 24 hour period to their original state or position upon removal of the additional one, two or three lane closure.

#### **D** Measurement

The department will measure Traffic Control Interim Freeway Lane Closure as each individual freeway one, two or three lane closure setup and subsequently removed in each traffic direction within a 24-hour time period, 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.0060.0001 Traffic Control Interim Freeway Lane Closure Each

Payment is full compensation for setup and subsequent removal in each traffic direction within a 24-hour time period of a freeway one, two, or three lane closure. Drums, barricades, lights, arrow board and signs will be paid for separately under the various traffic control items.

## 65. Traffic Control Close-Open Freeway Ramp, Item SPV.0060.0002.

#### **A Description**

This special provision describes the labor and equipment required for closing and subsequently opening a freeway ramp and associated auxiliary lane as the plans show, the engineer directs, and according to standard spec 643.

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

#### **C** Construction

Drums, barricades and signs may remain along the roadway when the exit ramp is open to traffic pending engineer approval to verify adequate offsets from traffic location are provided. Ensure that all inappropriate signs associated with the ramp closure are not visible to traffic when the ramp is open. A deduction of one each will be made from the project total for this item for each day any inappropriate sign is visible to traffic when the ramp is open.

#### **D** Measurement

The department will measure Traffic Control Close-Open Freeway Ramp as a unit every time a freeway ramp is setup and subsequently removed within a 24-hour period that has been authorized by the engineer. Closure to a ramp not deemed necessary for construction does not constitute payment.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.0002Traffic Control Close-Open Freeway RampEach

Payment is full compensation for the labor and equipment associated with closing and subsequently opening a freeway ramp. Closure or partial closure of adjacent auxiliary lanes will be made as necessary at no additional cost to the department. Drums, barricades, arrow boards, and signs will be paid for separately under the various traffic control items.

## 66. Reconnect Storm Sewer Laterals, Item SPV.0060.0003.

#### **A Description**

This special provision describes reconnecting existing storm sewer laterals to new structures or new pipe.

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

#### C Construction

Identify all laterals in existing structures or pipes prior to removal of that structure or pipe. Remove existing lateral pipes to the next engineer accepted joint and replace in-kind with equivalent modern materials such as PVC or concrete. Verify that positive drainage is achieved when connecting lateral. Salvage any structurally sound pipe that was removed if prior approval is granted by the engineer. Connect the existing pipes to the new pipes with the appropriate coupling, concrete collar or by means approved by the engineer. Utilize concrete masonry for concrete collar according to standard spec 501.

#### **D** Measurement

The department will measure Reconnect Storm Sewer Laterals by each lateral, connected and approved in the field.

## E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.0003Reconnect Storm Sewer LateralsEach

Payment is full compensation for performing all work; removing, furnishing and installing all materials, coring, couplings, concrete collars, and pipe. Any additional pipe or materials required to reconnect the storm sewer laterals shall be considered incidental to this bid item. SEF Rev. 14 0917

## 67. Concrete Barrier Type S56 End Anchor, Item SPV.0060.0164.

## **A Description**

This special provision describes constructing end anchorages for single slope concrete barrier according to standard spec 603, details shown in the plans and as hereinafter provided.

## **B** (Vacant)

#### C Construction

Construct the Concrete Barrier (Type) to present a smooth, uniform appearance in its final position conforming to the horizontal and vertical lines shown on the plans or ordered by the engineer, and be free of lumps, sags or other irregularities.

#### **D** Measurement

The department will measure Concrete Barrier (Type) End Anchor as each individual end anchor, acceptably completed.

#### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.0164Concrete Barrier Type S56 End AnchorEach

Payment is full compensation for providing the barrier end anchor; for excavating and backfilling; for disposing of excess material; and for restoring the grade.

## 68. Removing Distribution Centers, Item SPV.0060.1001.

#### A Description

The work under this item consists of Removing Distribution Centers including electric service pedestal at locations shown in the plans, removing the meter pedestals and disposing of off the site.

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

#### **C** Construction

Existing distribution centers shall not be removed until they have been identified by the engineer. Completely remove the distribution cabinet and its base from the surrounding soil and properly dispose of off the job site.

The Removed lighting distribution center shall be returned to the department or disposed of off the site as directed by the engineer. Notify department's Lighting engineer before disposal.

Coordinate with the utility for disconnection of service. The department will pay any fees charged by the utility.

Remove any fencing that is specific to the removed distribution center, incidental to this pay item.

#### **D** Measurement

The department will measure Removing Distribution Centers by each unit removed, delivered or disposed of, including the service pedestal.

## E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.1001Removing Distribution CentersEach

Payment will be full compensation for removal of the cabinet and service; and for delivery of the cabinet to the department or disposal.

## 69. Removing Luminaires Underdeck, Item SPV.0060.1002.

#### A Description

The work under this item shall consist of removing existing luminaires underdeck from the railroad bridge deck intended to remain in service. Removed materials shall become the property of the contractor and shall be disposed of off the project site. Lamp disposal shall be paid separately.

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

#### C Construction

Dispose of all materials off the site, except sodium vapor lamps. Lamps shall be disposed of under the requirements of a separate pay item.

#### **D** Measurement

The department will measure Removing Luminaires Underdeck as each individual removed unit, acceptably completed.

## E Payment

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

following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.1002Removing Luminaires UnderdeckEach

Payment is full compensation for removing and disposing of luminaires underdeck.

## 70. Removing Lighting Units, Item SPV.0060.1003.

## A Description

This special provision describes the removing lighting units (pole, arm, luminaire, wires, breakaway device, and associated hardware and appurtenances). Removed lighting units shall be returned to the department as directed by the engineer. Lamp disposal removal shall be paid separately. The foundation shall remain in place.

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

#### **C** Construction

No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

Any damage to the existing concrete foundation or anchor bolts while removing the lighting units shall be replaced in kind to the satisfactory of the engineer at no additional cost to the State

All materials shall be removed as described on the plans and as directed by the engineer.

#### **D** Measurement

The department will measure Removing Lighting Units by each unit removed and returned to the department, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.1003Removing Lighting UnitsEach

Payment will be full compensation for removing lighting units; and for disposal of all removed materials.

## 71. Lamp Disposal High Intensity Discharge, Item SPV.0060.1004.

## **A Description**

This special provision describes the packaging and delivering of high intensity discharge (mercury vapor, metal halide, and high-pressure sodium) lamps removed under this contract to the department for disposal as hazardous materials.

#### **B** Materials

Lamps turned in to the department will be considered the property of the department for proper future disposal, and the contractor will have no further obligation for their disposal.

#### **C** Construction

Pack intact lamps in the packaging of the new lamps used to replace them, or packaging affording the equivalent protection. Place in full, closed stackable cartons.

Pack broken lamps into (min.) 6 mil thick plastic bags and place inside sturdy cardboard boxes or the equivalent. Mark the outer packaging with the term "broken lamps "with the number of broken lamps clearly marked on the box. Deliver all broken lamps to the department.

The department will not accept lamps improperly packaged or packed in metal containers. The department will reject any lamps not removed as part of a contract pay item or otherwise required under this contract.

Pile cartons no more than four high if palletized and secure cartons with shrink wrap to prevent shifting or falling of the loads. Clearly mark each pallet with the number of lamps on each pallet.

Deliver the lamps to the department at the South 60<sup>th</sup> Street office in West Allis. Consolidate all deliveries into a truckload or more, except when all the lamps removed under a contract measure less than a truckload, deliver as one load at one time. Contact (414) 266-1170 to set up an appointment for delivery.

#### **D** Measurement

The department will measure Lamp Disposal High Intensity Discharge as each individual unit delivered to the department properly packaged. The department will not measure broken lamps that exceed a total of ten percent of all lamps to be delivered.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.1004 Lamp Disposal High Intensity Discharge Each

Payment is full compensation for handling, packaging, labeling and delivering the lamps. Payment will be in addition to payment for the work under which the lamps are removed from service

## 72. Poles Type F, Item SPV.0060.1005.

#### **A Description**

These special provisions describe furnishing and installing steel light poles (Type F).

#### **B** Materials

Conform to materials requirements in the plan details. Additionally, conform to applicable requirements of standard spec 657.2.1 and 657.2.3.2.

#### **C** Construction

Conform to standard spec 657.3.1 and 657.3.3.

#### **D** Measurement

The department will measure Poles Type F by each individual unit, furnished and installed, acceptably completed.

## E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.1005Poles Type FEach

Payment is full compensation conforming to standard spec 657.5(4) and 657.5(7).

## 73. Poles Type 5-Aluminum, Multi Arm Heights, Item SPV.0060.1006.

## **A Description**

This special provision describes furnishing and installing aluminum light poles with capabilities of multi mounting height for dual luminaire arms.

#### **B** Materials

Conform to materials requirements in the plan details. Additionally, conform to applicable requirements of standard spec 657.2.

#### **C** Construction

Conform to standard spec 657.3.

#### **D** Measurement

The department will measure Poles Type 5-Aluminum, Multi Arm Heights as each individual unit, acceptably completed.

## E Payment

The department will pay for measured quantities at the contract unit price according to standard spec 657.5 under the following bid item:

ITEM NUMBER DESCRIPTION UNIT SPV.0060.1006 Poles Type 5-Aluminum, Multi Arm Heights Each

Payment is full compensation conforming to standard spec 657.5.

## 74. Ground Rod, Item SPV.0060.2001.

## **A Description**

This special provision describes installing a ground rod and ground wire.

#### **B** Materials

Ground rod shall be copper clad steel with cladding 13 mils thick. The minimum diameter is 5/8-inch and the minimum length is eight feet. Ground wire shall be AWG # 6 bare, solid copper.

#### **C** Construction

Use exothermic welding to connect the ground wire to the rod. Install the rod vertically, or as close to vertical as conditions permit. Select locations with moist soil, if available. Place the rod at least 6 feet from all other ground rods.

#### **D** Measurement

The department will measure Ground Rod by each individual unit, acceptably installed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.2001 Ground Rod Each

Payment is full compensation for installation of the ground rod and ground wire; welding and connections at both ends of the ground wire.

## 75. Install Overhead Freeway DMS Full Matrix, Item SPV.0060.2002.

#### A Description

This special provision describes installing a state-furnished dynamic message sign on a new sign structure.

#### **B** Materials

Materials will be a combination of department furnished and contractor furnished.

The department will provide the following materials:

- Dynamic Message Sign (including controller);
- Copper Ethernet control cable for connection between the sign and the associated Ethernet switch;
- · Vertical I-beams to bolt to the back of the sign enclosure; and
- · Hardware to connect the vertical I-beams to the back of the sign enclosure.

Dynamic Message Sign and mounting hardware will be from Adaptive Display Solutions of Milwaukee, WI, will be nominally 106-inches high by 303.5-inches wide by 38-inches deep and weigh approximately 4,500-pounds.

The contractor shall provide the following materials:

- Four power wires to connect the sign to the breaker disconnect box at the control cabinet location. Size the wires to carry the maximum amperage permitted by the main breakers in the sign; and,
- One 100-amp 240-VAC double pole breaker in the breaker disconnect box (paid for separately) mounted on the control cabinet.

Use an AWG #6 copper wire or equivalent bonding straps to bond the sign and cabinet to the structure. Use an AWG #6 solid, bare copper wire to bond the sign structure to the ground rod(s).

#### **C** Construction

Install the 100-amp breaker so that it controls all power to the sign. There will be a separate breaker to control the cabinet.

Connect the power and control cables as shown on the plans, as directed by the engineer, and according to the manufacturer's recommendations. Run the cables in rigid metallic conduit or flexible metallic conduit, or combination of these, within the sign structure.

Bond the bottom of the sign structure to one or more ground rods. Use exothermic welding at each end of the ground wire, unless the steel structure has a suitable grounding lug. Use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the sign's ground bar to ground does not exceed 4 ohms. Add more ground rods if necessary to achieve this requirement.

#### **D** Measurement

The department will measure Install Overhead Freeway DMS Full Matrix by each sign, acceptably installed and tested.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.2002Install Overhead Freeway DMS Full MatrixEach

Payment is full compensation for installing and testing the sign and controller; providing cables, conduits, and fittings; for testing the sign; and for transporting materials.

## 76. Pull Box Non-Conductive 24x42-Inch, Item SPV.0060.2004.

## **A Description**

This special provision describes furnishing and installing Pull Box Non-Conductive 24x42-Inch as shown on the plans.

#### **B** Materials

Furnish pull boxes, frames, and lids made of non-conductive material. Pull boxes, frames, and lids shall be suitable for Tier 15 loading as specified in ANSI/SCTE 77.

Furnish one 24" length of #6 reinforcing steel.

#### **C** Construction

Provide pull boxes, frames, and lids made of non-conductive materials. The contractor may extend Pull Box Non-Conductive 24x42-Inch as the plan details show using the same material as the pull box. Saw extensions parallel to the extension ring. Secure extension to original box as shown in the plan details. Excavate, place coarse aggregate drain material, and backfill as the plan details show. Dispose of surplus or unsuitable materials as specified under standard spec 205.3.12. Use covers stamped with "Electric" for traffic signal and lighting pull boxes or "WISDOT FTMS" for pull boxes shown in the FTMS section of the plan set.

Install one 24" length of #6 reinforcing steel vertically on the north side of the pull box. Reinforcing steel is for future locating purposes.

#### **D** Measurement

The department will measure Pull Box Non-Conductive 24x42-Inch as each individual unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.2004Pull Box Non-Conductive 24x42-InchEach

Payment is full compensation for providing and installing pull boxes, frames, lids, aggregate, fasteners, reinforcing steel; conduit extensions less than 10 feet long including fittings; and for furnishing all excavating, backfilling and disposing of surplus material. The department will pay separately for engineer-directed pull box drain duct under the Conduit Rigid Nonmetallic bid items as specified in standard spec 652.5.

## 77. Install 5.8 GHz Ethernet Bridge, Item SPV.0060.2005.

#### **A Description**

This special provision describes installing a state-furnished, or salvaged, 5.8 GHz Ethernet bridge access point or subscriber unit at a new or existing cabinet or new or existing pole.

#### **B** Materials

Materials will include state-furnished materials and contractor furnished materials.

State-furnished or salvaged, materials include the following:

- One 5.8 GHz Ethernet bridge with integral antenna.
- One 5.8 GHz Ethernet bridge power converter.
- One 5.8 GHz Ethernet bridge mounting bracket.

Contractor-furnished materials include the following:

- Mounting hardware.
- Outdoor rated Category 6 communications cable.
- · Inline network cable surge suppressor.

#### **C** Construction

Bond the surge suppressor to the cabinet grounding system.

Install the 5.8 GHz Ethernet bridge in a point-to-point or point-to-multipoint configuration as shown on the plans and as directed by the engineer.

Use the manufacturer's set-up software to configure the Ethernet bridge radio for its intended use. Use the signal strength indicator on the radio to find the optimum position. Also perform a frequency analysis to determine the optimal hop pattern of the radios and test the continuity of the link by polling the radios using the software provided. The position of the radio and the hop pattern shall be adjusted until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies identified in the frequency analysis. Deliver three copies of the final test results for signal strength, frequency analysis, and test polling.

#### **D** Measurement

The department will measure Install 5.8 GHz Ethernet Bridge as each individual unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.2005Install 5.8 GHz Ethernet BridgeEach

Payment is full compensation for installing, setting up, configuring, and testing the 5.8 GHz Ethernet bridge radio, surge suppressor, cables, and connections; and transportation.

## 78. Removing Microwave Detector Assembly, Item SPV.0060.2006.

## **A** Description

This special provision describes removing an existing Microwave Detector Assembly.

#### **B** Materials

Materials included in Microwave Detector Assembly are:

- 1. Microwave Detector.
- 2. Type 5 Pole.
- 3. Transformer Base.
- 4. Mounting Hardware.

## **C** Construction

Remove Microwave Detector Assembly at the locations shown in the plans, or as directed by the engineer. Salvage the Microwave Detector Assemblies for the department to pick up, or dispose of them properly as directed by the engineer.

All work shall be according to the applicable requirements of standard spec 655, 656, 657, and 658, the Wisconsin Electrical Code, these special provisions, and the details shown in the plans.

Salvage and store all removed materials for pickup by the department. Coordinate with the engineer on a schedule to have the removed items picked up. Maintain all materials in a condition suitable for reutilization. Replace all items damaged during construction operations.

Electrical work under this item shall be completed by a journeyman electrician or be completed under the supervision of a journeyman electrician. Legal status or standing as a journeyman electrician shall be certified or otherwise documented to the engineer before any electrical work may begin.

#### **D** Measurement

The department will measure Removing Microwave Detector Assembly by each individual unit, acceptably removed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.2006 Removing Microwave Detector Assembly Each

Payment is full compensation for removal and storage of the Microwave Detector Assembly; disconnecting all wiring connections; removing all conduit connections; for any necessary restoration, including backfill, topsoil, and seeding.

## 79. Removing Monotube Concrete Base, Item SPV.0060.3051.

#### A Description

This special provision describes removing and disposing of existing monotube traffic signal concrete bases.

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

#### **C** Construction

Construction shall be according to standard spec 204.3.

At locations of concrete bases where complete removal of the base will impact construction of new monotube concrete bases and location of existing monotube does not interfere with construction of new monotube, break down and remove the concrete material to a depth of 2' below grade. Fill the area to grade with similar material as adjacent to the base (topsoil/seed, concrete sidewalk, asphalt, etc).

If the location of the existing monotube interferes with the construction of new monotube then remove the entire monotube concrete base per standard spec 204.3.

#### **D** Measurement

The department will measure Removing Monotube Concrete Bases bid items as each individual backplate, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.3051Removing Monotube Concrete BaseEach

Payment is full compensation for breaking down and removing; for hauling and disposing of materials; for restoring the roadway cross-section; and for backfilling.

## 80. Backplates with Reflective Border 3 Section 12-Inch, Item SPV.0060.3052.

## **A Description**

This special provision describes furnishing and installing traffic signal backplates with a factory installed 2-inch reflective border.

#### **B** Materials

Backplate materials shall be according to standard spec 658.2.2.2. Reflective border materials shall be factory installed.

#### **C** Construction

Construction shall be according to the manufacturer's recommendations and standard spec 658.3.

#### **D** Measurement

The department will measure Backplates with Reflective Border (size) bid items as each individual backplate, 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.0060.3052 Backplates with Reflective Border 3 Section 12-Inch Each

Payment is full compensation for furnishing and installing backplates with reflective border and mounting screws; and for disposing of surplus materials.

## 81. Locating Monotube Traffic Signals, Item SPV.0060.3053.

#### **A Description**

This special provision describes locating monotube traffic signals based on limited sight distance due to an existing bridge.

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

#### **C** Construction

Notify the department's Electrical Field Unit at (414) 266-1170 and Derrin Wolford with WisDOT Signal Operations at (262) 521-4409 at least five working days prior to locating the monotube traffic signals. WisDOT must be on-site when locating the monotube traffic signals.

Furnish two vehicles equipped with two-way communications equipment and full width flashing yellow light bars with 360 degree visibility. Provide a target on the lead vehicle 20.5' above the roadway offering a sharp cutoff when it appears and disappears. Ensure that the observer's eye in the trailing vehicle is 7.60 feet above the roadway.

Park the trailing vehicle at the intersection stop line ensuring that the vehicle is at the highest point in the travel lanes. Park the leading vehicle at the highest point in the travel lanes with the target centered in the travel lane at the station of the monotube pole as shown in the plans. Verify that the target can be seen by the trailing vehicle. Locate an alternate monotube station following the procedure noted above if the target cannot be seen by the trailing vehicle. WisDOT shall approve all revised monotube stations.

#### **D** Measurement

The department will measure Locating Monotube Traffic Signals bid items as each individual monotube, acceptably located.

#### **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.3053	Locating Monotube Traffic Signals	Each

Payment is full compensation for verifying the location of the monotubes; and for providing a new monotube location, if required.

## 82. Concrete Bases Type 1 Spread Footing, Item SPV.0060.3054; Concrete Control Cabinet Base Type 9 Special (Mod.), Item SPV.0060.3055.

## **A** Description

Work under this specification shall be done according to standard spec 654, contract plan detail, and these special provisions.

#### **B** Materials

Materials shall be according to standard spec 654.

#### C Construction

Construction shall be according to standard spec 654.

#### **D** Measurement

The department will measure Concrete Bases (Type) bid items as each individual base, 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.0060.3054	Concrete Bases Type 1 Spread Footing	Each
SPV.0060.3055	Concrete Control Cabinet Base Type 9 Special (Mod.)	Each

Payment is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor rods, nuts, and washers; for bar steel reinforcement, if required; for excavating, backfilling, and disposing of surplus materials.

## 83. EVP Detector Type I, Item SPV.0060.3101.

#### **A Description**

This work shall consist of furnishing and installing EVP Detector Type I as shown on the plans and as hereinafter provided.

#### **B** Materials

The infrared EVP Detector Type I shall be lightweight, weatherproof device capable of sensing and transforming pulsed infrared energy into electrical signals for use by the signal discrimination equipment. The infrared EVP Detector Type I shall be designed for mounting at or near an intersection on mast arms, pedestals or pipes. Each infrared EVP Detector Type I shall be supplied with mounting hardware to accommodate installation on mast arms, poles,

or traffic signal standards as shown in the plans. The EVP Detector Type I shall accept infrared signals from one direction and shall provide a single electrical output signal. The EVP Detector Type I shall have a built-in terminal block to simplify wiring connections. The infrared EVP Detector Type I shall receive power from the discriminator and shall have internal voltage regulation to operate from 18 to 37 volts DC. The infrared EVP Detector Type I shall respond to clear lens code secured emitter with 0.84 (+/- 10%) Joules of energy output per flash at a distance of 2,500 feet under clear atmospheric conditions. If the emitter is configured with a visible light filter, the EVP Detector Type I shall respond at a distance of 1,800 feet under clear atmospheric conditions. The noted distances shall be comparable day and night. The infrared detector shall produce an electrical signal to the discriminator via a detector cable up to 1,000 feet in length.

The EVP Detector Type I shall be a GTT Opticom Model #711, or approved equal.

#### C Construction

Furnish and install EVP Detector Type I for traffic signals. Set the initial aim angle at a distance of 1,800 feet from the stop bar or as specified by the engineer. Final adjustment shall be under the direction of the engineer.

#### **D** Measurement

The department will measure each EVP Detector Type I as each unit, acceptably completed.

# **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.3101EVP Detector Type IEach

Payment is full compensation for furnishing and installing the EVP Detector Type I on signal poles or mast arms as shown on the plans, including extensions to poles if required; and for aiming the detector.

# 84. EVP Discriminator Type IV, Item SPV.0060.3102.

# **A Description**

This work shall consist of furnishing and installing an EVP Discriminator Type IV in the control cabinet as shown on the plans and as hereinafter provided.

# **B** Materials

The EVP Discriminator Type IV shall be a plug-in, four channel, multiple priority device intended to be installed directly, into a rack located within the controller cabinet. The EVP Discriminator Type IV card edge connector shall include primary infrared detector inputs and power outputs. Two additional detector inputs per channel shall be provided on a front panel connector. An auxiliary function harness (#757) shall be included. The EVP Discriminator Type IV shall be powered from 115 volt (95 volts AC to 135 volts AC), 60 Hz mains and shall contain an internal, regulated power supply that supports up to four infrared detectors. The EVP Discriminator Type IV shall include several control timers that shall limit or modify the

duration of a priority control condition and programmable security via jumper selection. The control timers shall be as follows:

- MAX CALL TIME: Shall set the maximum time a channel is allowed to be active. It can be set to 120, 240, or 65,535 seconds. Its factory default must be the maximum time.
- CALL HOLD TIME: Shall set the time a call is held on a channel after the priority signal is no longer being received. It can be set to either 6 or 12 seconds via jumper selects. Its factory default mist be six seconds.
- SECURITY ENCODED DATA: Shall require that an infrared signal contain an embedded vehicle ID code to be recognized as a valid request. The default jumper selection shall disable this requirement.

The EVP Discriminator Type IV default range values shall be re-settable by the operator using switches located on its front. The EVP Discriminator Type IV shall be capable of three levels of discrimination of security encoded infrared signals, as follows:

- Verification of the presence of the base infrared of either 14.03509 Hz +/- 0.01773 Hz for Command priority, or 9.63855 Hz +/- 0.00836 Hz for Advantage priority.
- Determination of when the vehicle is within the prescribed range.
- The EVP Discriminator Type IV card edge connector shall include primary infrared detector inputs and power outputs. The EVP Discriminator Type IV shall include one optoisolated NPN output per channel that provides the following electrical signal to the appropriate pin on the card edge connector:
- Hz +/- 0.1 Hz 50% on/duty square wave in response to an Advantage priority call.
- A steady ON in response to a Command priority call.

The EVP Discriminator Type IV shall accommodate two methods for setting intensity thresholds (emitter range) for high and low priority signals:

- Using an encoded emitter with range-setting capability.
- Using an encoded emitter while manipulating the front panel switches.

The EVP Discriminator Type IV shall have a solid state POWER ON LED indicator that flashes to indicate unit diagnostic mode and illuminates steadily to indicate proper operation. The EVP Discriminator Type IV shall have internal diagnostics to test for proper operation. If a fault is detected, the discriminator shall use the front panel LED indicators to display fault information. The EVP Discriminator Type IV shall have a Command (high) and Advantage (low) solid state LED indicator for each channel to display active calls. The EVP Discriminator Type IV shall have a test switch for each channel to test proper operation of Command or Advantage priority. The EVP Discriminator Type IV shall properly identify a Command priority call with the presence of 10 Advantage priority code secured emitter signals being received simultaneously on the same channel. The EVP Discriminator Type IV shall have write-on pads to allow identification of the phase and channel. The EVP Discriminator Type IV shall have the capability of functionally testing connected detector circuits and indicating via front panel LEDs non-functional detector circuits. An auxiliary

interface panel shall be available to facilitate interconnections between the discriminator and traffic cabinet wiring.

Additional wiring harnesses may be required for auxiliary detector heads as shown on the plans.

The EVP Discriminator Type IV shall be a GTT Opticom Model #464, or approved equal.

# **C** Construction

Furnish and install EVP Discriminator Type IV for traffic signals.

#### **D** Measurement

The department will measure each EVP Discriminator Type IV as each 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.0060.3102 EVP Discriminator Type IV Each

Payment is full compensation for furnishing and installing the EVP Discriminator Type IV in the control cabinets and any additional wiring harnesses required for auxiliary heads.

# 85. EVP Confirmation Light Assembly Type I, Item SPV.0060.3103.

#### **A Description**

This work shall consist of furnishing and installing Confirmation Light Assemblies, Type I as shown on the plans and as hereinafter provided.

# **B** Materials

Confirmation Light Assembly, Type I, shall consist of weatherproof, aluminum lamp holder with a single LED lamp as shown on the plans. In addition, mounting materials shall be provided as shown on the plans.

The Confirmation Light Assembly Type I shall be a GTT Opticom Model #575, or approved equal.

# **C** Construction

Furnish and install Confirmation Light Assembly Type I for traffic signals.

# D Measurement.

The department will measure EVP Confirmation Light Assembly Type I as each 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.0060.3103 Confirmation Light Assembly Type I Each

Payment is full compensation for furnishing and installing the Confirmation Light Assembly Type I.

# 86. Traffic Signal Controller Programming, Item SPV.0060.3104.

# **A Description**

This special provision describes the required traffic signal controller programming necessary to update the intersection phasing and timing. Specific timing plans will be provided by the City of Wauwatosa.

# **B** (Vacant)

### **C** Construction

Input traffic signal timings into the new traffic signal controller as directed by the City of Wauwatosa to allow the traffic signal to operate according to the sequence of operations.

Allow the City of Wauwatosa and/or its representatives to review the operation of the controller prior to installation at the job site. Provide guidance as needed on special programming features based on the sequence of operations to maintain proper operation.

#### D Measurement.

The department will measure Traffic Signal Controller Programming by each individual controller, 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.0060.3104 Traffic Signal Controller Programming Each

Payment is full compensation for controller programming and timing modifications required to accommodate fully functional traffic signal operation as shown in the sequence of operations plan.

# 87. Concrete Control Cabinet Base Type 9 Modified, Item SPV.0060.3105.

# A Description

This special provision describes modifying the existing concrete traffic signal cabinet base at the intersection of W. Center Street and N. 124<sup>th</sup> Street according to the pertinent provisions of standard spec 654 and as hereinafter provided. Specific construction details are provided in the plans.

# **B** (Vacant)

#### **C** Construction

Notify the City of Wauwatosa Engineering Department at (414) 302-8374 at least five working days prior to the modification of the existing base.

Minimize impacts to adjacent landscaping and sidewalk and notify the City of Wauwatosa of possible impacts prior to construction.

Construct the expanded concrete control cabinet base around the existing concrete control cabinet base according to the construction details and as specified in standard spec 501. Provide the surface finish specified in standard spec 502.3.7.2 and plan details. Inspect the forming and applicable reinforcement for concrete bases before pouring the concrete. Cure exposed portions of the concrete bases as specified in standard spec 415.3.12 except the contractor may use curing compound conforming to standard spec 501.2.9. Wait at least seven days before installing the new traffic signal cabinet. Install necessary hardware to anchor traffic signal cabinet to the base. Existing traffic signal must remain operation while constructing the expanded concrete control cabinet base.

#### D Measurement.

The department will measure Concrete Control Cabinet Bases Type 9 Modified by each individual concrete base, 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.0060.3105 Concrete Control Cabinet Bases Type 9 Modified Each

Payment is full compensation for installing concrete bases; for anchor bolts, nuts, washers, and other necessary hardware; for excavating, backfilling, and disposing of surplus materials.

# 88. Video Detection System Programming, Item SPV.0060.3106.

# **A Description**

This special provision describes the required traffic signal video detection programming necessary to update the intersection phasing. Specific phasing information is provided in the plans.

# **B** (Vacant)

# **C** Construction

Program the existing video detection system as directed by the City of Wauwatosa to allow the traffic signal to operate according to the sequence of operations.

Allow the City of Wauwatosa and/or its representatives to review the operation of the video detection system. Provide guidance as needed on special programming features based on the sequence of operations to maintain proper operation.

#### D Measurement.

The department will measure Video Detection System Programming by each individual video detection system, 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.0060.3106 Video Detection System Programming Each

Payment is full compensation for video detection system programming required to accommodate fully functional traffic signal operation as shown in the sequence of operations plan.

# 89. Relocation Hydrant Assembly, Item SPV.0060.5001.

# **A Description**

This work includes relocating existing hydrants at locations indicated in the plans, conforming to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and as hereinafter provided.

# **B** Materials

# **B.1 New Hydrant Assembly**

Provide new water main hydrants and hydrant branch piping meeting the requirements of the City of Wauwatosa.

Hydrant shall be a AWWA C502 hydrant with all operating nuts and hose connections meeting City of Wauwatosa size requirements.

# **B.2** Fittings

Fittings shall conform to AWWA C110, centrifugally cast in metal or sand-lined molds. Use of compact fittings conforming to AWWA C153 is acceptable.

In no case shall fitting grade rating less than adjoining pipe.

Fittings shall be from same manufacturer as pipe.

Nuts and bolts for joints and fittings shall be corrosion resistant steel, NSS Technologies, Inc., or Cor-Blue, or approved equal.

# **B.3** Polyethylene Sheeting for Pipe Corrosion Protection

Furnish polyethylene sheeting conforming to ASTM D4976, Type I, Class B, color black, Grade E-1, 1200 psi tensile strength, minimum thickness of 8 mil. Tube diameter or sheet width shall conform to AWWA C105.

Furnish tape for polyethylene sheeting that is 2-inch wide, black tape with rubber adhesive and minimum 9 mil polyethylene backing. Tape shall be 3M<sup>TM</sup> Preservation Sealing Tape 481, or Scapa Preservation Tape 136, or an approved equal.

# **C** Construction

# C.1 General

According to Wisconsin Statute 182.0175, "Damage to Transmission Facilities," Excavator, as defined in 182.0175(1)(bm), shall be solely responsible to provide advance notice to "Diggers Hotline, Inc." at (800) 242-8511, not less than three working days prior to commencement of any Excavation, as defined in the statute, required to perform work contained in this project, and further, Excavator shall comply with all other requirements of this Statute relative to Excavation

# C.2 Removal of existing Hydrant Assembly

Remove and salvage the existing hydrant as shown in the plans. Contact David Simpson at (414) 471-8422 of the Wauwatosa Water Utility to arrange for pickup of the salvaged hydrant.

# C.3 Installation of Hydrant Assembly

Provide hydrants, hydrant branch piping and fittings.

Place crushed clear stone below base of re-located hydrant to 6 inches above drain holes in hydrant stem.

Solidly buttress new hydrant against trench wall.

Join pipe and fittings by means of a rubber gasket push-on joints conforming to AWWA C111.

#### **D** Measurement

The department will measure Relocation Hydrant Assembly by each hydrant assembly provided and installed, acceptably completed.

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.5001 Relocation Hydrant Assembly Each

Payment is full compensation for removing, salvaging, furnishing and installing all materials; excavating, backfilling, and compacting.

# 90. Pavement Cleanup Project 1060-39-90, Item SPV.0075.0001; Project 1360-09-71, Item SPV.0075.0002.

# **A Description**

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site. Pavement Cleanup includes surveillance and reporting of all active haul routes.

#### **B** Materials

# **B.1 Pavement Cleanup**

Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

Utilize vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified herein or approved by the engineer.

#### **C** Construction

# C.1 Surveillance

Provide daily surveillance of active haul routes to identify if material is being tracked from the jobsite. Document the condition of the roads and all sweeping recommendations in a daily report. Submit reports to the engineer daily, including hourly metered tickets for that day's sweeping activities.

# **C.2 Pavement Cleanup**

Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract. Keep all pavements, sidewalks, driveways, curb lanes, and gutters adjacent to the project free of dust and debris that are caused by land disturbing, dust generating activities, as defined in the contractor's Dust Control Implementation Plan (DCIP). Provide routine sweeping of all pavements, sidewalks, driveways, curb lanes and gutters on local-street active haul routes as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

# **Project 1060-39-90**

- 1. W. Burleigh Street (STH 100 to 124th Street)
- 2. Watertown Plank Road (STH 100 to 124th Street)
- 3. 124<sup>th</sup> Street(Burleigh Street to Watertown Plank Road)

# **Project 1360-09-71**

1. Capitol Drive eastbound and westbound (lower level of the interchange)

And any other roadways approved by the department.

In addition to routine sweeping, conduct sweepings as the engineer directs or approves, to eliminate dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Coordinate with engineer to determine deadlines for responding to emergency sweeping requests and cleaning up spillage and material tracked to/from the project.

Skid steers with mechanical power brooms may only be utilized on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer.

#### **D** Measurement

The department will measure Pavement Cleanup (Project) by the hour, acceptably completed.

Tickets shall include:

- Date
- Company
- · Operator name
- Equipment make/model
- Routes swept
- · Total hours.

Total hours shall be to the nearest 0.25 hour that work under this item was performed.

Compensation for mobilizing equipment shall be included in the contract price for Pavement Cleanup and no additional compensation therefore will be allowed.

# E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0075.0001	Pavement Cleanup Project 1060-39-90	HRS
SPV.0075.0002	Pavement Cleanup Project 1360-09-71	HRS

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials.

SEF Rev. 16\_0223

# 91. Obstructions Sign Supports Concrete Masonry, Item SPV.0075.4000.

# **A Description**

# A.1 General

The work included herein consists of removing, drilling, or coring through unknown, and unidentified, man-made subsurface obstructions when encountered for construction of drilled shaft footings for concrete masonry sign supports.

#### A.2 Definitions

Surface obstructions are defined as any objects, man-made or naturally deposited, encountered within 6 feet of the ground surface. Subsurface obstructions are defined as man-made obstructions that are encountered by the drilling equipment at a depth greater than 6 feet below the ground surface. Obstructions include only man-made materials, such as old concrete foundations or abandoned utilities. Known obstructions are man-made obstructions that are shown or identified in the plans. Unknown obstructions are man-made obstructions that are not shown or identified in the plans. Naturally occurring deposits such as rock, boulders, cobbles, nested cobbles and nested boulders, are not considered obstructions and therefore are not applicable to the provision of this pay item.

# **B** (Vacant)

# **C** Construction

Remove surface and subsurface obstructions at drilled shaft footing locations. Use special tools and/or procedures when the contractor cannot advance the hole more than 12 inches in 60 minutes using conventional earth augers operating at maximum power, torque, and down thrust. Special procedures and/or tools may be required but are not limited to chisels, breakers, core barrels, air hammer tools, and hand excavation. Other methods for obstruction removal can be employed to aid in the removal if acceptable to the engineer. Blasting is not permitted.

When an unknown subsurface obstruction is encountered, notify the engineer prior to beginning any work to remove the obstruction.

# **D** Measurement

The department will measure Obstructions (Type) by the hour for each hour the contractor actively spends removing or coring through unknown man-made subsurface obstructions. A quantity of one hour will be paid upon the determination that a subsurface obstruction is encountered based on lack of hole advancement with conventional tools as set forth in this specification. Upon removal of the unknown man-made subsurface obstruction, portions of the final hour measured will be rounded up to the next whole hour. Down time spent planning for subsurface obstruction removal or delays caused by the mobilization of special equipment and tools not readily available at the site will not be measured for payment.

	Measurement Example	Paid Obstruction Hours
1	Drilling encounters possible obstruction. Contractor notifies engineer.	0.00
	Start clock.	
2	Conventional drilling equipment does not advance 12 inches after attempting to do so for at least 60 minutes.	1.00
3	Contractor resumes work clearing obstruction the following day.  Assume the obstruction is cleared in aggregate total of 1 hour and 15 minutes of time. Obstruction is identified to be a previously unknown and unidentified man-made obstruction.	2.00

Only unknown (not identified in the plans), man-made subsurface obstructions, will be measured for payment. Work to clear and remove surface obstructions, known obstructions identified on the plans, and any natural deposits (rock, boulders, cobbles, nested cobbles and nested boulders) will not be measured separately for payment and shall be included in the applicable items for Sign Supports Concrete Masonry.

# **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0075.4000	Obstructions Sign Supports Concrete Masonry	HRS

Payment is full compensation for removal and disposal of unknown, man-made subsurface obstructions.

# 92. Pipe Underdrain 6-Inch Special, Item SPV.0090.0001.

# **A Description**

This special provision describes providing necessary subsurface drainage by constructing trenches, backfilling the trenches with the specified backfill material as the plans show according to standard spec 310, 612, placing the required geotextile fabric according to standard spec 645, installing the designated pipes or drainage devices, salvaging; disposing of surplus material; and restoring the work site, and as described in this special provision.

# **B** Materials

# **B.1** Base Aggregate

Furnish only base aggregate open graded conforming to standard spec 310.2.

### **B.2** Geotextile Fabric

Furnish geotextile fabric consisting of Type DF Schedule A and conforming to standard spec 645.2.2.4.

# B.3 Fittings, caps, and plugs

Furnish PVC or HDPE fittings, and caps or plugs.

#### C Construction

Completely wrap the installation trench with geotextile fabric. Make a hole in the existing structure large enough to make the pipe connection, back-plastering connections, mortaring connections, or both to storm sewer structures on the external and internal sides of the receiving structure.

# **D** Measurement

The department will measure Pipe Underdrain 6-Inch Special 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 NUMBERDESCRIPTIONUNITSPV.0090.0001Pipe Underdrain 6-inch SpecialLF

Payment is full compensation for providing the pipe underdrain; making all necessary connections to the receiving structures, performing back-plastering, mortaring, or both mortaring of underdrain connections to storm sewer structures, providing all fittings, and caps or plugs; for furnishing all excavating, plowing, and re-compacting, salvaging; disposing of surplus material; and restoring the work site.

The department will pay separately for geotextile fabric type DF schedule A and base aggregate open-graded under each bid item.

# 93. Concrete Curb and Gutter 30-Inch Type A (Modified), Item SPV.0090.0002; Concrete Curb and Gutter Integral 30-Inch Type D (Modified), Item SPV.0090.0003.

# **A Description**

This special provision describes constructing Concrete Curb and Gutter 30-Inch Type A (Modified), and Concrete Curb and Gutter Integral 30-Inch Type D (Modified). These items vary from the standard Concrete Curb and Gutter 30-Inch Type A and Concrete Curb and Gutter Integral 30-Inch Type D in that the curb height shall be 4 Inches instead of 6 Inches.

# **B** (Vacant)

Furnish materials that is according to the pertinent requirements of standard spec 601.

## **C** Construction

Construction shall be according to standard spec 601 and as shown and identified in the construction detail drawings.

### **D** Measurement

The department will measure Concrete Curb and Gutter 30-Inch Type A (Modified), and Concrete Curb and Gutter Integral 30-Inch Type D by the linear foot, acceptably completed.

# E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.0002	Concrete Curb and Gutter 30-Inch Type A (Modified)	LF
SPV.0090.0003	Concrete Curb and Gutter Integral 30-Inch Type D	LF
	(Modified)	

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.

Payment is full compensation for foundation excavation and preparation; special construction required at driveway and alley entrances, or curb ramps; for providing materials, including concrete, expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring work site. However, if the contract provides a bid item for excavation, then the department will pay for excavation required for this work as specified in the contract. Payment also includes providing tie bars in unhardened concrete. For the tie bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars bid item as specified in standard spec 416.5.

#### 94. Outdoor Rated Network Cable, Item SPV.0090.2001.

# **A Description**

This special provision describes furnishing and installing outdoor rated network cable in new or existing conduit or as directed by the engineer. It also includes installing statefurnished network communications extenders as required.

#### **B** Materials

Furnish outdoor rated Category 5e, or better, UTP cable with water-blocking flooded core and UV-resistant polyethylene jacket. Cable shall consist of 4-pairs of 24 AWG solid copper conductors and shall meet the requirements of ANSI/TIA/EIA 5 68A Category 5e, CENELEC EN50173, ICEA S-90-661, and ISO/IEC 11801.

Furnish an RJ45 connector for each end of the cable.

State-furnished network communications extenders.

### C Construction

Install the cable following the manufacturer's installation guidelines.

Install the RJ45 connectors (if not done prior to installation) according to manufacturer's installation guidelines.

Install a network communications extender as shown on the plans when cable length exceeds 100 meters

Use a purpose built "Pass-Fail" network cable tester to test the network cable installation for Category 5, Class E compliance. Repair any connections or cable as needed for the test to register a "Pass".

Connect the cable to the devices on each end as shown on the plans or as directed by the engineer.

#### **D** Measurement

The department will measure Outdoor Rated Network Cable, acceptably installed and tested, by the linear foot.

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.2001 Outdoor Rated Network Cable LF

Payment is full compensation for furnishing, installing, and testing the outdoor rated network cable; for installing network communications extenders where required; for connecting the cable to the devices at each end of the cable.

# 95. Cable Type UF 2-14 AWG, Item SPV.0090.3001.

# **A Description**

This work shall consist of furnishing and installing cable for confirmation lights and making all connections as shown on the plans and as hereinafter provided.

# **B** Materials

Conform to standard spec 655 revised with the following:

*Supplement standard spec 655.3.4 with the following:* 

When lighting is installed in conjunction with traffic signals, conductors from the traffic signal control cabinet to the confirmation light(s) shall be Cable Type UF, 2 conductor without ground, solid copper conductor, size No. 14.

## **C** Construction

Furnish and install Cable Type UF 2-14 AWG for traffic signals.

# USH 18 and STH 181

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to pulling confirmation light cable in the active traffic signal. Pull the confirmation light cable to the respective pedestal bases, monotube handholes, or control cabinet. Contact the department's Electrical Field Unit at (414) 266-1170 to access the traffic signal cabinet. Strip the cable on both ends and wire nut individual conductors in the field. Label both conductor ends per the cable routing chart. All connections to the traffic signal equipment and control cabinet will be made by the WisDOT EFU. Notify the department's Electrical Field Unit at (414) 266-1170 once the confirmation light cable has been installed

#### **D** Measurement

The department will measure Cable Type UF 2-14 AWG by the linear foot of cable, 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.0090.3001 Cable Type UF 2-14 AWG LF

Payment shall be full compensation for furnishing and installing cable; for making all connections; for furnishing and installing all connectors, including wire nuts, splice kits, tape, insulating varnish or sealant and ground lug fasteners, and for testing.

# 96. Install State Supplied Video Detection Cable, Item SPV.0090.3002; Install State Supplied Cat-5e Cable, Item SPV.0090.3003.

# **A Description**

This special provision describes the transporting and installing of state furnished Camera Power Cable, Cat-5e Cable, and Ethernet repeaters.

# **B** Materials

Pick up the state furnished Camera Power Cable, Cat-5e cable, and Ethernet repeaters at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical field unit at (414) 266-1170 to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

Furnish all other necessary materials (connectors including wire nuts, splice kits, tape, insulating varnish or sealant and ground lug fasteners) ensuring all materials are in compliance with the WisDOT Qualified Electrical Products List.

# **C** Construction

Install the Cat-5e Cable from the video detection cameras to the cabinet. Provide an extra 6-foot loop of cable in each pull box. Cat-5e Cable runs longer than 300-feet require an Ethernet repeater. Provide an extra 12-foot loop of cable at locations provided by the

engineer and install the state furnished Ethernet repeaters per the manufacturer's specifications. Terminate the Ethernet cable ends in the cabinet, at the video detection camera, and at the locations of any required Ethernet repeaters per the manufacturer's specifications. Each run of Ethernet cable must be terminated at both ends. All open field ends shall be taped and covered with a sealant according to standard spec 655.3.1.

Mark the cabinet end of the Camera Power Cable and Cat-5e Cable appropriately to indicate the equipment label (i.e. V1, V2, etc.) in the traffic signal control cabinet. Neatly coil a minimum of 15-feet of extra cable in the traffic signal cabinet for connection to the traffic signal cabinet equipment by others.

Submit an Ethernet Cable Test Procedure to the department 30 days prior to camera installation. The department will approve the test procedure within 30 days of the date received and provide a written approval.

Resubmit rejected test procedures within 15 days of notification. The department will provide written approval of resubmitted test procedures within 30 days of the date received.

Perform an Ethernet Cable Test conforming to the approved Ethernet Cable Test Procedure on each run of Ethernet cable (cabinet to camera, cabinet to Ethernet repeater, Ethernet repeater to camera). Test the Ethernet cable at a minimum for the following: 1000BASE-T, 100BASE-TX, 10BASE-T, Voice Over IP, Wiremap, Telco, and Length. Submit five copies of the test results to the department for approval. Notify the department of any cable that fails testing. If the Ethernet cable fails testing due to cable terminations, replace the terminations and re-test the cable. If the Ethernet cable fails testing due to the cable itself, re-install any failed Ethernet cable. Re-terminate the ends and re-test any Ethernet cable until it passes all testing procedures.

Connect the Ethernet cables to the video detection cameras and Ethernet repeaters per the manufacturer's specifications once all cable has passed testing. Connect the camera power cable to the video detection cameras. Neatly coil and secure the Ethernet cable and camera power cable in the traffic signal cabinet for connection to the adaptive traffic signal cabinet equipment by others.

Notify department's Electrical field unit at (414) 266-1170 upon installation completion at each intersection.

# **D** Measurement

The department will measure Install Stae Supplied Video Detection Cable and Install State Supplied Cat-5e Cable by the linear foot of cable, acceptably completed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.3002	Install State Supplied Video Detection Cable	LS
SPV.0090.3003	Install State Supplied Cat-5E Cable	LS

Payment is full compensation for transporting and installing the video detection cable, Cat-5e Cable, and Ethernet Repeaters; for making all connections; for furnishing and installing all connectors, including wire nuts, splice kits, tape, insulating varnish or sealant and ground lug fasteners; for terminating, testing, and connecting the Ethernet cables; and for terminating and connecting the camera power cable.

# 97. Survey Project 1360-09-71, Item SPV.0105.0001; 1060-39-90, Item SPV.0105.0007.

# **A Description**

This special provision describes modifying standard spec 105.6 and 650 to define the requirements for construction staking for this contract. Conform to standard spec 105.6 and 650 except as modified in this special provision.

*Replace standard spec 105.6.1(2) with the following:* 

The department will not perform any construction staking for this contract. Obtain engineer's approval before performing all survey required to lay out and construct the work under this contract.

*Replace standard spec 650.1 with the following:* 

This section describes the contractor-performed construction staking required under individual contract bid items to establish the horizontal and vertical position for all aspects of construction including:

- 1. Storm Sewer
- 2. Subgrade
- 3. Base
- 4. Curb
- 5. Curb and Gutter
- 6. Drainage Structures
- 7. Structure Layout
- 8. Pavement
- 9. Pavement Markings (Temporary And Permanent)
- 10. Barriers (Temporary And Permanent)
- 11. Overhead Signs
- 12. Electrical Installations
- 13. Supplemental Control
- 14. Traffic Signals
- 15. Its
- 16. Ftms

- 17. Utilities
- 18. Conduit
- 19. Landscaping Elements
- 20. Traffic Control Items
- 21. Fencing

# **B** (Vacant)

#### **C** Construction

Supplement standard spec 650.3.1 (5) with the following:

Confirm with engineer before using global positioning methods to establish the following:

- 1. Structure layout horizontal or vertical locations.
- 2. Concrete pavement vertical locations.
- 3. Curb, gutter, and curb and gutter vertical locations.
- 4. Concrete barrier vertical locations.
- 5. Storm Sewer layout horizontal or vertical locations, including structure centers, offsets, access openings, rim and invert elevations.

*Replace standard spec 650.3.1 (6) with the following:* 

Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. This includes:

- 1. Raw data files
- 2. Digital stakeout reports
- 3. Control check reports
- 4. Supplemental control files (along with method used to establish coordinates and elevation)
- 5. Calibration report

Make the survey notes and computations available to the engineer within 24 hours as the work progresses unless a longer period is approved by the engineer.

*Replace standard spec 650.3.3.1 with the following:* 

Under the Survey Project bid item, global positioning system (GPS) machine guidance for conventional subgrade staking on all or part of the work may be substituted. The engineer may require reverting to conventional subgrade staking methods for all or part of the work at any point during construction if, in the engineer's opinion, the GPS machine guidance is producing unacceptable results.

*Replace standard spec 650.3.3.3.4.1 with the following:* 

The department will provide the contractor staking packet as described in the Construction and Materials Manual (CMM) 7.10. At any time after the contract is awarded, the available survey and design information may be requested. The department will provide that information within five business days of receiving the contractor's request. The department incurs no additional liability beyond that specified in standard spec 105.6 or standard spec 650 by having provided this additional information.

Supplement standard spec 650.3.3.3.6.2 with the following:

Record all subgrade elevation checks and submit a hard copy to the engineer within 24 hours or as requested by the engineer.

# **D** Measurement

Replace standard spec 650.4 with the following:

The department will measure Survey Project (Project) as a separate single lump sum unit, acceptably completed.

# E Payment

*Replace standard spec 650.5 with the following:* 

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.0001	Survey Project 1360-09-71	LS
SPV.0105.0007	Survey Project 1060-39-90	LS

Payment is full compensation for performing all survey work required to lay out and construct all work under this contract. The department will not make final payment for this item until the contractor submits all survey notes and computations used to establish the required lines and grades to the engineer within 24 hours of completing this work. Restaking due to construction disturbance and knock-outs will be performed at no additional cost to the department.

SEF Rev. 16 0330

# 98. Maintenance of Lighting Systems, Item SPV.0105.1001.

# **A** Description

This special provision describes maintaining existing and proposed lighting system beginning on the date that the contractor's activities, including electrical, begin at the job site. Properly operate and maintain all existing and proposed lighting systems which are part of, or which may be affected by, the work until final acceptance or as otherwise determined by the engineer.

Before performing any excavation, removal, or installation work, including electrical, for the project, initiate a request for maintenance transfer and preconstruction inspection, as specified in this special provision. Conduct the transfer and inspection in the engineer's presence and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. Request the maintenance preconstruction inspection at least seven calendar days before the desired inspection date.

Existing lighting systems, when shown on the plans, are intended only to indicate the general equipment installation of the systems involved, possibly not exactly representing the field conditions. A site visit will confirm the exact condition of the electrical equipment and systems to be maintained.

Issues found during contractor assessment can be discussed and addressed by contacting the SE Region Lighting Engineer (Eric Perea) before transferring maintenance responsibility to the contractor

Maintenance of the lighting system includes lighting control cabinet(s): HL-40-CD.

The following lighting control cabinet(s) will be used long enough to allow the installation of temporary lighting: HL-51-CD.

# **B** (Vacant)

#### **C** Construction

# **C.1 Existing Lighting Systems**

Existing lighting systems are defined as any lighting system or part of a lighting system in service before this contract. The contract drawings indicate the general extent of any existing lighting. <u>Understand</u> the effort required for compliance with these specifications; Clear and replace any knockdowns or damage caused to the existing lighting system, regardless of who causes the damage. Maintain existing lighting system as follows:

**Partial Maintenance:** Only maintain the affected circuits if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work unless otherwise indicated. Obtain engineer approval to isolate the affected circuits by in-line waterproof fuse holders as specified elsewhere

**Full Maintenance:** Maintain the entire controller and all associated circuits if the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work.

# **C.2 Proposed Lighting Systems**

Proposed lighting systems are any temporary or final lighting systems or part of a lighting system to be constructed under this contract.

Maintain all items installed under this contract, including all equipment failures or malfunctions as well as equipment damage by the motoring public, contractor operations, or other sources

# **C.3** Maintenance Operations

Maintain lighting units (including sign lighting), cable runs, and lighting controls. If a pole is knocked down or sign light damage is caused by normal vehicular traffic, promptly clear the lighting unit and circuit discontinuity, and restore the system to service. Reinstall the lighting unit (if salvageable), or install a new one.

Provide weekly night-time patrol of the lighting system, with patrol reports filed on standard forms as designated by the engineer. Send a copy to the region lighting coordinator.

Correct the deficiencies within a time frame acceptable to the engineer. Remaining deficiencies may require corrective action on specific lighting system equipment as described in the chart or based on material availability.

Incident or Problem	Service Response	Service	Permanent
merdent of 1 toolem	Time	Restoration Time	Repair Time
Control cabinet out	12 hours	24 hours	7 Calendar days
Hanging mast arm	1 hour to clear	na	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days
Circuit out – Needs to reset breaker	12 hours	12 hours	na
Circuit out – Cable trouble	12 hours	24 hours	21 Calendar days
Outage of 3 or more successive lights	12 hours	24 hours	na
Outage of 75% of lights on one tower	12 hours	24 hours	na
Outage of light nearest RR crossing approach, Islands and gores	12 hours	24 hours	na
Outage (single or multiple non successive lights) found on night outage survey	na	na	7 Calendar days

# C.4 Lighting

- 1. **Serve Response Time:** The amount of time from the initial contractor notification to the patrolman physically arriving.
- 2. **Service Restoration Time**: The amount of time from the initial contractor notification to a fully operational system again. (In cases of motorist-caused damage, the undamaged portions of the system are operational.)

3. **Permanent Repair Time**: The amount of time from initial contractor notification until permanent repairs are made unless the contractor was required to make temporary repairs to meet the service restoration requirement. Temporary repairs that do not meet the service restoration requirements require engineer's approval.

# **C.5** Operation of Lighting

Maintain operational lighting every night, from dusk until dawn. Do not operate duplicate lighting systems (such as temporary lighting and proposed new lighting) simultaneously. Do not keep lighting systems in operation during long daytime periods. Ensure that the lighting system is fully operational and approved by the engineer before submitting a pay request.

#### **D** Measurement

The department will measure Maintenance of Lighting Systems as a single lump sum unit, acceptably completed.

# **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.1001Maintenance of Lighting SystemsLS

Payment is full compensation for Maintenance of Lighting Systems, both existing and proposed, weekly night-time patrol of the lighting system, mobilization, and filed patrol reports.

The contractor will be reimbursed for replaced equipment, materials only, if the invoice paid for the individual piece of equipment is greater than \$500.

Non-compliance with designated response, restoration, and permanent repair times will result in liquidated damages of \$500 per day per occurrence. In addition, the department reserves the right to assign any work not completed within this timeframe to the State Electrical Engineering and Electronics Unit. Reimburse all costs associated to repair this uncompleted work within one month after the incident or additional liquidated damages of \$500 per month per occurrence will be assessed. Unpaid bills will be deducted from the cost of the contract. Repeated non-response or a negligent maintenance shall result in the State's Electrical Engineering and Electronics Unit being directed to correct all deficiencies and the resulting costs deducted from all monies owed the contractor.

Not understanding the effort required for compliance with these specifications will not be justification for extra payment or reduced responsibilities. No payment will be considered for damage or repairs due to contractor operations.

Not ensuring that the lighting system is fully operational and approved by the engineer before submitting a pay request will be grounds for denying the pay request.

# 99. Lighting System Integrator, Item SPV.0105.1002.

# **A Description**

These special provisions describe coordinating lighting with various parties; record keeping, and documentation. Where the department is responsible for freeway lighting operation, maintenance, or utility locates on existing systems or systems overlapping project boundaries, the contractor's freeway lighting integrator will serve as the contractor's liaison to the department's electrical operations unit.

# **B** Personnel Qualifications

Assign personnel experienced in underground utility construction and department lighting specifications and practices.

### **C** Construction

At any one time during the project, the contractor shall assign one individual person as the freeway lighting integrator.

The freeway lighting integrator shall:

- 1. Familiarize himself with the location and nature of existing lighting circuits. This familiarity shall include the extent of any lighting system that overlaps project limits.
- 2. Maintain a file of applicable permits or licenses issued to the contractor, and convey copies to the engineer.
- 3. Keep with him at all times a contact list of affected lighting personnel.
- 4. Maintain a record of tagouts and the clearance of tagouts.
- 5. Interface with department electrical personnel to determine how contract limits might affect maintenance or operation of existing systems.
- 6. Maintain ongoing contact with the department's Diggers' Hotline Coordinator to ensure that each of the two persons knows that all requested utility locates are marked in the field by the appropriate party. The intent here is to assure coordination. This special provision does not transfer additional utility locating responsibilities to the contractor, beyond those responsibilities already assigned to him by other provisions of the contract.
- 7. Inform the department of any lighting outages, including outside the project limits where a lighting system crosses the project boundary.
- 8. Maintain in any format real-time records of existing, removed and new lighting facilities. Include utility service extensions. Additional required records will include temporary connections and their ultimate removal.
- 9. Maintain records of tests, including: "meg" tests, amperage draw per circuit leg, voltage reading at the disconnect, and voltage reading at the furthest pole per circuit leg. Convey these records at time of acceptance or partial acceptance.
- 10. At the time of acceptance or partial acceptance, convey as-built drawings in both the following formats: plan redlines and .dgn electronic. Include utility service extensions.
- 11. Secure copies of operator's manuals, tear sheets, etc. as may be provided by manufacturers of some lighting materials, and convey a minimum of three sets to the department.

- 12. Work with the engineer to notify department electrical personnel of acceptance or partial acceptance.
- 13. Perform related duties as may be needed to ensure continuity of freeway lighting during construction, and orderly transfer upon completion.

#### **D** Measurement

The department will measure Lighting System Integrator as a single lump sum unit for all services, acceptably completed under the contract.

# E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.1002Lighting System IntegratorLS

Payment is full compensation for providing specified expertise, assistance and documents, personnel costs.

# 100. Lighting System Survey, Item SPV.0105.1003.

# **A Description**

These special provisions describe performing lighting system survey using Global Position System (GPS).

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

## **C** Construction

Locate and survey using GPS all the lighting units and control cabinets. Maintain neat, orderly, and complete survey notes. Enter the coordinates into a Microsoft Excel 2007 spreadsheet along with other required fields as specified by Wisconsin Department of Transportation (WisDOT).

# **D** Measurement

The department will measure Lighting System Survey for all lighting units and control cabinets as a single lump sum unit, acceptably completed.

# E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.1003Lighting System SurveyLS

Payment is full compensation for locating and surveying all the lighting units and control cabinets

# 101. Remove Traffic Signals STH 190 & Industrial Road, Item SPV.0105.3001; IH 41 & STH 190, Item SPV.0105.3051.

# **A Description**

This special provision describes removing existing traffic signals at the intersection of STH 190 & Industrial Road and IH 41 & STH 190 according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans

# **B** (Vacant)

# **C** Construction

Arrange for the de-energizing of the traffic signals with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the department.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, emergency vehicle preemption heads (evp), mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact. Dispose of the underground signal cable, internal wires and street lighting cable off the state right-of-way. Deliver the remaining materials to the West Allis Electrical Service Facility at 935 South 60<sup>th</sup> Street, West Allis, Milwaukee County. Contact the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to delivery to make arrangements.

Department forces will remove the signal cabinet from the footing. The signal cabinet and associated signal cabinet equipment will be removed from the site by DOT forces and will remain the property of the department.

### **D** Measurement

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

# **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3001	Remove Traffic Signals STH 190 & Industrial Road	LS
SPV.0105.3051	Remove Traffic Signals IH 41 & STH 190	LS

Payment is full compensation for removing and disassembling traffic signals; for scrapping of some materials; for disposing of scrap material; and for delivering the requested materials to the West Allis Electrical Service Facility or City of Wauwatosa.

# 102. Remove Traffic Signals USH 18 & STH 181, Item SPV.0105.3002.

# **A Description**

This special provision describes removing existing traffic signals at the intersection USH 18 & STH 181 according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans.

# **B** (Vacant)

### **C** Construction

All existing equipment shall remain in operation during the construction of the new equipment. The existing signal equipment shall only be de-energized when the new equipment is energized and fully operational. The de-energizing and removal of the existing equipment may only take place after receiving the approval from the engineer. The existing equipment shall be removed the same day as to not obstruct the newly operating equipment.

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the department.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, emergency vehicle preemption heads (evp), mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact. Dispose of the underground signal cable, internal wires and street lighting cable off the state right-of-way. Deliver the remaining materials to the West Allis Electrical Service Facility at 935 South 60<sup>th</sup> Street, West Allis, Milwaukee County. Contact the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to delivery to make arrangements.

Do not remove existing traffic signal cable/wire or equipment until WisDOT has connected all re-routed traffic signal cable/wire. Contact the department's Electrical Field Unit at (414) 266-1170 to access the traffic signal cabinet. Notify the department's Electrical Field Unit at (414) 266-1170 once all traffic signal cable/wire has been removed.

Department forces will remove the signal cabinet from the footing. The signal cabinet and associated signal cabinet equipment will be removed from the site by DOT forces and will remain the property of the department.

# **D** Measurement

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

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.3002 Remove Traffic Signals USH 18 & STH 181 LS

Payment is full compensation for removing, disassembling traffic signals, scrapping of some materials, disposing of scrap material, for delivering the requested materials to the department, and incidentals necessary to complete the contract work.

# 103. Transport and Install State Furnished Traffic Signal Cabinet IH 41 SB Off Ramp & CTH EE, Item SPV.0105.3003; IH 41 & STH 190 SPV.0105.3052.

#### A Description

This special provision describes the transporting and installing of department furnished materials for traffic signals.

## **B** Materials

Use materials furnished by the department including: the traffic signal controller and the traffic signal cabinet.

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

#### **C** Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

Request a signal inspection of the completed signal installation to the engineer at least five (5) working days prior to the time of the requested inspection. The departments' Region Electrical personnel will perform the inspection.

Coordinate directly with the department's traffic signal cabinet vendor {TAPCO at (262) 814-7327 or <a href="rickk@tapconet.com">rickk@tapconet.com</a> / TCC at (651) 439-1737 or mallwood@trafficcontrolcorp} to schedule the cabinet acceptance testing. Coordinate with the department's Electrical Field Unit at (414)-266-1170 to participate in the acceptance testing. The department has final determination of the cabinet acceptance testing date and time.

### **D** Measurement

The department will measure Transport and Install Traffic Signal Cabinet (location) as a single lump sum unit of work, in place and accepted.

# **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3003	Transport and Install State Furnished Traffic Signal	LS
	Cabinet IH 41 SB Off Ramp & CTH EE	
SPV.0105.3052	Transport and Install State Furnished Traffic Signal	LS
	Cabinet IH 41 & STH 190	

Payment is full compensation for transporting and installing the traffic signal controller and the traffic signal cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors, tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit and for clean-up and waste disposal.

# 104. Transporting Traffic Signal and Lighting Materials IH 41 SB Off Ramp & CTH EE, Item SPV.0105.3004; IH 41 & STH 190, SPV.0105.3053; W. North Avenue & N. 124th Street, Item SPV.0105.3104.

# **A Description**

This special provision describes the transporting of department furnished materials for traffic signals and intersection lighting.

#### **B** Materials

Transport materials furnished by the department including: Anchor rods, monotube arms/poles and luminaire arms (to be installed on monotube assemblies).

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

#### **C** Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

# **D** Measurement

The department will measure Transporting Traffic Signal and Intersection Lighting Materials (location) as a single lump sum unit of work, in place and accepted.

# **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3004	Transporting Traffic Signal and Lighting Materials	LS
	IH 41 SB Off Ramp & CTH EE	
SPV.0105.3053	Transporting Traffic Signal and Lighting Materials	LS
	IH 41 & STH 190	
SPV.0105.3104	Transporting Traffic Signal and Lighting Materials	LS
	W. North Avenue & N. 124 <sup>th</sup> Street	

Payment is full compensation for transporting the anchor rods, monotube poles/arms and luminaire arms (to be installed on monotubes). Installation of these materials is included under a separate pay item.

# 105. Transporting and Installing State Furnished Radar Detection System IH 41 SB Off Ramp & CTH EE, Item SPV.0105.3005; IH 41 & STH 190, SPV.0105.3054.

# A Description

This special provision describes the transporting and installing of department furnished Radar Detection System on monotube poles or arms.

#### **B** Materials

Pick up the department furnished Radar System at the department's electrical shop located at 935 South 60<sup>th</sup> Street, West Allis. Notify the department's electrical field unit (EFU) at (414) 266-1170 to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

### **C** Construction

Install the department furnished pole/arm mounting brackets, extension arms (if required), and radar units per manufacturer recommendations in the locations determined by the department.

Install the power and communication cable to run continuously (without splices) from the traffic signal cabinet to the pole handhole plus an additional 16-feet in each pull box and an extra 10-feet in the pole handhole. Install the detector unit cable whip from the detector unit to the pole handhole. Splice the detector unit cable whip to the power and communication cable in the pole handhole using the provided junction box.

Mark each end of the lead in the traffic signal cabinet and each cable in the pole handhole to indicate the equipment label (i.e. RA1, RA2, etc.) on the plans. For a cabinet that is not operating the signal, the contractor will terminate the ends. If the cabinet is operating the signal, the cabinet wiring will be done by the department.

Notify department's Electrical Shop at (414) 266-1170 upon completion of the installation and aiming of the radar units.

The department will provide the vendor's contact information. Coordinate directly with the department's radar detection system vendor to arrange for the vendor to program the radar detection system on site. Notify the department and vendor at least five working days prior to the date of programming. Assist the department and vendor with fine adjusting of the radar units during the radar system programming, if necessary.

# **D** Measurement

The department will measure Transporting and Installing State Furnished Radar Detection System (location) as a single lump sum unit of work for each intersection, acceptably completed.

#### **E** Payment

•		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3005	Transporting and Installing State Furnished Radar	LS
	Detection System IH 41 SB Off Ramp & CTH EE	
SPV.0105.3054	Transporting and Installing State Furnished Radar	LS
	Detection System IH 41 & STH 190	

Payment is full compensation for transporting and installing the radar detection system, cable, mounting hardware, and radar units; assisting the department and vendor during the radar system programming.

# 106. Transporting and Installing State Furnished Autoscope Video Detection System USH 18 & STH 181, Item SPV.0105.3006; IH 41 Ramps & W. Burleigh Street, Item SPV.0105.3008.

# **A Description**

This special provision describes the transporting and installing of department furnished Traffic Signal Autoscope Video Detection System on Monotubes and Luminaire arms.

#### **B** Materials

The contractor shall pick up all the department furnished Autoscope Video Detection System for all state maintained traffic signals for the project at the department's Electrical Shop located at 935 South 60<sup>th</sup> Street, West Allis. Notify the department's Electrical field unit at (414) 266-1170 to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

# **C** Construction

Install the Traffic Signal Terra Power Cable 18/3, the camera manufacturer's connector cable whip, pole/arm mounting bracket, extension arm (if required) and camera as shown on the plans (the final determination of location will be made by the department's electrical personnel to ensure best line of sight). The department Electrical Field Unit (EFU) shall install State-furnished Autoscope video detection equipment in the traffic signal control cabinet.

Install the Traffic Signal Terra Power Cable 18/3 to run continuously (without splices) from the traffic signal cabinet plus an additional 10 feet to the handhole or base. Leave 10 feet of cable in each pull box. Install the camera manufacturer's connector cable whip from the camera to the handhole or base.

Mark each end of the lead appropriately to indicate the equipment label (i.e. VID1, VID2, etc.). Splice, solder and shrink wrap the Terra power cable to the camera manufacturer's cable whip. Allow 3 feet of slack on each cable.

Notify department's Electrical Shop at (414) 266-1170 upon completion of the Monotube and Luminaire arm installation of the Traffic Signal Terra Power Cable 18/3, cable whip and camera at each intersection. Camera programming will be performed by the vendor with aiming assistance from the contractor when operation of the permanent signal begins.

#### **D** Measurement

The department will measure Transporting and Installing State Furnished Autoscope Video Detection System (location) as a single lump sum unit of work for each intersection, acceptably completed.

# E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3006	Transporting and Installing State Furnished	LS
	Autoscope Video Detection System	
	USH 18 & STH 181	
SPV.0105.3008	Transporting and Installing State Furnished	LS
	Autoscope Video Detection System	
	IH 41 Ramps & W. Burleigh Street	

Payment is full compensation for transporting and installing the Intersection Autoscope Video Detection System, Traffic Signal Terra Power Cable 18/3, cable whips, mounting hardware, cameras and programming.

# 107. Covering Traffic Signal Equipment USH 18 & STH 181, Item SPV.0105.3007; STH 190 & Industrial Road, Item SPV.0105.3009.

# A Description

This special provision describes covering existing permanent traffic signal equipment during construction.

### **B** Materials

Hood materials shall be burlap, canvas, nylon or other materials approved by the engineer and black in color. Plastic trash bags or similar materials are not acceptable. The hood shall cover the entire face of the traffic signal head to the rim of the backplate, if present, and completely cover the pedestrian push button and pedestrian push button sticker and/or sign. The hoods must not damage the existing traffic signal equipment.

The hoods must be securely fastened to the existing traffic signal equipment with nylon rope, straps or other materials approved by the engineer. Tape or similar materials are not acceptable. The straps must not damage the existing traffic signal equipment.

# **C** Construction

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the required deactivation of the permanent traffic signal equipment.

Hood the permanent traffic signal heads immediately upon the deactivation of the equipment. Cover the entire face of the signal head to the rim of the backplate and cover the pedestrian push button and pedestrian push button sticker and/or sign with the approved cover materials. Securely fasten the hood to the existing traffic signal equipment with the approved materials. Ensure that the traffic signal indications are not visible.

The hoods must be maintained until the permanent traffic signal equipment is reactivated.

Remove the traffic signal hoods upon project completion.

#### **D** Measurement

The department will measure Covering Traffic Signal Equipment (location), furnished, installed, and completely operational, as a single complete unit of work per intersection, complete in place and accepted.

# **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3007	Covering Traffic Signal Equipment USH 18 &	LS
	STH 181	
SPV.0105.3009	Covering Traffic Signal Equipment STH 190 &	LS
	Industrial Road	

Payment is full compensation for furnishing and installing all required traffic signal hoods, materials, and supplies; for maintaining the traffic signal hoods; for removing the traffic signal hoods; and for cleaning up and properly disposing of waste.

108. Remove Traffic Signals W. North Avenue & N. 124th Street, Item SPV.0105.3101; W. Center Street & N. 124th Street, Item SPV.0105.3102; W. Burleigh Street & N. 124th Street, Item SPV.0105.3103; W. Burleigh Street & N. 119th Street, Item SPV.0105.3111; W. Burleigh Street & N. 114th Street, Item SPV.0105.3112.

# **A Description**

This special provision describes removing existing traffic signals according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans.

# B (Vacant)

# **C** Construction

All existing equipment shall remain in operation during the construction of the new equipment. The existing signal equipment shall only be de-energized when the new equipment is energized and fully operational. The de-energizing and removal of the existing equipment may only take place after receiving the approval from the engineer. The existing equipment shall be removed the same day as to not obstruct the newly operating equipment.

Arrange for the de-energizing of the traffic signals with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the City of Wauwatosa Public Works department at (414) 471-8422 at least five working days prior to the removal of the traffic signal. Complete the removal work as soon as possible following shut down of this equipment.

The department and City of Wauwatosa assume that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the department or City of Wauwatosa.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring / cabling and traffic signal mounting devices from each signal standard, arm or pole. Ensure that access handhole doors and all associated hardware remain intact. Remove the traffic signal cabinet from the concrete footing. Dispose of the underground signal cable, internal wires, and street lighting cable. Deliver the remaining materials to the City of Wauwatosa Electrical Yard at 11100 W. Walnut Road, Wauwatosa, WI. Contact the City of Wauwatosa Public Works Department at (414) 471-8422 at least five working days prior to delivery to make arrangements.

#### **D** Measurement

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

# E Payment

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

Tollo willig old reelli.		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3101	Remove Traffic Signals W. North Avenue & N. 124 <sup>th</sup> Street	LS
SPV.0105.3102	Remove Traffic Signals W. Center Street & N. 124 <sup>th</sup> Street	LS
SPV.0105.3103	Remove Traffic Signals W. Burleigh Street & N 124 <sup>th</sup> Street	LS
SPV.0105.3111	Remove Traffic Signals W. Burleigh Street & N 119 <sup>th</sup> Street	LS
SPV.0105.3112	Remove Traffic Signals W. Burleigh Street & N 114 <sup>th</sup> Street	LS

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

109. Install State Furnished Municipal Traffic Signal Cabinet W. North Avenue & N. 124th Street, Item SPV.0105.3105; W. Center Street & N. 124th Street, Item SPV.0105.3106; W. Burleigh Street & N. 119th Street, Item SPV.0105.3113; W. Burleigh Street & N. 114th Street, Item SPV.0105.3114.

# **A Description**

This special provision describes the installing of the State Furnished Municipal Traffic Signal Cabinet for traffic signals.

# **B** Materials

Use materials furnished by the department including: the traffic signal controller and the traffic signal cabinet. The City of Wauwatosa will provide notification at the preconstruction meeting of the Traffic Signal Cabinet vendor and provide the vendor's contact information.

Pick up the materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking up the materials.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

Append standard spec 651.3.3 (6) with the following:

Operate the completed traffic signal installation for 30 days consecutively, using the specified signal sequence(s) and all special functions, such as preemption as the plans show or as specified by the engineer.

# **C** Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. The City of Wauwatosa personnel will perform the inspection.

Coordinate directly with the Traffic Signal Cabinet vendor to schedule the cabinet acceptance testing. Notify the City of Wauwatosa Public Works Department at (414) 471-8422 and participate in the acceptance testing. The City of Wauwatosa has the final determination of the cabinet acceptance testing date and time. The acceptance testing procedures will follow the WisDOT procedures for state owned/operated signals as well as any procedures set forth by the City of Wauwatosa. The department shall not be responsible for project delays and costs due to the delays of delivery by the vendor or by the failure of the Traffic Signal Cabinet to pass acceptance testing.

#### **D** Measurement

The department will measure Install State Furnished Municipal Traffic Signal Cabinet (location) as a single lump sum unit of work, in place and accepted.

# E Payment

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

010 1001111		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3105	Install State Furnished Municipal Traffic Signal	LS
	Cabinet W. North Avenue & N. 124 <sup>th</sup> Street	
SPV.0105.3106	Install State Furnished Municipal Traffic Signal	LS
	Cabinet W. B Street & N. 119 <sup>th</sup> Street	
SPV.0105.3113	Install State Furnished Municipal Traffic Signal	LS
	Cabinet W. Burleigh Street & N. 119 <sup>th</sup> Street	
SPV.0105.3114	Install State Furnished Municipal Traffic Signal	LS
	Cabinet W. Burleigh Street & N. 114 <sup>th</sup> Street	
	$\sim$	

Payment is full compensation for installing and testing the Traffic Signal Cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors, tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit; and for clean-up and waste disposal.

110. Video Vehicle Detection System W. North Avenue & N. 124th Street, PV.0105.3107; W. Burleigh Street & N. 124th Street. Item SPV.0105.3109; W. Burleigh N. 119th & Street Street. Item SPV.0105.3115; W. Burleigh Street & N. 114th Street. W. Burleigh N. 112th Item SPV.0105.3116; & Street Street, Item SPV.0105.3117.

# **A Description**

This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle traffic. Work shall consist of furnishing and installing a video image detector system on all travel approaches.

The video detection camera system shall consist of the latest model video image detector cameras, mounting brackets and hardware, video monitor, video image processor card, power cable, and auxiliary equipment to make the video detector system fully operational. The camera shall be an Iteris brand model and shall be equipped with a battery backup system.

#### **B** Materials

# **B.1 System Hardware**

The video detection system shall consist of one to six video cameras, a video detection processor (VDP) capable of processing from one to six video sources, a video monitor, and a pointing device.

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

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on-board video menu and a pointing device to place the zones on a video image. Up to 144 detection zones shall be available. A separate computer shall not be required to program the detection zones. The VDP shall process video from up to 6 video sources simultaneously. The sources can be video cameras or S-VHS video tape players. The video shall be input to the VDP in RS170 format and shall be digitized and analyzed in real time. A separate microprocessor for each video input shall be used.

The VDP shall detect the presence of vehicles in up to 24 detection zones, per camera. A detection zone shall be approximately the width and length of one car. Detection zones shall be programmed via an on-board menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of the detection zones quickly and easily. A separate computer shall not be required for programming detection zones.

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

The VDP shall detect vehicles in real time as they travel across each detection zone. The VDP shall have an RS-232 port for communications with an external computer. The VDP RS-232 port shall be multi-drop capable.

The VDP shall accept new detection patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detection patterns.

The VDP shall send its detection patterns to an external computer through the RS-232 port when requested when the external computer uses the correct communications protocol for uploading detection patterns.

#### **B.3 Vehicle Detection**

Up to 144 detection zones shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region. Detection zones shall be capable of being OR'ed or AND'ed together to indicate vehicle presence on a single detector output channel.

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

Up to three detection zone patterns shall be saved for each camera within the VDP memory and this memory shall prevent loss during power outages.

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

When a vehicle is detected crossing a detection zone, the corners of the detection zone will flash on the video overlay display to confirm the detection of the vehicle. Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g., rain, snow, or fog), which reduce visibility. Detection accuracy is dependent upon camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality. See the traffic signal installation plans for recommended camera placement.

The VDP shall provide 32 channels of detection through either a NEMA TS1 port or a NEMA TS2 port. The VDP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The VDP shall output a constant call on any detector channel corresponding to a zone being modified.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area. Detection zone setup shall not require site-specific information such as latitude and longitude to be entered into the system. Detection zone setup shall not require temporal information such as date and time.

The VDP shall process the video input from each camera using a separate microprocessor at 30 frames per second.

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

#### **B.4 VDP Hardware**

The VDP shall be housed in a durable metal enclosure suitable for shelf-mounting or rack mounting in a roadside traffic equipment cabinet. The VDP enclosure shall not exceed 7" high, 17.75" wide, and 10.5" deep. The VDP shall be modular in construction with plug-in field replaceable units (FRU's) to minimize troubleshooting and repair time. The VDP shall operate satisfactorily in a temperature range from -30°F to +165°F and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

The VDP shall be powered by 120 VAC 60 Hz single-phase power source. Surge ratings shall be as set forth in NEMA specifications. Power consumption shall not exceed 135 watts.

The VDP shall include an RS-232 port for serial communications with a remote computer. The VDP RS-232 port shall be multi-drop capable. This port shall be a 9-pin female "D" subminiature connector on the front of the VDP.

The VDP shall include ports for transmitting TS1 and TS2 detections to a traffic controller. The TS1 port shall be a 37-pin female "D" connector on the front of the VDP. The TS2 port shall be a 15-pin female "D" connector on the front of the VDP. The front of the VDP shall include up to six BNC video input connections suitable for RS-170 video inputs. Each video input shall include a switch selectable 75-ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection.

The front of the VDP shall include one BNC video output. Any one of the six video inputs shall be switch selectable for output on this BNC connection via the pointing device at the VDP, or through software and a personal computer connected through the RS-232 multi-drop port via a full duplex modem link.

The video inputs to the VDP shall include transient voltage suppression and isolation. Amplification that shall assure the 1-volt peak-to-peak video signal integrity is maintained despite video cabling losses and externally induced transients. The amplifier shall have a minimum common mode rejection at 60 Hz of 90 dB. The VDP enclosure shall include provisions to be bonded to a good earth ground.

The front face of the VDP shall contain indications, such as LED displays, to enable the user to view real time detections for up to 8 detector output channels at a time.

#### **B.5** Camera

The video cameras used for traffic detection shall be furnished by the VDP supplier and shall be qualified by the supplier to ensure proper system operation.

The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range of 0.1 lux to 10,000 lux.

The camera shall use a CCD sensing element and shall output monochrome video with resolution of not less than 380 lines vertical and 380 lines horizontal. The camera shall include an electronic shutter control lens.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry. A single camera configuration shall be used for all approaches in order to minimize the setup time and spares required by the user.

The camera electronics shall include AGC to produce a satisfactory image at night. The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view.

The camera enclosure with sunshield shall be less than 5" in diameter, less than 14" long, and shall weigh less than 5 pounds when the camera and lens are mounted inside of the enclosure

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from  $-30^{\circ}$ F to  $+140^{\circ}$ F and a humidity range from 0% RH to 100% RH. The camera shall be powered by a 120 VAC 60 Hz power source. Power consumption shall be 15 watts or less, under all conditions.

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection, the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The camera enclosure shall be equipped with separate, weather-tight connections for power and video cables at the rear of the enclosure. These connections may also allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module (LAM) supplied by the VDP supplier.

Video and power shall not be connected within the same connector. The video signal output by the camera shall be black and white in RS-170 or CCIR format. The video signal shall be fully isolated from the camera enclosure and power cabling.

#### **B.6 Manufacturer Warrantv**

The manufacturer / supplier shall provide a limited two-year warranty on the video detection system. Refer to the supplier's standard warranty included in the Terms and Conditions of Sale documentation

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

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

#### **B.7 Video Detection Coaxial Cable**

The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281 or a 75 ohm, precision video cable with 20-gauge solid bare copper conductor (9.9 ohms/M), solid polyethylene insulating dielectric, 98% (min) tinned copper double-

braided shield and black polyethylene outer covering. The signal attenuation shall not exceed 0.78 dB per 100 feet at 10 MHz. Nominal outside diameter is 0.304 inches.

This cable shall be suitable for installation in conduit or overhead with the appropriate span wires. 75-ohm BNC plug connectors shall be used at both the camera and cabinet ends. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

#### **B.8 Video Detection Power Cable**

The power cabling shall be 16 AWG three-conductor cable with a minimum outside diameter of 0.325 inch and a maximum diameter of 0.490 inch. The power cable shall be terminated at the camera per manufacturer's instructions and shall only require standard wire strippers and a screw driver for installation (no special connectors or crimping tools shall be used for installation). The cabling shall comply with the National Electric Code, as well as local electrical codes. Cameras may acquire power from the luminaire, if necessary.

#### **B.9 Video Detection Monitor**

The monitor shall be a flat screen color video monitor with a minimum 9" diagonal picture display. It shall support EIA standards RS-170 composite video signal (1.0 v p-p, 75 OHM).

It shall have a resolution of 900 lines at center. Video bandwidth shall be >11 MHz. Loop through connectors shall be provided, and both input and output connectors shall be BNCs.

The monitor power source shall be 120 VAC +/- 10%, 60 Hz. Power consumption shall not be greater than 18 W. Ambient operating temperature shall be +50 to +122 degrees Fahrenheit.

Located on the front panel, the controls shall be on/off, contrast, bright, vertical hold, and horizontal hold. Rear panel shall have controls for vertical size, vertical linearity and scan switch.

Dimensions shall not exceed 9" (W) and 10" (H). Weight shall not exceed 10 pounds.

#### C Construction

Install the Video Vehicle Detection System (location) according to the pertinent sections of the standard specifications and manufacturer's recommendations.

The coaxial cable and power cable shall be installed as a continuous unbroken run from the cameras to the VDP.

#### **D** Measurement

The department will measure Video Vehicle Detection System (Location) as a single lump sum unit of work, in place and accepted.

#### **E** Payment

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

ionowing ord item.		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.3107	Video Vehicle Detection System W. North Avenue & N. 124 <sup>th</sup> Street	LS
SPV.0105.3109	Video Vehicle Detection System W. Burleigh Street & N. 124 <sup>th</sup> Street	LS
SPV.0105.3115	Video Vehicle Detection System W. Burleigh Street & N. 119 <sup>th</sup> Street	LS
SPV.0105.3116	Video Vehicle Detection System W. Burleigh Street & N. 114 <sup>th</sup> Street	LS
SPV.0105.3117	Video Vehicle Detection System W. Burleigh Street & N. 112 <sup>th</sup> Street	LS

Payment is full compensation for furnishing and installing the Video Detection Camera system on signal poles or mast arms as shown on the plans; and for aiming the camera.

## 111. Temporary Traffic Signals for Intersection Partial W. North Avenue & N. 124th Street, Item SPV.0105.3108.

#### **A Description**

This special provision describes the installation of Temporary Traffic Signals for Intersection Partial W. North Avenue & N. 124<sup>th</sup> Street at the locations shown on the plans and according to the pertinent provisions of standard spec 661 and as hereinafter provided.

#### **B** Materials

Use materials that conform to the requirements of standard spec 661.2.

#### **C** Construction

Perform work according to the requirements of standard spec 661.3 and as follows:

*Append standard spec 661.3.2.3 with the following:* 

Install the overhead signal cable as shown on the plans and make final connections in signal bases and control cabinet. Notify the City of Wauwatosa Public Works Department at (414) 471-8422 at least five working days prior to making final connections in signal bases and control cabinet.

Provide a diagram of the existing cable routing in the affected portion of the intersection, to ensure presence of proper phasing at termination points. Install the overhead signal cable feeder from the pole splices to the nearest 'active' signal pole containing proper phasing to feed signal heads. Label each signal cable feeder appropriately as to which signal phase it is associated with. Coil and secure to the top of the pole with enough cable to reach the signal base plus an additional 3 feet for splicing.

Make any revisions to the temporary signals as required for the various stages shown in the traffic control plans.

Notify the City of Wauwatosa Public Works Department at (414) 471-8422 upon completion of the overhead temporary portion of the signal and subsequent turn-on of temporary signal.

#### **D** Measurement

The department will measure Temporary Traffic Signals for Intersection Partial W. North Avenue & N. 124<sup>th</sup> Street as a single lump sum unit for each intersection, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.3108Temporary Traffic Signals for Intersection PartialLS

W. North Avenue & N. 124th Street

Payment is full compensation for providing, installing, maintaining, revising and repairing the complete temporary installation; and for removal. Payment also includes the furnishing and installing of replacement equipment.

## 112. Operate and Maintain Traffic Signal W. Burleigh Street & N. 124th Street, Item SPV.0105.3110.

#### A Description

This special provision describes operating the maintaining the existing traffic signal at the intersection of W. North Avenue & N. 124<sup>th</sup> Street. The traffic signal is to remain operational throughout construction.

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

#### **C** Construction

Operate and maintain the existing traffic signal throughout construction. Program the existing traffic signal controller and video detection system to allow the traffic signal to maintain operation during construction. Provide guidance as needed on special programming features based on the sequence of operations to maintain proper operation.

Allow the City of Wauwatosa and/or its representatives to review the operation of the traffic signal at any point during construction.

Replace any equipment damaged during construction that is no longer operational per the pertinent section of the standard specifications.

#### **D** Measurement

The department will measure Operate and Maintain Traffic Signal W. Burleigh Street & N. 124<sup>th</sup> Street as a single lump sum unit for each intersection, acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.3110 Operate and Maintain Traffic Signal W. Burleigh LS

Street & N. 124th Street

Payment is full compensation for providing, installing, maintaining, revising and repairing the temporary installation; and for any removal. The department will pay separately for replacing any traffic signal equipment required to maintain operation of the existing traffic signal under the respective bid item.

#### 113. Concrete Pavement HES 8-Inch Special, Item SPV.0180.0001.

#### **A Description**

This special provision describes placing HES colored concrete. Placement, forming, and aggregate of the concrete shall be according to the pertinent requirements of standard spec 415, 416 and 501, according to the details as shown on the plans, and as hereinafter provided.

#### **B** Materials

At least 15 working days prior to the start of colored concrete installation supply one 2-foot x 2-foot panel sample of the colored concrete with the proposed broom finish and troweled edge. The final color and finish is to be approved by the City of Wauwatosa, Mr. William Wehrley, (414) 479-8929, prior to placement of any colored concrete in the field.

The accepted sample shall be the standard of finish for all colored concrete work within the project.

The concrete shall be grade A2 or grade A-FA as specified in standard spec 501. All colored concrete shall originate from the same batch plant.

#### **C** Construction

Concrete shall be placed by installers experienced with colored, broom finished concrete.

Concrete pavement shall match the visual appearance of the approved sample. Concrete pavement not conforming to the color and finish of the approved sample shall be replaced at the contractor's expense.

Tie the pavement to adjacent Concrete Pavement 8-Inch using No. 4 tie bars spaced 2'-0" center to center

#### C.1 Color Admixture

Use integral color admixture material specifically designed for coloring concrete.

Blend admix at plant per manufacturers specifications to achieve the indicated color. Color admixtures manufacturer and colors include:

Solomon Color – **Brick 417**Schofield System – **Quarry Red C-32**Davis Colors – **Brick Red 160** 

Or approved equal

#### C.2 Finish

Finish shall be a medium brushed (broom) finish with a 6-inch smooth troweled finish as shown in the plans.

#### **D** Measurement

The department will measure Concrete Pavement HES 8-Inch Special in area by the square yard, placed and acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0180.0001 Concrete Pavement HES 8-Inch Special SY

Payment is full compensation for installation of colored concrete; excavating and preparing the foundation; providing all materials, including concrete, and expansion joints; placing, finishing, protecting and curing concrete; and for preparing sample panels.

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

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.
  - <u>Eligibility and Duration:</u> To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.
  - <u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that \_\_\_\_\_ (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).

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

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>1</u> (*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).

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

#### II. IMPLEMENTATION

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

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

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

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

#### IV. TRANS TRAINING

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

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

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

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

#### V. APPRENTICESHIP TRAINING

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

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

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

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

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

#### **ADDITIONAL SPECIAL PROVISION 3**

#### DISADVANTAGED BUSINESS ENTERPRISE [DBE] PROGRAM IMPLEMENTATION

#### 1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
  - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
  - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance. <a href="http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf">http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf</a>
  - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
    - i. Produce accurate and complete quotes.
    - ii. Understand highway plans applicable to their work.
    - iii. Understand specifications and contract requirements applicable to their work.
    - iv. Understand contracting reporting requirements.
  - (2) Wisconsin DOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
  - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at: http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

#### 2. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. Bid Percentage: The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- e. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- f. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

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

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

#### 4. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

#### a. Department's DBE Evaluation Process

WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.

#### b. Documentation Submittal

The contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at DBE\_Alert@dot.wi.gov (DBE\_Alert@dot.wi.gov) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

#### (1) Bidder Meets DBE Goal

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

#### (2) Bidder Does Not Meet DBE Goal

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

#### c. Bidder Fails to Submit Documentation

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

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

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

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

a. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

- b. Prime Contractors should:
  - (1) <u>Document</u> all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT- approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
  - (2) Prime contractors <u>may</u> request assistance with DBE outreach and follow-up by contacting the department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Requesting assistance with outreach <u>is not</u> a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: DOTDBESupportServices@dot.wi.gov.
  - (3) Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
    - i. Solicit quotes from certified DBE firms who match 'possible items to subcontract' using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which you are seeking quotes to <a href="mailto:DOTDBESupportServices@dot.wi.gov">DOTDBESupportServices@dot.wi.gov</a>.
    - ii. SBN is the preferred outreach tool. <a href="https://www.bidx.com/wi/main">https://www.bidx.com/wi/main</a>. Other acceptable means include postal mail, email, fax, phone call.
      - (a) Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
      - (b) Solicit quotes at least 10 calendar days prior to the letting date, at least two Fridays before the letting, to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
      - (c) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up solicitation.
    - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
    - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit or insurance if requested.
    - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
      - (a) Email to all prospective DBE firms in relevant work areas.
      - (b) Phone call log to DBE firms who express interest via written response or call.
      - (c) Fax/letter confirmation
      - (d) Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.
- c. <u>Evaluate DBE quotes</u> Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.
  - (1) Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, *a discussion with the DBE firm* regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
  - (2) In striving to meet an assigned DBE contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

- (3) **Special Circumstance** Evaluation of DBE quotes with <u>tied bid items</u>. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
  - i. Compare bid items common to both quotes, noting the reasonableness in the price comparison.
  - ii. Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- d. Immediately after notification of contract award, the prime submits all 'Commitment to Subcontract' forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
  - (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
  - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
  - (3) Photocopies or electronic copies of all written solicitations to DBE's. A printed copy of SBN solicitation is acceptable.
  - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
  - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

#### 6. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE, a prime contractor and the regular dealer of materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE in cases where the prime has submitted the DBE and material for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
  - (1) Request should be made when the DBE Commitment form or Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
  - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
  - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
  - (4) The joint check for supplies must be strictly for the cost of supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following.
  - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
  - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor,
  - (1) The prime agrees to furnish the check used for the payment of materials/supplies under the contract.
  - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractors negotiated unit price.

#### 7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 5 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

#### 8. Department's Criteria for DBE Participation

#### **Directory of DBE firms**

a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx

b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

#### 9. Counting DBE Participation

#### **Assessing DBE Work**

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE certified firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he is committing/contracting the DBE to do. Note that the department encourages the prime contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

#### 10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE is performing a commercially useful function if the following conditions are met:
  - (1) For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
  - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

#### 11. Credit Evaluation for Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at <a href="http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf">http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf</a>

#### 12. Credit Evaluation for Manufacturers, Suppliers, Brokers

The department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The department will count the material and supplies that a DBE provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

#### a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, count **100%** percent of the cost of the materials or supplies toward DBE goals.
- b. Regular Dealers of Material and/or Supplies
  - (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
  - (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
  - (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
    - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
    - ii. The DBE firm must both own and operate distribution equipment for the product-bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.
- c. Brokers, Transaction Expediters, Packagers, Manufacturers Representatives
  - (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit; however, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives or other persons who arrange or expedite transactions.
  - (2) Brokerage fees have historically been calculated as 10% of the purchase amount.
  - (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site.
  - (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.

When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and documentation of the calculations used as the basis for the purchase agreement, subcontract or invoice. WisDOT recognizes that the amount on the Attachment 'A' form may be more or less than the amount on the invoice. Please respond to the following questions and submit with your DBE Commitment Form.

- 1. What is the product or material?
- 2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
- 3. Which contract line items were referenced to develop this quote?
- 4. What is the amount of material or product used on the project?

#### 13. Credit Evaluation for DBE Primes

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

#### 14. Joint Venture

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

#### 15. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be evaluated and confirmed by the DBE Office for any contracts on which the mentor protégé team identifies itself to the DBE Office as a current participant of the Mentor Protégé Program.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

#### 16. DBE Replacement or Termination

#### **Contractual Requirement**

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

#### **Contractor Considerations**

a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason or is terminated from a contract, the prime contractor is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
  - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
    - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
    - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent to* request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
    - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
    - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days to respond, in writing. Exception: The prime contractor must provide a verifiable reason for a response period shorter than five days. For example a WisDOT project manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
    - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

#### The Request to Replace or Terminate a DBE

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

- 1. Contract ID number.
- 2. Wisconsin DOT Contract Project Manager name and contact information.
- 3. DBE name and work type and/or NAICS code.
- 4. Contract's progress schedule.
- 5. Reason(s) for requesting that the DBE be replaced or terminated.
- 6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

Examples of Good Causes to Replace a DBE according to the federal DBE program guidelines {49 CFR part 26.53}

- The listed DBE subcontractor fails or refuses to execute a written contract.
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent
  with normal industry standards. Provided, however, that good cause does not exist if the failure or
  refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or
  discriminatory action of the prime contractor.
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

#### **Evaluation and Response to the Request**

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at <a href="mailto:DBE\_Alert@dot.wi.gov">DBE\_Alert@dot.wi.gov</a> or by calling 608-267-3849.

#### 17. DBE Utilization beyond the approved DBE Commitment Form DT1506

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- a. Send an email to the DBE Engineer at <a href="mailto:DBE\_Alert@dot.wi.gov">DBE\_Alert@dot.wi.gov</a> describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally. If the scope change added work for a participating DBE; list the date and reason for the scope change.
- b. Forward a complete, signed Attachment 'A' form to the DBE Office at <a href="mailto:DBE\_Alert@dot.wi.gov">DBE\_Alert@dot.wi.gov</a>. A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.
  - The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

#### 18. Contract Modifications

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

#### 19. Payment

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

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

#### GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

DATE:

CC:

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: REQUEST FOR DBE QUOTES

**LET DATE & TIME** MONTH DAY YEAR DBE OFFICE ENGINEER

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 <a href="http://roadwaystandards.dot.wi.gov/hcci/">http://roadwaystandards.dot.wi.gov/hcci/</a>

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. <u>Make sure</u> the correct letting date, project ID and proposal number, unit price and extension are included in your quote. We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

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

All questions should be directed to:

Project Manager, John Doe,

Phone: (000) 123-4567

Email: <u>Joe@joetheplumber.com</u>

Fax: (000) 123- 4657

# Sample Contractor Solicitation Letter Page 2 This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

ease check all that apply  Yes, we will be quoting on t  No, we are not interested in	quoting on t			reference	d below		
☐ No, we are not interested in	quoting on t			reference	d below		
		1 1		reference	d below		
				rererere	a below		
☐ Please take our name off you							
☐ We have questions about qu	oting this let	ting. Pleas	se have som	neone con	tact me at t	his number	
Prime Contractor 's Contact Pe				DDE Co.	entun atou Co	ntagt Dagg	
Prime Contractor's Contact Pe	erson			DBE CO	ntractor Co	ontact Perso	n
none:			Phone				
none:		_	Fax				
mail:		<del>_</del>	Email				
		_					
		_					
Please	circle the jo	bs and ite	ems you wi	ill be quo	ting below	7	
				_			
Proposal No.							
	1	2	3	4	5	6	7
	1	2	3	4	5	6	7
County	1	2	3	4	5	6	7
County ORK DESCRIPTION:	1	2	3	4	5	6	7
County	1 X	2	3 X	4 X	5	6 X	7 X
ORK DESCRIPTION:		2			5		,
ORK DESCRIPTION: Clear and Grub	X	2	X	X	5	X	X
ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.	X X	2	X X	X X	5	X X	X
ORK DESCRIPTION: Clear and Grub Dump Truck Hauling	X X X	2	X X X X	X X X	5	X X X	X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers	X X X X	2 X	X X X X	X X X X	5	X X X X	X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Fraffic Control	X X X X		X X X X	X X X X	5	X X X X X	X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Fraffic Control  Electrical Work/Traffic Signals  Pavement Marking	X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X	X	X X X X X X X	X X X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Fraffic Control  Electrical Work/Traffic Signals  Pavement Marking  Sawing Pavement	X X X X	X X X X	X X X X X X	X X X X X X X	X	X X X X X X X X	X X X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Fraffic Control  Electrical Work/Traffic Signals  Pavement Marking  Sawing Pavement  QMP, Base	X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X	X	X X X X X X X	X X X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Traffic Control  Electrical Work/Traffic Signals  Pavement Marking  Sawing Pavement  QMP, Base  Pipe Underdrain	X X X X	X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X	X X X	X X X X X X X X	X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Traffic Control  Electrical Work/Traffic Signals  Pavement Marking  Sawing Pavement  QMP, Base  Pipe Underdrain  Beam Guard	X X X X X	X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X	X	X X X X X X X X	X X X X X X X X
County  ORK DESCRIPTION:  Clear and Grub  Dump Truck Hauling  Curb & Gutter/Sidewalk, Etc.  Erosion Control Items  Signs and Posts/Markers  Fraffic Control  Electrical Work/Traffic Signals  Pavement Marking  Sawing Pavement  QMP, Base  Pipe Underdrain	X X X X X	X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X	X X X	X X X X X X X X	X

# 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.
    - 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.
- View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.

#### 4. View Record of Subcontractor Outreach Effort:

- a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
- b. Easily locate pre-qualified and certified small and disadvantaged businesses.
- c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
- d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

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

#### 1. View and reply to sub-quote requests from primes:

a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.

#### 2. Select items when responding to sub-quote requests from primes:

- a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
- b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
- c. Add attachments to a sub-quote.

#### 3. Create and send unsolicited sub-quotes to specific contractors:

a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.

#### 4. Easily select and price items for unsolicited sub-quotes:

- a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
- b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
- c. Add attachments to a sub-quote.
- d. Add unsolicited work items to sub-quotes that you are responding to.

#### 5. Easy Access to Valuable Information

- a. Receive a confirmation that your sub-quote was opened by a prime.
- b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
- c. View important notices and publications from DOT targeted to small and disadvantaged businesses.

#### 6. Accessing Small Business Network for WisDOT contracting opportunities

- a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** 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.

November 2013 ASP-4

#### ADDITIONAL SPECIAL PROVISION 4

#### **Payment to First-Tier Subcontractors**

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

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

#### **Payment to Lower-Tier Subcontractors**

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

#### **Release of Routine Retainage**

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

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

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

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

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

Make the following revisions to the standard specifications:

#### 440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

#### 450.3.1.1.4 Recording Truck Loads

Replace the entire text with the following effective with the December 2016 letting:

- (1) If not using automatic batch recording, install a digital recorder as part of the platform truck or storage silo scales. Ensure that the recorder can produce a printed digital record of at least the gross or net weights of delivery trucks. Provide gross, tare, net weights, load count, and the cumulative tonnage; the date, time, ticket number, WisDOT project ID, and mix 250 number; and the mix type including the traffic, binder, and mix designation codes specified in 460.3.1. Ensure that scales cannot be manually manipulated during the printing process. Provide an interlock to prevent printing until the scales come to rest. Size the scales and recorder to accurately weigh the heaviest loaded trucks or tractor-trailers hauling asphaltic mixture. Ensure that recorded weights are accurate to within 0.1 percent of the nominal capacity of the scale.
- (2) Ensure that tickets identify additives not included in the mix design submittal. Indicate on the ticket if the mixture will be placed under a cold weather paving plan and identify the warm mix additive and dosage rate required under 450.3.2.1.2.2.

#### 455.3.2.1 General

Replace paragraph one with the following effective with the December 2016 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 reasonably free of loose dirt, dust, or other foreign matter. Do not apply to surfaces with standing water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

#### 460.2.1 General

Replace the entire text with the following effective with the December 2016 letting:

- (1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material. Design mixtures conforming to table 460-1 and table 460-2 to 4.0% air voids to establish the aggregate structure.
- (2) Determine the target JMF asphalt binder content for production from the mix design data corresponding to 3.0% air voids (97% Gmm) target at the design the number of gyrations (Ndes). Add liquid asphalt to achieve the required air voids at Ndes.
- (3) For SMA, determine the target JMF asphalt binder content for production from the mix design data corresponding to 4.0% air voids (96% Gmm) target at Ndes.

#### 460.2.8.2.1.5 Control Limits

Replace paragraph one with the following effective with the December 2016 letting:

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

ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
75-µm	+/- 2.0	+/- 1.5
Asphaltic content in percent	- 0.3	- 0.2
Air voids in percent <sup>[1]</sup>	+1.3/-1.0	+1.0/-0.7
VMA in percent <sup>[2]</sup>	- 0.5	- 0.2

<sup>[1]</sup> For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

#### 460.2.8.2.1.6 Job Mix Formula Adjustment

Replace paragraph one with the following effective with the December 2016 letting:

(1) The contractor may request adjustment of the JMF according to CMM 8-36.6.13.1. Have an HMA technician certified at a level appropriate for process control and troubleshooting or mix design submit a written JMF adjustment request. Ensure that the resulting JMF is within specified master gradation bands. The department will have a certified Hot Mix Asphalt, Mix Design, Report Submittals technician review the proposed adjustment and, if acceptable, issue a revised JMF.

#### 460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2016 letting:

- (1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:
  - Va is within a range of 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
  - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

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

#### 460.3.3.1 Minimum Required Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) Compact all layers of HMA mixture to the density table 460-3 shows for the applicable mixture, location, and layer.

#### TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

		PERCENT	OF TARGET MAXIMUM DE	ENSITY
LOCATION	LAYER		MIXTURE TYPE	
		LT and MT	HT	SMA <sup>[5]</sup>
TRAFFIC LANES[2]	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	
TRAFFIC LAINES	UPPER	93.0	93.0	
SIDE ROADS,	LOWER	93.0 <sup>3]</sup>	93.0 <sup>[4]</sup>	
CROSSOVERS, TURN LANES, & RAMPS	UPPER	93.0	93.0	
SHOULDERS &	LOWER	91.0	91.0	
APPURTENANCES	UPPER	92.0	92.0	

<sup>&</sup>lt;sup>[1]</sup> The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

#### 460.5.2.1 General

Replace paragraph six with the following effective with the December 2016 letting:

(6) If during a QV dispute resolution investigation the department discovers mixture with 1.5 > Va > 5.0 or VMA more than 1.0 below the minimum allowed in table 460-1, and the engineer allows that mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

#### 460.5.2.3 Incentive for HMA Pavement Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) If the lot density is greater than the minimum specified in table 460-3 and all individual air voids test results for that mixture placed during the same day are within 2.5 - 4.0 percent, the department will adjust pay for that lot as follows:

#### INCENTIVE PAY ADJUSTMENT FOR HMA PAVEMENT DENSITY[1]

PERCENT LOT DENSITY ABOVE SPECIFIED MINIMUM
From -0.4 to 1.0 inclusive
From 1.1 to 1.8 inclusive
More than 1.8

\$0.40
\$0.80

<sup>[2]</sup> Includes parking lanes as determined by the engineer.

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

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

<sup>[5]</sup> The minimum required densities for SMA mixtures are determined according to CMM 8-15.

<sup>[1]</sup> SMA pavements are not eligible for density incentive.

<sup>[2]</sup> The department will prorate the pay adjustment for a partial lot.

#### 501.2.6 Fly Ash

Replace the entire subsection with the following effective with the December 2016 letting:

#### 501.2.6.1 General

- (1) Fly ash is defined as a finely divided residue resulting from the combustion of coal in a base loaded electric generating plant, transported from the boiler by flue gases, and later collected, generally by precipitators. Use fly ash in concrete manufactured by facilities and processes known to provide satisfactory material.
- (2) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.
- (3) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.
- (4) Prequalify any proposed fly ash source as follows: The contractor shall obtain a copy of the certified report of tests or analysis made by a qualified independent laboratory, recognized by the department under 501.2.2, showing full and complete compliance with the above specification from the fly ash manufacturer and furnish it to the engineer. Provide this report to the engineer at least 14 calendar days before using the fly ash.
- (5) The manufacturer shall retain test records for at least 5 years after completing the work, and provide these records upon request.

#### 501.2.6.2 Class C Ash

(1) Conform to ASTM C618 class C except limit the loss on ignition to a maximum of 2 percent.

#### 501.2.6.3 Class F Ash

(2) Furnish a class F fly ash from a source listed on the department's approved product list, and conform to ASTM C618 class F except limit the loss on ignition to a maximum of 2 percent.

#### 502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department's bureau of structures.

#### 503.3.2.1.1 Tolerances

<u>Increase the "length of beam" max tolerance for prestressed concrete I-type girders from 3/4" to 1 1/2"</u> effective with the December 2016 letting:

#### PRESTRESSED CONCRETE I-TYPE GIRDERS

#### 517.3.1.7.3 Epoxy System Intermediate and Protective Coats

Replace paragraph one with the following effective with the December 2016 letting:

- (1) Mask the faying surfaces of bolted field splices and the top of the top flanges where welding the stud shear connectors during coat application. On all other areas including the outside surfaces of splice plates, ensure that the dry film thickness conforms to the following:
  - 1. For the white intermediate coat, 3.5 mils to 8 mils.
  - 2. For the protective coat, sufficient thickness to provide a uniform color and appearance but not less than 3 mil or more than 6 mils.

#### **Errata**

Make the following corrections to the standard specifications:

#### Throughout the contract:

Update all references to the construction rental rate "Blue Book" to reference "EquipmentWatch" rates.

#### 105.13.4 Content of Claim

- (1) Include the following 5 items in the claim.
  - 1. A concise description of the claim.
  - 2. A clear contractual basis for the claim. This should include reference to 104.2 on revisions to the contract and as appropriate, specific reference to contract language regarding the bid items in question.
  - 3. Other facts the contractor relies on to support the claim.
  - 4. A concise statement of the circumstances surrounding the claim and reasons why the department should pay the claim. Explain how the claimed work is a change to the contract work.
  - 5. A complete breakdown of the costs used to compile the claim. Include copies of all EquipmentWatch equipment rental rate sheets used, with the applicable number highlighted.

#### 109.4.5.5.1 General

(2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in EquipmentWatch Cost Recovery (formerly Rental Rate Blue Book). Base all rates on revisions effective on January 1 for all equipment used in that calendar year.

http://equipmentwatch.com/estimator/

#### 109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

(1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

 $HEER = [RAF \times ARA \times (R/176)] + HOC$ 

#### Where:

**HEER** = Hourly equipment expense rate.

**RAF** = EquipmentWatch regional adjustment factor.

**ARA** = EquipmentWatch age rate adjustment factor.

**R** = Current EquipmentWatch monthly rate.

**HOC** = EquipmentWatch estimated hourly operating cost.

(2) The EquipmentWatch hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

#### 109.4.5.5.3 Hourly Equipment Stand-By Rate

(1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

 $HSBR = RAF \times ARA \times (R/176) \times (1/2)$ 

#### Where:

**HSBR** = Hourly stand-by rate.

**RAF** = EquipmentWatch regional adjustment factor.

**ARA** = EquipmentWatch age rate adjustment factor.

**R** = Current EquipmentWatch monthly rate.

(2) The department will limit payment for stand-by to 10 hours or less per day up to 40 hours per week. The department will not pay the contractor for equipment that is inoperable due to breakdown. The department will not pay for idle equipment if the contractor suspends work or if the contractor is maintaining or repairing the equipment.

#### 109.4.5.5.4 Hourly Outside-Rented Equipment Rate

(1) If the contractor rents or leases equipment from a third party for force account work, the contractor shall determine, and the department will confirm, the hourly outside-rented equipment rate as follows:

#### HORER = HRI + HOC

Where:

**HORER** = Hourly outside-rented equipment rate

**HRI** = Hourly rental invoice costs prorated for the actual number of hours

that rented equipment is operated solely on force account work

**HOC** = EquipmentWatch hourly operating cost.

#### 109.2 Scope of Payment

Correct errata to clarify that work under the contract is included in payment unless specifically excluded.

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

#### 204.3.2.2.1 General

Correct errata by removing the reference to 490 which was deleted effective with the 2017 spec.

(1) Under the Removing Pavement bid item, remove concrete pavements, concrete alleys, concrete driveways, or rigid base including all surfaces or other pavements superimposed on them.

#### 657.2.2.1.1 General

Correct errata by eliminating the reference to department provided arms in the last sentence.

(1) Furnish shop drawings as specified in 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show. Show the width, depth, length, and thickness of all material, and list pertinent ASTM specification designations and metal alloy designations together with the tensile strength of metallic members. Provide tightening procedures for arm-to-pole connections on the shop drawings.

#### 657.2.2.1.4 Poles Designed Under Legacy Standards

Correct errata by deleting the entire subsection to eliminate redundant language.

#### 657.2.2.2 Trombone Arms

Correct errata by changing the reference from 657.2.2.1.3 to 657.2.2.1.2.

(1) Design aluminum trombone arms as specified in 657.2.2.1.2 based on the completed maximum loading configuration the plans show. Furnish shop drawings conforming to 657.2.2.1.1 that show the width, depth, length, and thickness of all members. Also list the ASTM alloy designation and strength of each aluminum member on the shop drawings.

#### **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

Page 1 of 1

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- 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 designbuild 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.
- 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 nonminority 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 <a href="Form FHWA-1391">Form FHWA-1391</a>. 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 federallyassisted 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 contacting 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:
- 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 (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), 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:
- 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 (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

#### Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

## XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

#### **Non-discrimination Provisions**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.

**6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

#### **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

#### **SEPTEMBER 2002**

# NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

- 1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
- 2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

#### **Goals for Minority Participation for Each Trade:**

_County_	<u>%</u>	_County_	_%_	_County_	<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/hcciDocs/contracting-info/ws4567.doc

1 of 1

#### Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

- (a) Agreement Clauses. "Use of United States-flag vessels:"
- (1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.
- (2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."
- (b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—"
- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

#### **Effective with February 2017 Letting**

## WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT

#### SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Prevailing Wage Rates, Hours of Labor, and Payment of Wages
- **II.** Payroll Requirements
- **III.** Postings at the Site of the Work
- IV. Wage Rate Distribution
- V. Additional Classifications

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

The U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) attached hereto and made a part hereof furnishes the prevailing wage rates pursuant to Section 84.062 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the 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 84.062, Stats. Apprentices shall be paid at rates not less than those prescribed in their apprenticeship contract.

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 16.856 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 base rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half:

January 1
Last Monday in May
July 4
First Monday in September
Fourth Thursday in November
December 25
The day before if January 1. July

The day before if January 1, July 4 or December 25 falls on a Saturday, and

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, euclid 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.

#### II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truckdrivers working on the project have been paid the prevailing wage rates for all workperformed under the contract required by Section 84.062 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 and accessible place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 84.062 of the Wisconsin Statutes.
- b. A copy of the U.S. Department of Labor (Davis-Bacon, Minimum Wage Rates).
- c. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

#### IV. WAGE RATE REDISTRIBUTION

A contractor or subcontractor performing work subject to a Davis-Bacon wage determination may discharge its minimum wage obligations for the payment of both straight time wages and fringe benefits by (1) paying both in cash, (2) making payments or incurring costs for bona fide fringe benefits, or (3) by a combination thereof. Thus, under the Davis-Bacon a contractor may offset an amount of monetary wages paid in excess of the minimum wage required under the determination to satisfy its fringe benefit obligations. *See* 40 USC 3142(d) and 29 CFR 5.31.

#### V. ADDITIONAL CLASSIFICATIONS

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5(a)(1)(ii)). The 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:

- a. The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- b. The classification is utilized in the area by the construction industry; and
- c. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

General Decision Number: WI170010 02/03/2017 WI10

Superseded General Decision Number: WI20160010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/06/2017 1 02/03/2017

BRWI0001-002 06/01/2016

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes	
BRICKLAYER	\$ 31.84	20.95	
BRWI0002-002 06/01/2016			

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes	
BRICKLAYER	\$ 37.04	19.70	
RPWT0002-005 06/01/2016			

BRWI0002-005 06/01/2016

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,

FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 35.07	20.51
BRWI0003-002 06/01/2016		
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE,	AND OCONTO COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 32.22	20.57
BRWI0004-002 06/01/2016		
KENOSHA, RACINE, AND WALWORTH CO	UNTIES	
	Rates	Fringes
BRICKLAYER	.\$ 36.59	21.49
BRWI0006-002 06/01/2016		
ADAMS, CLARK, FOREST, LANGLADE, ONEIDA, PORTAGE, PRICE, TAYLOR,		
	Rates	Fringes
BRICKLAYER		
	.\$ 33.04	19.75
BRWI0007-002 06/01/2016	.\$ 33.04 	19.75
BRWI0007-002 06/01/2016  GREEN, LAFAYETTE, AND ROCK COUNT		19.75
		19.75 Fringes
	IES Rates	
GREEN, LAFAYETTE, AND ROCK COUNT	IES Rates	Fringes
GREEN, LAFAYETTE, AND ROCK COUNT	IES  Rates .\$ 33.54	Fringes 20.95
GREEN, LAFAYETTE, AND ROCK COUNT BRICKLAYER BRWI0008-002 06/01/2016	IES  Rates .\$ 33.54	Fringes 20.95
GREEN, LAFAYETTE, AND ROCK COUNT BRICKLAYER BRWI0008-002 06/01/2016	IES Rates .\$ 33.54 AND WAUKESHA Rates	Fringes 20.95 COUNTIES

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 32.22 20.57

BRWI0019-002 06/01/2015

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 31.36	16.51
BRWI0034-002 06/01/2015		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes	
BRICKLAYER	\$ 32.86	17.22	
CARP0087-001 07/01/2012			

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes	
Carpenter & Piledrivermen	\$ 33.34	16.73	
CARP0252-002 07/02/2012			

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Rates Fringes

		FR

CARPENTER\$	30.48	15.80
MILLWRIGHT\$	32.11	15.80
PILEDRIVER\$	30.98	15.80

CARP0252-010 07/02/2012

#### ASHLAND COUNTY

	Rates	Fringes	
Carpenters			
Carpenter	\$ 30.48	15.80	
Millwright	\$ 32.11	15.80	
Pile Driver	\$ 30.98	15.80	

CARP0264-003 06/01/2008

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER	\$ 30.52	14.41

<sup>\*</sup> CARP0361-004 05/01/2016

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER	.\$ 34.57	18.16
GARD2227 001 06/01/2000		

CARP2337-001 06/01/2008

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes	
PILEDRIVERMAN			
Zone A	\$ 27.25	19.46	
Zone B	\$ 24.47	19.46	
			_

ELEC0014-002 05/30/2016

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON, AND WASHBURN

Rates Fringes

Electricians:.....\$ 32.00 19.28

ELEC0014-007 05/30/2016

REMAINING COUNTIES

Rates Fringes

Teledata System Installer

Installer/Technician.....\$ 24.35 13.15

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

\_\_\_\_\_\_

ELEC0127-002 06/01/2016

KENOSHA COUNTY

Rates Fringes Electricians:.....\$ 37.71 30%+10.02

ELEC0158-002 05/30/2016

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

Rates Fringes Electricians:.....\$ 30.50 29.50% + 9.57 ELEC0159-003 05/30/2016

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin,

Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK

COUNTIES

	Rates	Fringes
Electricians:	.\$ 36.50	20.39
ELEC0219-004 06/01/2015		
FLORENCE COUNTY (Townships of Au Florence and Homestead) AND MARI Niagara)		
	Rates	Fringes
Electricians:  Electrical contracts over \$180,000  Electrical contracts under \$180,000		18.34 18.26
DOUGLAS COUNTY		
	Rates	Fringes
Electricians:	.\$ 34.92	25.05
ELEC0388-002 06/01/2013		
ADAMS, CLARK (Colby, Freemont, L Sherwood, Unity), FOREST, JUNEA MARINETTE (Beecher, Dunbar, Good West of a line 6 miles West of t County), ONEIDA, PORTAGE, SHAWAN AND WOOD COUNTIES	U, LANGLADE, man & Pembine he West bound	LINCOLN, MARATHON, ), MENOMINEE (Area ary of Oconto
	Rates	Fringes
Electricians:		4.85% + 9.70
ELEC0430-002 06/01/2016		
RACINE COUNTY (Except Burlington	Township)	
	Rates	Fringes
Electricians:	.\$ 36.07	21.84

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

ELEC0494-005 06/01/2016

	Rates	Fringes	
Electricians:	\$ 36.01	24.00	

D - - - -

ELEC0494-006 06/01/2014

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes	
Electricians:	\$ 29.64	20.54	
ELEC0494-013 06/01/2015			

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

Į.	Rates	Fringes
Sound & Communications		
Installer\$	16.47	14.84
Technician\$	26.00	17.70

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

TT DC0577 002 05 /20 /2016

#### ELEC0577-003 05/30/2016

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO

1	Rates	Fringes
Electricians:\$	30.68	17.28
ELEC0890-003 06/01/2016		
DODGE (Emmet Township only), GREEN RACINE (Burlington Township), ROCK		
1	Rates	Fringes
Electricians:\$		26.10% + \$10.56
ELEC0953-001 07/01/2015		
1	Rates	Fringes
Line Construction: (1) Lineman\$ (2) Heavy Equipment Operator\$	40.03	32% + 5.00 32% + 5.00
<ul><li>(3) Equipment Operator\$</li><li>(4) Heavy Groundman Driver\$</li><li>(5) Light Groundman Driver\$</li><li>(6) Groundsman\$</li></ul>	26.78 24.86 23.18	32% + 5.00 14.11 13.45 32% + 5.00
ENGI0139-005 06/01/2016		
1	Rates	Fringes
Power Equipment Operator  Group 1 \$  Group 2 \$  Group 3 \$  Group 4 \$  Group 5 \$  Group 6 \$	38.77 38.27 38.01 37.72	21.80 21.80 21.80 21.80 21.80 21.80
HAZARDOUS WASTE PREMIUMS:  EPA Level "A" protection - \$3.00 pe  EPA Level "B" protection - \$2.00 pe  EPA Level "C" protection - \$1.00 pe  POWER EQUIPMENT OPERATORS CLASSIFIC	per hour er hour	r

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminious paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender.

GROUP 6: Off-road material hauler with or without ejector.

-----

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates		Fri	inges	
IRONWORKER	\$ 30.86			25.42	2
Paid Holidays: New Year's Day	, Memorial	Day,	July	4th,	Labor

Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER	\$ 33.15	25.42
Paid Holidays: New Year's Day Day, Thanksgiving Day & Christ	<del>-</del> -	uly 4th, Labor

IRON0383-001 06/01/2015

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER	\$ 32.85	21.84
IRON0498-005 06/01/2008		

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER	.\$ 34.34	25.72
IRON0512-008 05/01/2015		

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER	\$ 35.50	23.45
TDONOF12 021 05 /01 /2015		

IRON0512-021 05/01/2015

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER	\$ 31.04	23.45

LABO0113-002 06/01/2016

#### MILWAUKEE AND WAUKESHA COUNTIES

	I	Rates	Fringes
LABORER			
Group	1\$	27.51	20.35
_	2\$		20.35
Group	3\$	27.86	20.35
Group	4\$	28.01	20.35
Group	5\$	28.16	20.35
Group	6\$	24.00	20.35

#### LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

\_\_\_\_\_

LABO0113-003 06/01/2016

#### OZAUKEE AND WASHINGTON COUNTIES

	I	Rates	Fringes
LABORER			
Group	1\$	26.76	20.35
Group	2\$	26.86	20.35
Group	3\$	26.91	20.35
Group	4\$	27.11	20.35
Group	5\$	26.96	20.35
Group	6\$	23.85	20.35

#### LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

-----

LABO0113-011 06/01/2016

#### KENOSHA AND RACINE COUNTIES

	I	Rates	Fringes
LABORER			
Group	1\$	26.57	20.35
Group	2\$	26.72	20.35
Group	3\$	26.92	20.35
Group	4\$	26.89	20.35
Group	5\$	27.22	20.35

Group 6.....\$ 23.71 20.35

#### LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

\_\_\_\_\_

#### LABO0140-002 06/01/2016

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	F	Rates	Fringes
LABORER			
Group	1\$	30.67	16.55
Group	2\$	30.77	16.55
Group	3\$	30.82	16.55
Group	4\$	31.02	16.55
Group	5\$	30.87	16.55
Group	6\$	27.30	16.55

#### LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;

Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

-----

LABO0464-003 06/01/2016

DANE COUNTY

		Rates	Fringes
LABORER			
Group	1\$	30.95	16.41
Group	2\$	31.05	16.41
Group	3\$	31.10	16.41
Group	4\$	31.30	16.41
Group	5\$	31.15	16.41
Group	6\$	27.30	16.41

#### LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist	
GROUP 5: Blaster; Powderman	
GROUP 6: Flagperson and Traffic Control Person	on
* PAIN0106-008 05/02/2016	
ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNT	IES
Rates	Fringes
Painters:	
New: Brush, Roller\$ 29.86	16.35
Spray, Sandblast, Steel\$ 30.46 Repaint:	16.35
Brush, Roller\$ 28.36	16.35
Spray, Sandblast, Steel\$ 28.96	16.35 
PAIN0108-002 06/01/2016	
RACINE COUNTY	
Rates	Fringes
Painters:	10 50
Brush, Roller\$ 32.74 Spray & Sandblast\$ 33.74	18.70 18.70
PAIN0259-002 05/01/2008	
BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PI SAWYER, ST. CROIX, AND WASHBURN COUNTIES	ERCE, POLK, RUSK,
Rates	Fringes
PAINTER\$ 24.11	
	12.15
PAIN0259-004 05/01/2015	12.15
PAIN0259-004 05/01/2015  BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE VERNON COUNTIES	
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE	
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE VERNON COUNTIES	, TREMPEALEAU, AND

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

PAIN0781-002 06/01/2016

	Rates	Fringes
Painters: Bridge Brush Spray & Sandblast	\$ 30.07	22.19 22.19 22.19
PAIN0802-002 06/01/2016		
COLUMBIA, DANE, DODGE, GRANT, G ROCK, AND SAUK COUNTIES	REEN, IOWA,	LAFAYETTE, RICHLAND,
	Rates	Fringes
PAINTER Brush	\$ 27.50	17.72
PREMIUM PAY: Structural Steel, Spray, Brid hour.	ges = \$1.0	00 additional per
PAIN0802-003 06/01/2016		
ADAMS, BROWN, CALUMET, CLARK, D LAKE, IRON, JUNEAU, KEWAUNEE, L MARATHON, MARINETTE, MARQUETTE, OUTAGAMIE, PORTAGE, PRICE, SHAW WAUSHARA, WAUPACA, WINNEBAGO, A	ANGLADE, LII MENOMINEE, ANO, SHEBOY	NCOLN, MANITOWOC, OCONTO, ONEIDA, YGAN, TAYLOR, VILAS,
	Rates	Fringes
PAINTER	\$ 24.39	11.72
PAIN0934-001 06/01/2016		
KENOSHA AND WALWORTH COUNTIES		
	Rates	Fringes
Painters: Brush	\$ 33.74	18.70 18.70 18.70
PAIN1011-002 06/01/2016		

FLORENCE COUNTY

Rates Fringes

Painters:	\$ 24.56	11.93

PLAS0599-010 06/01/2016

:	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER Area 1\$ Area 2 (BAC)\$ Area 3\$ Area 4\$	35.07 35.61	17.17 19.75 19.40 20.51
Area 5\$ Area 6\$	36.27	18.73 22.99

#### AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

#### AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2016

	Rates	Fringes
TRUCK DRIVER  1 & 2 Axles  3 or more Axles; Euclids Dumptor & Articulated,	.\$ 26.63	19.85
Truck Mechanic	.\$ 26.78	19.85
WELL DRILLER	.\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

\_\_\_\_\_

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the

most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

\_\_\_\_\_

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination

- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_\_

#### 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 omision 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.

Page 1 of 1





Page 1 of 23



## Proposal Schedule of Items

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

0010         108.4400         1.000         7,500.0000           0020         204.0100         4,736.000         Removing Pavement         SY           0030         204.0150         1,120.000         Removing Curb & Gutter         LF           0040         204.0155         998.000         Permoving Concrete Sidewalk         SY           0050         204.0157         260.000         Permoving Concrete Barrier         LF	Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
Removing Pavement         SY           0030         204.0150         1,120.000           Removing Curb & Gutter         LF           0040         204.0155         998.000           Removing Concrete Sidewalk         SY           0050         204.0157         260.000           Removing Concrete Barrier         LF           0060         204.0195         33.000           Removing Concrete Bases         EACH           0070         204.0220         9.000           Removing Inlets         EACH           0080         204.0245         242.000           Removing Storm Sewer (size) 0001.12- Inch         LF           0090         204.0280         1.000           Sealing Pipes         EACH           0100         205.0501.0         2,981.000           Excavation Common         CY           0110         205.0501.S         34.000           Excavation, Hauling, and Disposal of Petroleum Contaminated Soil         TON           0120         209.2100         20.000           Backfill Granular Grade 2         CY           0130         213.0100         1.000           Finishing Roadway (project) 0001.1060- 39-90         EACH	0010			7,500.00000	7,500.00
Removing Curb & Gutter	0020				
Removing Concrete Sidewalk         SY           0050         204.0157         260.000           Removing Concrete Barrier         LF           0060         204.0195         93.000           Removing Concrete Bases         EACH           0070         204.0220         9.000           Removing Inlets         EACH           0080         204.0245         242.000           Removing Storm Sewer (size) 0001. 12- Inch         LF           0090         204.0280         1.000           Sealing Pipes         EACH           0100         205.0100         2,981.000           Excavation Common         CY           0110         205.0501.S         34.000           Excavation, Hauling, and Disposal of Petroleum Contaminated Soil         TON           0120         209.2100         20.000           Backfill Granular Grade 2         CY           0130         213.0100         1.000           Finishing Roadway (project) 0001. 1060- 39-90         EACH           0150         305.0120         2,123.000           Base Aggregate Dense 1 1/4-Inch         TON	0030				·
Removing Concrete Barrier	0040				·
Removing Concrete Bases	0050				·
Removing Inlets	0060				·
Removing Storm Sewer (size) 0001. 12-	0070				·
Sealing Pipes       EACH         0100       205.0100       2,981.000         Excavation Common       CY	080	Removing Storm Sewer (size) 0001. 12-			
Excavation Common         CY            0110         205.0501.S         34.000           Excavation, Hauling, and Disposal of Petroleum Contaminated Soil         TON            0120         209.2100         20.000            Backfill Granular Grade 2         CY             0130         213.0100         1.000             Finishing Roadway (project) 0001. 1060-39-90         EACH             0140         213.0100         1.000          EACH            09-71         305.0120         2,123.000         EACH             0160         310.0110         12.900	0090				
Excavation, Hauling, and Disposal of Petroleum Contaminated Soil  0120 209.2100 20.000 Backfill Granular Grade 2 CY	0100				
Backfill Granular Grade 2 CY	0110	Excavation, Hauling, and Disposal of			·
Finishing Roadway (project) 0001. 1060- 39-90  0140  213.0100  Finishing Roadway (project) 0002. 1360- 09-71  0150  305.0120  Base Aggregate Dense 1 1/4-Inch  12.900  EACH	0120				
Finishing Roadway (project) 0002. 1360- 09-71  0150  305.0120  Base Aggregate Dense 1 1/4-Inch  12.900  EACH     10160	0130	Finishing Roadway (project) 0001. 1060-		·	
Base Aggregate Dense 1 1/4-Inch TON	0140	Finishing Roadway (project) 0002. 1360-			
	0150				
	0160			·	







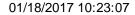
Page 2 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0170	311.0115 Breaker Run	282.000 CY		
0180	312.0115 Select Crushed Material	71.000 CY		
0190	415.0090 Concrete Pavement 9-Inch	3,686.000 SY		
0200	415.1080 Concrete Pavement HES 8-Inch	114.000 SY		
0210	415.1090 Concrete Pavement HES 9-Inch	338.000 SY	·	
0220	416.0610 Drilled Tie Bars	900.000 EACH		
0230	416.0620 Drilled Dowel Bars	273.000 EACH		
0240	416.1710 Concrete Pavement Repair	500.000 SY		
0250	416.1725 Concrete Pavement Replacement SHES	248.000 SY		
0260	455.0605 Tack Coat	9.000 GAL		
0270	460.6224 HMA Pavement 4 MT 58-28 S	29.000 TON		
0280	520.8000 Concrete Collars for Pipe	3.000 EACH		
0290	601.0331 Concrete Curb & Gutter 31-Inch	1,040.000 LF		
0300	601.0409 Concrete Curb & Gutter 30-Inch Type A	1,737.000 LF		
0310	601.0452 Concrete Curb & Gutter Integral 30-Inch Type D	40.000 LF		
0320	601.0600 Concrete Curb Pedestrian	174.000 LF		







Page 3 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0330	602.0410 Concrete Sidewalk 5-Inch	9,177.000 SF		
0340	602.0505 Curb Ramp Detectable Warning Field Yellow	144.000 SF		·
0350	602.0515 Curb Ramp Detectable Warning Field Natural Patina	8.000 SF		·
0360	603.3113 Concrete Barrier Transition Type NJ32SF to S36	4.000 EACH		
0370	603.3535 Concrete Barrier Transition Type S36 to S42	4.000 EACH	·	
0380	603.3559 Concrete Barrier Transition Type S42 to S56	4.000 EACH		·
0390	603.8000 Concrete Barrier Temporary Precast Delivered	1,185.000 LF		
0400	603.8125 Concrete Barrier Temporary Precast Installed	1,185.000 LF		
0410	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	115.000 LF		
0420	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	233.000 LF		
0430	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	9.000 LF		
0440	611.0420 Reconstructing Manholes	1.000 EACH		
0450	611.0530 Manhole Covers Type J	1.000 EACH		
0460	611.0624 Inlet Covers Type H	10.000 EACH		







Page 4 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0470	611.0639 Inlet Covers Type H-S	2.000 EACH	·	
0480	611.0642 Inlet Covers Type MS	4.000 EACH		
0490	611.2006 Manholes 6-FT Diameter	1.000 EACH		
0500	611.3004 Inlets 4-FT Diameter	6.000 EACH		<u> </u>
0510	611.3230 Inlets 2x3-FT	7.000 EACH		
0520	611.3901 Inlets Median 1 Grate	4.000 EACH		
0530	611.8115 Adjusting Inlet Covers	5.000 EACH		
0540	611.9710 Salvaged Inlet Covers	2.000 EACH		
0550	612.0106 Pipe Underdrain 6-Inch	66.000 LF		
0560	614.0905 Crash Cushions Temporary	3.000 EACH		
0570	614.2300 MGS Guardrail 3	264.000 LF		
0580	614.2610 MGS Guardrail Terminal EAT	1.000 EACH		
0590	614.2620 MGS Guardrail Terminal Type 2	1.000 EACH		
0600	619.1000 Mobilization	1.000 EACH		
0610	620.0300 Concrete Median Sloped Nose	137.000 SF		
0620	623.0200  Dust Control Surface Treatment	6,934.000 SY		
0630	624.0100 Water	58.000 MGAL		







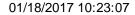
Page 5 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0640	625.0100 Topsoil	2,553.000 SY		
0650	628.1504 Silt Fence	795.000 LF		
0660	628.1520 Silt Fence Maintenance	1,116.000 LF	·	
0670	628.1905 Mobilizations Erosion Control	7.000 EACH	·	·
0680	628.1910 Mobilizations Emergency Erosion Control	4.000 EACH	<u></u>	
0690	628.7005 Inlet Protection Type A	9.000 EACH		<u></u>
0700	628.7010 Inlet Protection Type B	3.000 EACH	·	·
0710	628.7015 Inlet Protection Type C	19.000 EACH		
0720	628.7020 Inlet Protection Type D	41.000 EACH		
0730	628.7504 Temporary Ditch Checks	25.000 LF		
0740	628.7570 Rock Bags	58.000 EACH		
0750	629.0210 Fertilizer Type B	2.890 CWT		
0760	630.0200 Seeding Temporary	10.000 LB		
0770	631.0300 Sod Water	55.500 MGAL		
0780	631.1000 Sod Lawn	2,553.000 SY		
0790	634.0618 Posts Wood 4x6-Inch X 18-FT	44.000 EACH		
0800	634.0622 Posts Wood 4x6-Inch X 22-FT	5.000 EACH		







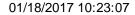
Page 6 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0810	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	2.000 EACH		
0820	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	8.000 EACH		
0830	636.0100 Sign Supports Concrete Masonry	35.000 CY		
0840	636.1500 Sign Supports Steel Coated Reinforcement HS	5,590.000 LB		
0850	637.2210 Signs Type II Reflective H	848.868 SF		
0860	637.2215 Signs Type II Reflective H Folding	247.420 SF		
0870	637.2220 Signs Type II Reflective SH	111.000 SF		
0880	637.2230 Signs Type II Reflective F	68.860 SF		
0890	638.2102 Moving Signs Type II	10.000 EACH		
0900	638.2602 Removing Signs Type II	101.000 EACH		
0910	638.3000 Removing Small Sign Supports	41.000 EACH		
0920	641.6600 Sign Bridge (structure) 0001. S-40-456	LS	LUMP SUM	
0930	643.0100 Traffic Control (project) 0001. 1060-39- 90	1.000 EACH		
0940	643.0100 Traffic Control (project) 0002. 1360-09- 71	1.000 EACH		
0950	643.0300 Traffic Control Drums	46,122.000 DAY	·	
0960	643.0410 Traffic Control Barricades Type II	2,016.000 DAY		







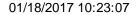
Page 7 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0970	643.0420 Traffic Control Barricades Type III	4,527.000 DAY		
0980	643.0705 Traffic Control Warning Lights Type A	11,070.000 DAY		
0990	643.0715 Traffic Control Warning Lights Type C	11,883.000 DAY		
1000	643.0800 Traffic Control Arrow Boards	1,995.000 DAY		
1010	643.0900 Traffic Control Signs	23,367.000 DAY		
1020	643.0910 Traffic Control Covering Signs Type I	17.000 EACH		
1030	643.1000 Traffic Control Signs Fixed Message	1,176.000 SF		
1040	643.1050 Traffic Control Signs PCMS	769.000 DAY		
1050	643.2000 Traffic Control Detour (project) 0001. 1060-39-90	1.000 EACH		·
1060	643.2000 Traffic Control Detour (project) 0002. 1360-09-71	1.000 EACH		
1070	643.3000 Traffic Control Detour Signs	31,620.000 DAY		
1080	644.1410.S Temporary Pedestrian Surface Asphalt	500.000 SF		
1090	644.1601.S Temporary Curb Ramp	10.000 EACH		
1100	644.1616.S Temporary Pedestrian Safety Fence	100.000 LF		
1110	645.0111 Geotextile Type DF Schedule A	109.000 SY		
1120	646.0106 Pavement Marking Epoxy 4-Inch	943.000 LF		·







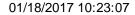
Page 8 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1130	646.0136 Pavement Marking Epoxy 12-Inch	120.000 LF		
1140	646.0600 Removing Pavement Markings	3,349.000 LF		
1150	646.0842.S Pavement Marking Grooved Contrast Wet Reflective Epoxy 4-Inch	6,772.000 LF		·
1160	646.0843.S Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	1,444.000 LF		
1170	646.0844.S Pavement Marking Grooved Contrast Wet Reflective Epoxy 8-Inch	1,459.000 LF		
1180	646.0881.S Pavement Marking Grooved Wet Reflective Tape 4-Inch	214.000 LF	·	
1190	646.0883.S Pavement Marking Grooved Wet Reflective Tape 8-Inch	1,354.000 LF		·
1200	647.0146 Pavement Marking Arrows Epoxy Type 6	3.000 EACH		
1210	647.0156 Pavement Marking Arrows Epoxy Type 1	2.000 EACH		
1220	647.0166 Pavement Marking Arrows Epoxy Type 2	19.000 EACH		
1230	647.0176 Pavement Marking Arrows Epoxy Type 3	9.000 EACH		
1240	647.0356 Pavement Marking Words Epoxy	14.000 EACH		
1250	647.0456 Pavement Marking Curb Epoxy	137.000 LF		
1260	647.0526 Pavement Marking Yield Line Symbols Epoxy 18-Inch	28.000 EACH		·
1270	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	774.000 LF	·	·







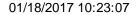
Page 9 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1280	647.0606 Pavement Marking Island Nose Epoxy	3.000 EACH		
1290	647.0706 Pavement Marking Diagonal Epoxy 6-Inch	1,324.000 LF		
1300	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	165.000 LF		
1310	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	819.000 LF	·	·
1320	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	1,298.000 LF		·
1330	647.0955 Removing Pavement Markings Arrows	5.000 EACH	·	
1340	647.0965 Removing Pavement Markings Words	3.000 EACH		
1350	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	4,809.000 LF		
1360	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	983.000 LF	·	
1370	649.1800 Temporary Pavement Marking Arrows Removable Tape	1.000 EACH		
1380	649.2000 Temporary Pavement Marking Words Removable Tape	1.000 EACH		
1390	652.0125 Conduit Rigid Metallic 2-Inch	64.000 LF		
1400	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	6,152.000 LF		
1410	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	3,760.000 LF		·







Page 10 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
1420	652.0615 Conduit Special 3-Inch	3,211.000 LF		
1430	652.0700.S Install Conduit into Existing Item	13.000 EACH		
1440	653.0135 Pull Boxes Steel 24x36-Inch	4.000 EACH		
1450	653.0140 Pull Boxes Steel 24x42-Inch	68.000 EACH		
1460	653.0905 Removing Pull Boxes	60.000 EACH		
1470	654.0101 Concrete Bases Type 1	21.000 EACH	·	
1480	654.0102 Concrete Bases Type 2	3.000 EACH	·	
1490	654.0105 Concrete Bases Type 5	30.000 EACH		
1500	654.0108 Concrete Bases Type 8	4.000 EACH		·
1510	654.0110 Concrete Bases Type 10	12.000 EACH		·
1520	654.0113 Concrete Bases Type 13	1.000 EACH	·	·
1530	654.0217 Concrete Control Cabinet Bases Type 9 Special	2.000 EACH	·	
1540	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	·	
1550	655.0230 Cable Traffic Signal 5-14 AWG	2,104.000 LF		
1560	655.0240 Cable Traffic Signal 7-14 AWG	5,268.000 LF		
1570	655.0260 Cable Traffic Signal 12-14 AWG	10,699.000 LF	·	







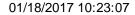
Page 11 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1580	655.0270 Cable Traffic Signal 15-14 AWG	555.000 LF		
1590	655.0320 Cable Type UF 2-10 AWG Grounded	2,322.000 LF	·	
1600	655.0510 Electrical Wire Traffic Signals 12 AWG	1,138.000 LF		
1610	655.0515 Electrical Wire Traffic Signals 10 AWG	9,567.000 LF		
1620	655.0610 Electrical Wire Lighting 12 AWG	12,798.000 LF		
1630	655.0615 Electrical Wire Lighting 10 AWG	1,824.000 LF		
1640	655.0620 Electrical Wire Lighting 8 AWG	31,425.000 LF		
1650	655.0630 Electrical Wire Lighting 4 AWG	9,950.000 LF	·	
1660	655.0635 Electrical Wire Lighting 2 AWG	880.000 LF	·	
1670	655.0640 Electrical Wire Lighting 1 AWG	18.000 LF	·	·
1680	655.0900 Traffic Signal EVP Detector Cable	2,812.000 LF		
1690	656.0200 Electrical Service Meter Breaker Pedestal (location) 3001. IH 41 SB Ramps & CTH EE	LS	LUMP SUM	
1700	656.0200 Electrical Service Meter Breaker Pedestal (location) 3051. IH 41 & STH 190	LS	LUMP SUM	
1710	656.0200 Electrical Service Meter Breaker Pedestal (location) 3101. W. North Avenue & N. 124th Street	LS	LUMP SUM	
1720	656.0400 Electrical Service Main Lugs Only Meter Pedestal (location) 0001. HL-40-CD	LS	LUMP SUM	







Page 12 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1730	656.0500 Electrical Service Breaker Disconnect Box (location) 2001. CB-DMS-40-0036	LS	LUMP SUM	
1740	657.0100 Pedestal Bases	27.000 EACH		
1750	657.0210 Transformer Bases Breakaway 15-17 Inch Bolt Circle	4.000 EACH		·
1760	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	34.000 EACH		
1770	657.0305 Poles Type 2	2.000 EACH	<u> </u>	
1780	657.0310 Poles Type 3	2.000 EACH		
1790	657.0322 Poles Type 5-Aluminum	30.000 EACH		
1800	657.0380 Poles Type E	4.000 EACH		
1810	657.0420 Traffic Signal Standards Aluminum 13- FT	13.000 EACH	·	
1820	657.0425 Traffic Signal Standards Aluminum 15- FT	9.000 EACH		
1830	657.0430 Traffic Signal Standards Aluminum 10- FT	5.000 EACH	·	·
1840	657.0590 Trombone Arms 20-FT	2.000 EACH		
1850	657.0605 Luminaire Arms Single Member 4 1/2- Inch Clamp 4-FT	18.000 EACH		
1860	657.0609 Luminaire Arms Single Member 4-Inch Clamp 6-FT	2.000 EACH	·	





## Proposal Schedule of Items

Page 13 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
1870	657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT	30.000 EACH		·
1880	657.0705 Luminaire Arms Truss Type 4 1/2-Inch Clamp 10-FT	16.000 EACH		
1890	657.0715 Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	20.000 EACH		
1900	657.1345 Install Poles Type 9	4.000 EACH	·	
1910	657.1350 Install Poles Type 10	8.000 EACH		·
1920	657.1355 Install Poles Type 12	1.000 EACH		
1930	657.1525 Install Monotube Arms 25-FT	1.000 EACH		·
1940	657.1530 Install Monotube Arms 30-FT	11.000 EACH		·
1950	657.1540 Install Monotube Arms 40-FT	1.000 EACH		·
1960	657.1808 Install Luminaire Arms Steel 8-FT	8.000 EACH		
1970	657.1815 Install Luminaire Arms Steel 15-FT	4.000 EACH		·
1980	658.0110 Traffic Signal Face 3-12 Inch Vertical	49.000 EACH		·
1990	658.0115 Traffic Signal Face 4-12 Inch Vertical	25.000 EACH		
2000	658.0215 Backplates Signal Face 3 Section 12-Inch	37.000 EACH		
2010	658.0220 Backplates Signal Face 4 Section 12- Inch	25.000 EACH	·	





## Proposal Schedule of Items

Page 14 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2020	658.0416 Pedestrian Signal Face 16-Inch	22.000 EACH		
2030	658.0500 Pedestrian Push Buttons	18.000 EACH		
2040	658.0600 Led Modules 12-Inch Red Ball	57.000 EACH		
2050	658.0605 Led Modules 12-Inch Yellow Ball	55.000 EACH		
2060	658.0610 Led Modules 12-Inch Green Ball	35.000 EACH		
2070	658.0615 Led Modules 12-Inch Red Arrow	17.000 EACH		
2080	658.0620 Led Modules 12-Inch Yellow Arrow	32.000 EACH		
2090	658.0625 Led Modules 12-Inch Green Arrow	51.000 EACH		
2100	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	22.000 EACH		·
2110	658.5069 Signal Mounting Hardware (location) 3001. IH 41 SB Ramps & CTH EE	LS	LUMP SUM	
2120	658.5069 Signal Mounting Hardware (location) 3002. USH 18 & STH 181	LS	LUMP SUM	
2130	658.5069 Signal Mounting Hardware (location) 3051. IH 41 & STH 190	LS	LUMP SUM	
2140	658.5069 Signal Mounting Hardware (location) 3101. W. North Avenue & N. 124th Street	LS	LUMP SUM	
2150	658.5069 Signal Mounting Hardware (location) 3102. W. Center Street & N. 124th Street	LS	LUMP SUM	







Page 15 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Dronned				
Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2160	658.5069 Signal Mounting Hardware (location) 3103. W. Burleigh Street & N. 124th Street	LS	LUMP SUM	
2170	659.0600 Underdeck Lighting (location) 0001. EB Lower Level	LS	LUMP SUM	·
2180	659.0600 Underdeck Lighting (location) 0002. WB Lower Level	LS	LUMP SUM	
2190	659.0600 Underdeck Lighting (location) 0003. EB Mid Level	LS	LUMP SUM	·
2200	659.0600 Underdeck Lighting (location) 0004. WB Mid Level	LS	LUMP SUM	
2210	659.1125 Luminaires Utility LED C	74.000 EACH		
2220	659.1130 Luminaires Utility LED D	22.000 EACH	·	
2230	659.1215 Luminaires Underdeck LED C	14.000 EACH	·	<u> </u>
2240	659.2230 Lighting Control Cabinets 240/480 30- Inch	1.000 EACH	·	
2250	661.0300 Generators	2.000 DAY	·	
2260	670.0100 Field System Integrator 2001. FTMS	LS	LUMP SUM	<u> </u>
2270	670.0200 ITS Documentation 2001. FTMS	LS	LUMP SUM	
2280	672.0280 Base Camera Pole 80-FT	1.000 EACH		
2290	673.0225.S Install Pole Mounted Cabinet	1.000 EACH		
2300	674.0300 Remove Cable	90.000 LF		





## Proposal Schedule of Items

Page 16 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2310	675.0300 Install Mounted Controller Microwave Detector Assembly	1.000 EACH		·
2320	675.0400.S Install Ethernet Switch	9.000 EACH		
2330	677.0180 Install Camera Pole 80-FT	1.000 EACH		
2340	677.0200 Install Camera Assembly	2.000 EACH		
2350	677.9051.S Removing 50-FT Camera Pole	1.000 EACH		
2360	677.9200.S Removing CCTV Camera	1.000 EACH		
2370	678.0006 Install Fiber Optic Cable Outdoor Plant 6- CT	830.000 LF		·
2380	678.0012 Install Fiber Optic Cable Outdoor Plant 12-CT	1,780.000 LF	<del>.</del>	
2390	678.0300 Fiber Optic Splice	4.000 EACH		
2400	678.0400 Fiber Optic Termination	12.000 EACH		
2410	678.0500 Communication System Testing 2001. FTMS	LS	LUMP SUM	·
2420	690.0250 Sawing Concrete	2,935.000 LF	·	
2430	715.0415 Incentive Strength Concrete Pavement	1,106.000 DOL		
2440	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	300.000 HRS	5.00000	1,500.00
2450	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	200.000 HRS	5.00000	1,000.00





## Proposal Schedule of Items

Page 17 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2460	SPV.0035 Special 0001. Backfill Slurry	414.000 CY		·
2470	SPV.0060 Special 0001. Traffic Control Interim Freeway Lane Closure	10.000 EACH		
2480	SPV.0060 Special 0002. Traffic Control Close-Open Freeway Ramp	3.000 EACH		·
2490	SPV.0060 Special 0003. Reconnect Storm Sewer Laterals	4.000 EACH	<del>.</del>	
2500	SPV.0060 Special 0164. Concrete Barrier Type S56 End Anchor	4.000 EACH	·	
2510	SPV.0060 Special 1001. Removing Distribution Centers	1.000 EACH		
2520	SPV.0060 Special 1002. Removing Luminaires Underdeck	14.000 EACH		
2530	SPV.0060 Special 1003. Removing Lighting Units	66.000 EACH		
2540	SPV.0060 Special 1004. Lamp Disposal High Intensity Discharge	109.000 EACH		·
2550	SPV.0060 Special 1005. Poles Type F	12.000 EACH		
2560	SPV.0060 Special 1006. Poles Type 5-Aluminum Multi-Arm Heights	16.000 EACH	·	·
2570	SPV.0060 Special 2001. Ground Rod	2.000 EACH		
2580	SPV.0060 Special 2002. Install Overhead Freeway DMS Full Matrix	1.000 EACH		
2590	SPV.0060 Special 2004. Pull Box Non-Conductive 24X42-Inch	4.000 EACH		





## Proposal Schedule of Items

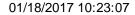
Page 18 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2600	SPV.0060 Special 2005. Install 5.8 GHz Ethernet Bridge	9.000 EACH		
2610	SPV.0060 Special 2006. Removing Microwave Detector Assembly	1.000 EACH		·
2620	SPV.0060 Special 3051. Remove Monotube Concrete Bases	4.000 EACH	<del></del>	
2630	SPV.0060 Special 3052. Backplates With Reflective Border 3 Section 12-Inch	12.000 EACH	·	
2640	SPV.0060 Special 3053. Locating Monotube Traffic Signals	2.000 EACH	·	
2650	SPV.0060 Special 3054. Concrete Bases Type 1 Spread Footing	2.000 EACH		·
2660	SPV.0060 Special 3055. Concrete Control Cabinet Bases Type 9 Special Mod.	1.000 EACH	·	
2670	SPV.0060 Special 3101. EVP Detector Type I	4.000 EACH		
2680	SPV.0060 Special 3102. EVP Discriminator Type IV	1.000 EACH	·	
2690	SPV.0060 Special 3103. EVP Confirmation Light Assembly Type I	4.000 EACH		
2700	SPV.0060 Special 3104. Traffic Signal Controller Programming	6.000 EACH		
2710	SPV.0060 Special 3105. Concrete Control Cabinet Bases Type 9 Modified	1.000 EACH	·	
2720	SPV.0060 Special 3106. Video Detection System Programming	1.000 EACH	·	







Page 19 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2730	SPV.0060 Special 5001. Relocation Hydrant Assembly	1.000 EACH		·
2740	SPV.0075 Special 0001. Pavement Cleanup Project 1060-39-90	100.000 HRS		<del></del>
2750	SPV.0075 Special 0002. Pavement Cleanup Project 1360-09-71	24.000 HRS	·	·
2760	SPV.0075 Special 4000. Obstructions Sign Supports Concrete Masonry	2.000 HRS	·	
2770	SPV.0090 Special 0001. Pipe Underdrain 6-Inch Special	218.000 LF	·	
2780	SPV.0090 Special 0002. Concrete Curb & Gutter 30-Inch Type A (Modified)	73.000 LF		
2790	SPV.0090 Special 0003. Concrete Curb & Gutter Integral 30-Inch Type D (Modified)	63.000 LF		
2800	SPV.0090 Special 2001. Outdoor Rated Network Cable	903.000 LF		
2810	SPV.0090 Special 3001. Cable Type UF 2-14 AWG	1,171.000 LF		
2820	SPV.0090 Special 3002. Install State Supplied Video Detection Cable	510.000 LF	·	·
2830	SPV.0090 Special 3003. Install State Supplied Cat- 5E Cable	554.000 LF		
2840	SPV.0105 Special 0001. Survey Project 1360-09-71	LS	LUMP SUM	
2850	SPV.0105 Special 0007. Survey Project 1060-39-90	LS	LUMP SUM	
2860	SPV.0105 Special 1001. Maintenance of Lighting Systems	LS	LUMP SUM	





## Proposal Schedule of Items

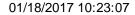
Page 20 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

2870   SPV.0105   Special 1002. Lighting system Integrator   LS   LUMP SUM	Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
Special 1003. Lighting System Survey	2870		LS	LUMP SUM	
Special 3001. Remove Traffic Signals   STH 190 & Industrial Road	2880		LS	LUMP SUM	
Special 3002. Remove Traffic Signals	2890	Special 3001. Remove Traffic Signals	LS	LUMP SUM	
Special 3003. Tmspt & Install State	2900	Special 3002. Remove Traffic Signals	LS	LUMP SUM	
Special 3004. Transporting Traffic Signal and Lighting Materials IH 41 SB Off Ramp & CTH EE	2910	Special 3003. Trnspt & Install State Furnished Traffic Signal Cabinet IH 41	LS	LUMP SUM	
Special 3005. Trnsp and Inst State Furn Radar Detection System IH 41 SB Off Ramp & CTH EE	2920	Special 3004. Transporting Traffic Signal and Lighting Materials IH 41 SB Off	LS	LUMP SUM	
Special 3006. Trnsp and Install State Furnished Autoscope Video Detection System USH 18 & STH 181  2950 SPV.0105 Special 3007. Covering Traffic Signal Equipment USH 18 & STH 181  2960 SPV.0105 Special 3008. Trnsp & Install State Furnished Autoscope Video Detection System IH 41 Ramps & W. Burleigh St.  2970 SPV.0105 Special 3009. Covering Traffic Signal Equipment STH 190 & Industrial Road  2980 SPV.0105 Special 3051. Removing Traffic Signals LS LUMP SUM LS L	2930	Special 3005. Trnsp and Inst State Furn Radar Detection System IH 41 SB Off	LS	LUMP SUM	·
Special 3007. Covering Traffic Signal Equipment USH 18 & STH 181  2960 SPV.0105 Special 3008. Trnsp & Install State Furnished Autoscope Video Detection System IH 41 Ramps & W. Burleigh St.  2970 SPV.0105 Special 3009. Covering Traffic Signal Equipment STH 190 & Industrial Road  2980 SPV.0105 Special 3051. Removing Traffic Signals LS LUMP SUM	2940	Special 3006. Trnsp and Install State Furnished Autoscope Video Detection	LS	LUMP SUM	·
2960 SPV.0105 Special 3008. Trnsp & Install State Furnished Autoscope Video Detection System IH 41 Ramps & W. Burleigh St.  2970 SPV.0105 Special 3009. Covering Traffic Signal Equipment STH 190 & Industrial Road  2980 SPV.0105 Special 3051. Removing Traffic Signals LS LUMP SUM	2950	Special 3007. Covering Traffic Signal	LS	LUMP SUM	
Special 3009. Covering Traffic Signal Equipment STH 190 & Industrial Road  2980 SPV.0105 Special 3051. Removing Traffic Signals  LS LUMP SUM LS LUMP SUM LS LUMP SUM	2960	SPV.0105 Special 3008. Trnsp & Install State Furnished Autoscope Video Detection	LS	LUMP SUM	
2980 SPV.0105 Special 3051. Removing Traffic Signals LS LUMP SUM	2970	Special 3009. Covering Traffic Signal	LS	LUMP SUM	
	2980	SPV.0105 Special 3051. Removing Traffic Signals	LS	LUMP SUM	







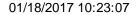
Page 21 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2990	SPV.0105 Special 3052. Transport & Install State Furnished Traffic Signal Cabinet IH 41 & STH 190	LS	LUMP SUM	<u> </u>
3000	SPV.0105 Special 3053. Transporting Traffic Signal and Lighting Materials IH 41 & STH 190	LS	LUMP SUM	
3010	SPV.0105 Special 3054. Transporting and Installing State Furnished Radar Detection System IH 41 & STH 190	LS	LUMP SUM	
3020	SPV.0105 Special 3101. Remove Traffic Signals W. North Avenue & N. 124th Street	LS	LUMP SUM	·
3030	SPV.0105 Special 3102. Remove Traffic Signals W. Center Street & N. 124th Street	LS	LUMP SUM	
3040	SPV.0105 Special 3103. Remove Traffic Signals W. Burleigh Street & N. 124th Street	LS	LUMP SUM	
3050	SPV.0105 Special 3104. Trnsp Traffic Signal and Lighting Materials W. North Avenue & N. 124th Street	LS	LUMP SUM	
3060	SPV.0105 Special 3105. Install State Furnished Municipal Traffic Signal Cabinet W. North Avenue & N. 124th Street	LS	LUMP SUM	
3070	SPV.0105 Special 3106. Install State Furnished Municipal Traffic Signal Cabinet W. Center Street & N. 124th Street	LS	LUMP SUM	
3080	SPV.0105 Special 3107. Video Vehicle Detection System W. North Avenue & N. 124th Street	LS	LUMP SUM	
3090	SPV.0105 Special 3108. Temp Traffic Signals for Intersections Partial W. North Avenue & N. 124th Street	LS	LUMP SUM	





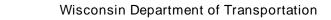


Page 22 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
3100	SPV.0105 Special 3109. Video Vehicle Detection System W. Burleigh Street & N. 124th Street	LS	LUMP SUM	
3110	SPV.0105 Special 3110. Operate and Maintain Traffic Signal W. Burleigh Street & N. 124th Street	LS	LUMP SUM	
3120	SPV.0105 Special 3111. Remove Traffic Signals W. Burleigh Street & N. 119th Street	LS	LUMP SUM	
3130	SPV.0105 Special 3112. Remove Traffic Signals W. Burleigh Street & N. 114th Street.	LS	LUMP SUM	
3140	SPV.0105 Special 3113. Install State Furnished Municipal Traffic Signal Cabinet W. Burleigh Street & N. 119th Street	LS	LUMP SUM	
3150	SPV.0105 Special 3114. Install State Furnished Municipal Traffic Signal Cabinet W. Burleigh Street & N. 114th Street	LS	LUMP SUM	
3160	SPV.0105 Special 3115. Video Vehicle Detection System W. Burleigh Street & N. 119th Street	LS	LUMP SUM	
3170	SPV.0105 Special 3116. Video Vehicle Detection System W. Burleigh Street & N. 114th Street	LS	LUMP SUM	
3180	SPV.0105 Special 3117. Video Vehicle Detection System W. Burleigh Street & N. 112th Street	LS	LUMP SUM	
3190	SPV.0105 Special 3200. Mast Arm Retrofit Structure B-40-333	LS	LUMP SUM	
3200	SPV.0105 Special 3210. Mast Arm Retrofit Structure B-40-334	LS	LUMP SUM	





## Proposal Schedule of Items

Page 23 of 23

Federal ID(s): N/A, WISC 2017102

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
3210	SPV.0180 Special 0001. Concrete Pavement HES 8-Inch Special	34.000 SY		
	Section: 000	01	Total:	
			Total Bid:	

## PLEASE ATTACH SCHEDULE OF ITEMS HERE