#### HIGHWAY WORK PROPOSAL

Proposal Number:

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

COUNTY STATE PROJECT ID FEDERAL PROJECT ID PROJECT DESCRIPTION HIGHWAY

(Moorland Road)

Waukesha 2722-11-70 WISC 2014 003 Lincoln Avenue Calhoun Road to CTH O

Local Street

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: February 11, 2014 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
October 31, 2014	NOT FOR BIDDING FOR COLO
Assigned Disadvantaged Business Enterprise Goal 13 %	This contract is exempt from federal oversight.

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

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.			
Subscribed and sworn to before me this date			
(Signature, Notary Public, State of Wisconsin)	(Bidder Signature)		
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)		
(Date Commission Expires)  Notary Seal	(Bidder Title)		

#### For Department Use Only

Type of Work

Removals, grading, base aggregate, HMA pavement, concrete curb and gutter, storm sewer, bioswales, underdrain, pavement markings, erosion control, contaminated material handling, traffic control, watermain adjustments, and sanitary manhole adjustments.

Notice of Award Dated Date 0

Date Guaranty Returned

## PLEASE ATTACH PROPOSAL GUARANTY HERE

#### **Effective with November 2007 Letting**

#### PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **Effective with August 2007 Letting**

#### **BID PREPARATION**

### Preparing the Proposal Schedule of Items

#### A General

- Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  - 1. Electronic bid on the internet.
  - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
  - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at <a href="http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm">http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm</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™ on-line bidding exchange at <a href="http://www.bidx.com/">http://www.bidx.com/</a> after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.
- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

email: mailto:customer.support@bidx.com

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at <a href="http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm">http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm</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.

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

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

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

- 1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
- 2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
- 3. Submit the bid according to the requirements of Expedite<sup>™</sup> software and the Bid Express<sup>™</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

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

**Bidder Name** 

**BN00** 

Proposals: 1, 12, 14, & 22

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

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

#### C Waiver of Electronic Submittal

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

#### PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

#### **PRINCIPAL**

(Company Name) (Affix Corpora	te Seal)		
(Signature and Title)			
(Company Name)	_		
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTARY FO	R PRINCIPAL	NOTARY FO	R SURETY
(Da	ate)	(Dat	e)
State of Wisconsin	)	State of Wisconsin	)
	) ss. _ County )		) ss. County )
On the above date, this instrument vnamed person(s).	vas acknowledged before me by the	e me by the On the above date, this instrument was acknowledged befor named person(s).	
(Signature, Notary Pub	lic, State of Wisconsin)	(Signature, Notary Publi	c, State of Wisconsin)
(Print or Type Name, Notary	Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)	
(Date Commi	ssion Expires)	(Date Commiss	sion Expires)

Notary Seal Notary Seal

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

### **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

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

(Signature of Authorized Contractor Representative)

#### March 2010

#### LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	<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**

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#### SPECIAL PROVISIONS

#### 1. General.

Perform the work under this construction contract for Project 2722-11-70 Lincoln Avenue, Calhoun Road to CTH O (Moorland Road), Local Street, Waukesha County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2014 Edition, as published by the department, and these special provisions.

Perform water main work, sanitary sewer work, underdrain cleanouts and storm sewer pipe bedding under this contract in accordance to the Standard Specifications for Sewer & Water Construction in Wisconsin, Sixth Edition dated December 22, 2003, Addendum No. 1 dated December 22, 2004 and Addendum No. 2 dated April 22, 2008. Copies of these Sewer & Water Specifications are available from the Public Works Industry Improvement Program, 2835 North Mayfair Road, Milwaukee Wisconsin 53222, (414) 778-1050. If there is a discrepancy or conflict between the referenced specifications and the standard specifications regarding contact 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.

## 2. Scope of Work.

**3.** 

The work under this contract shall consist of removals, grading, base aggregate, HMA pavement, concrete curb and gutter, storm sewer, bioswales, underdrain, pavement markings, erosion control, contaminated material handling, water main adjustments, sanitary manhole adjustments and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

## **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.

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

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

#### **Fish Spawning**

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

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

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

South Calhoun Road and CTH O, Moorland Road shall remain open throughout this contract. West Lincoln Avenue westbound traffic shall be closed and detoured.

The schedule for each stage shall be as follows below, unless modifications are approved in writing by the engineer.

**Stage 1** activities shall include temporary widening of West Lincoln Avenue to the north by paving the existing gravel shoulders and widening South Commerce Drive to the east by placing additional base aggregate dense, as shown in the plans. Stage 1 also includes placing the outfall pipe for the conveyance storm sewer on the northwest side of Deer Creek, pipe P-16.1.

**Stage 2** activities shall include construction the south side of West Lincoln Avenue, South 170th Street, South Commerce Drive and South 126nd Street. Stage 2 construction also includes the south storage storm sewer system and the south side bioswales. All laterals to the north in the conveyance storm sewer system shall be temporary bulkheaded near the centerline of West Lincoln Avenue.

**Stage 2A** activities include construction of the western half of South Commerce Drive and a temporary connection from existing West Lincoln Avenue to the newly constructed South Commerce Drive. The temporary connection is between Station 44+40 to Station 45+00 referenced from the South Commerce Drive reference line.

**Stage 2B** activities include construction of the eastern half of South Commerce Drive and final construction of the Stage 2A temporary connection in the southwest quadrant.

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**Stage 3** activities shall include construction the north side of West Lincoln Avenue, the Calhoun Frontage Road, the north sides of South 170th Street and South 162nd Street. Stage 3 construction also includes completing the conveyance storm sewer system, the north storage storm sewer system and the north side bioswales.

#### **B** Work Restrictions

Comply with all local ordinances that apply to work operations, including those pertaining to working during nighttime work hours. The City of New Berlin allows construction operations between 7:00 AM and 7:00 PM. Any ordinance variance issued by the municipality or required permits shall be furnished to the engineer, by the contractor, in writing three working days before performing such work.

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

Maintain pedestrian and vehicular access to all commercial and private properties along west Lincoln Avenue at all times unless otherwise noted in the plan and except during construction of the driveways. During driveway construction, do not close any driveway approach or remove from service without providing a five day notice to the occupants of the premises to remove their vehicles prior to driveway removal or closing of the driveway approach access. When necessary, provide alternate access during driveway construction. Replace the driveway as expeditiously as possible to minimize the inconvenience to the occupants whose driveway has been removed or closed. For large commercial driveways, construct the driveways in halves. For smaller driveways that are the only access point, high early strength concrete was specified. Driveway access can be temporarily maintained by placing removed asphaltic material or removed base aggregate materials.

Submit all traffic control change requests to the engineer at least 48 hours prior to an actual traffic control change. A request does not constitute approval.

#### 4. Traffic.

#### A General

The construction traffic control shall be substantially accomplished as detailed in the Traffic Control Plans, and as described herein.

Traffic requirements under this contract shall be coordinated with other adjacent and concurrent Department of Transportation or local municipality projects. The contractor shall be responsible for implementing and coordinating with other contractors all traffic control as shown on the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

Unless detailed in the plans, the contractor shall not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article Traffic.

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## 5. Holiday Work Restrictions.

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

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

107-005 (20050502)

#### 6. Utilities.

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

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 statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

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

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

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

Known utilities on the projects are as follows:

**AT&T** has underground Fiber Optic conduit running the length of the project along the RT ditch of Lincoln Avenue. This fiber optic line crosses the side roads of South 170th Street, South Commerce Drive and South 162nd Street. These facilities will remain in place without adjustment except for resetting three manhole covers on fiber optic vaults to the new proposed grade. The information for these three manholes is as follows:

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Station	Offset	Change in Grade	MH work
212+57	29' RT	+ 0.08'	Adjust
225+39	27' RT	+ 4.00'	Rebuild
237+99	35' RT	+ 1.00'	Adjust

These manholes with be adjusted and/or reconstructed in conjunction with the contractor's operations. AT&T needs access maintained to these three manholes at all times. AT&T will need a three day advanced notice prior when these manholes need to be adjusted and/or reconstructed.

The following locations have been identified as areas of concern due to proposed excavation above the fiber optic conduit to remain in place:

Station	Offset	Depth of Excavation	Proposed work	
201+20	38' RT	1.0'	24" SSPRC	
203+94 /98	39' RT	1.8'	12" PUU	
206+10 to	36' RT to	1.02	Bioswale 5	
207+10	37' RT	1.0'		
207+54	35' RT	2.7'	18" SSPRC	
208+15	37' RT	3.2'	18" SSPRC	
213+49	29' RT	2.1'	12" SSPRC	
215+48	28' RT	0.9'	12"PUU	
219+60	28' RT	2.8'	18" SSPRC	
221+50	28' RT	0.2'	12"PUU	
223+50	28' RT	1.6'	12" SSPRC	
226+40	31' RT	1.2	12"PUU	
229+25	29' RT	0.7	6"PUU	
233+88	33' RT	0.5'	24"SSPRC	
235+65 to	32' RT	0.5'	Bioswale 29	
236+70	32 K1	0.3		
236+83	38' RT	3.4'	12"PUU	
237+13	37' RT	2.1'	15" SSPRC	
237+73	35' RT	2.1'	15" SSPRC	
237+86	35' RT	3.1'	6"PUU	
242+46	37' RT	1.5'	12"PUU	
245+32 to	36' RT	4.0''	Bioswale 39 and	
246+50	30 K1	4.0	6"PUU	
246+25	36' RT	3.4'	12"PUU	

The proposed 30-inch storm sewer pipe P-9.3 between Stations 212+33 and 213+55 will be jacked under the Union Pacific Railroad with a 36-inch steel carrier pipe. This carrier pipe will be within 2 feet horizontally of the casing pipe around the AT&T fiber optic conduit at Station 213+00.

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Grading for several bioswales will occur above this fiber optic conduit long the south side of Lincoln Avenue. This will occur at Bioswales 1, 3, 5, 25, 27, 29, 31, 33, 37 and 39. The maximum depth of cut above the fiber optic line is approximately 24 inches except at the south end of Bioswale 39. Contractor shall use care in excavation for the engineered soil on the south end of Bioswale 39 where the maximum depth of cut above the fiber optic line is approximately 48 inches.

Currently the exact cover over the AT&T lines crossing Lincoln Avenue between Stations 212+62 and 212+68 is not known. Test holes will be performed in January 2014.

If any of fiber optic conduit needs to be lowered for a storm sewer conflict, the adjustment will be done during construction. If the fiber optic conduit needs to be lowered through a bioswale, the conduit will be adjusted prior to construction.

AT&T has a buried cable on the south side of Lincoln Avenue between Stations 228+96 to 233+97. The offset for this facility varies from 42 feet RT to 50 feet RT. This buried cable will be under the proposed Bioswales 21 and 23. AT&T will be abandoning this cable in place prior to the start of construction. A new AT&T buried cable will be installed along the north side of Lincoln Avenue between Station 229+00 to 234+00 at an offset of 37' LT prior to the start of construction. This installation also includes a crossing of Lincoln Avenue at Station 234+00 at an elevation of 837.00 which is below the elevation of the proposed storm sewer.

AT&T has buried cables crossing West Lincoln Avenue perpendicularly at the following locations:

Station 204+40, Station 207+45, Station 212+70, Station 212+80, Station 213+43, Station 213+49, Station 228+65, Station 228+96 and 234+00.

All of these cable crossings have new storm sewer to be installed at approximately 6 feet below grade except for Station 234+00 which is only 3.4 feet of cut to the proposed storm sewer elevation.

The AT&T cable crossing at Station 204+40 will be abandoned in place prior to the start of construction. A new crossing of Lincoln Avenue will be installed at Station 204+45 at an elevation of 837.00 which is below the elevation of the proposed storm sewer.

The AT&T cable crossings at Station 207+45 will be abandoned in place prior to the start of construction. A new crossing of Lincoln Avenue will be installed at Station 208+18 at an elevation of 841.00 which is below the elevation of the proposed storm sewer. This installation will also include a new installation of a buried line on the south side of Lincoln Avenue between Station 208+20 and Station 212+55 at an offset of 33'RT.

The AT&T cable crossings at Stations 212+62 to 212+68 will be abandoned in place prior to the start of construction. A new crossing of Lincoln Avenue will be installed at Station 213+55 at an elevation of 837.00 which is below the elevation of the proposed storm sewer.

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The AT&T cable crossings at Stations 213+43 to 213+49 will be abandoned in place prior to the start of construction. A new crossing of Lincoln Avenue will be installed at Station 213+55 at an elevation of 837.00 which is below the elevation of the proposed storm sewer.

The AT&T field contact is Joel Ostrengra, (262) 896-6527, jo4761@att.com.

The **City of New Berlin** has a 12-inch sanitary sewer along the centerline of West Lincoln Avenue through the limits of this project. These 13 manholes will be adjusted and/or reconstructed as a part of this contract. The City of New Berlin has 32 sanitary laterals crossing West Lincoln Avenue to the properties throughout this project. The pipe sizes of these sanitary laterals are between 6 inches to 10 inches. The sanitary laterals are deep enough that they are not in conflict with the roadway construction. Limited data is available on the elevations of the sanitary laterals beyond the right-of-way. It is assumed for this contract that these sanitary laterals are all deep enough to not conflict with the proposed bioswales.

The City of New Berlin has a 16-inch water main 13 feet north of the centerline of West Lincoln Avenue through the limits of the project. This 16-inch water main has 13 6-inch hydrant assemblies which will be removed and new hydrant assemblies installed. Seven of the new hydrants will require modular block walls around the outer edge closest to the proposed bioswales. All of the seven 16-inch butterfly valves on the 16-inch water main in the project limits will be replaced. This work will involve 130 linear feet of new 16-inch water main.

The City of New Berlin has 8-inch water mains 10 feet east of the centerline of South 170th Street, South Commerce Drive and South 162nd Street. These facilities will remain in place without adjustment except for seven gate valves that will be removed and replaced. This work will involve 49 linear feet of new 8-inch water main.

The City of New Berlin has the following water service/fire protection laterals off the 16-inch water main:

Station	Offset	Size (inches)	Station	Offset	Size (Inches)
206+16	LT	6	232+65	LT	4
211+29	LT	2	235+78	RT	2
216+88	LT	8	239+57	LT	2
216+91	LT	8	239+95	RT	4
225+36	RT	8	243+54	RT	2
225+41	LT	6	245_40	LT	8
228+93	LT	4	247+27	RT	8
229+02	LT	10	247+50	RT	6
229+45	RT	8	247+92	LT	8

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Four of these water service laterals require a portion of the water service line to be relaid at a lower elevation to avoid the bioswales construction:

- 2-inch lateral at Station 211+30, LT requires 20 linear feet of relocation including the stop box
- 2-inch lateral at Station 235+78, RT requires 30 linear feet of relocation including the stop box
- 4-inch lateral at Station 239+95, RT requires 30 linear feet of relocation
- 1 1/4-inch lateral at Station 243+54, RT requires 50 linear feet of relocation

All water service laterals or water mains that have a storm sewer pipe crossing above them, will require at least 4 inches of insulation be placed under the crossing storm sewer pipe.

The City of New Berlin contact for the sanitary sewers and water mains is J. P. Walker, (262) 797-2453, <u>jwalker@newberlin.org.</u>

**TDS Metrocom** has no conflicts with this construction project.

The TDS Metrocom contact is Matthew Schulte, (262) 754-3063.

**Midwest Fiber Networks** has an overhead cable crossing of West Lincoln Avenue on We Energies poles at Station 204+50. These Midwest Fiber Networks facilities are on We Energy poles that are to be relocated prior to construction. Midwest Fiber Networks will transfer their facilities on to the relocated We Energies poles prior to the start of construction.

The Midwest Fiber Networks contact is Richard Trgovec, (414) 672-5612, rtrgovec@midwestfibernetworks.com.

**Time Warner Cable** has three overhead cable crossings of West Lincoln Avenue on We Energies poles at Stations 204+50, 212+80 and 233+90. These facilities are not in conflict with the construction and will remain in place without adjustment.

Time Warner Cable has facilities on several We Energy poles that are to be relocated prior to construction. Time Warner Cable will transfer their facilities on to the relocated We Energies poles prior to the start of construction.

Time Warner Cable has an underground line to the Hanson building at 16300 west Lincoln Avenue. This underground line is in conflict with a proposed bioswales and will be relocated prior to the start of construction.

The Time Warner Cable contact is Steve Cramer, (414) 277-4045 (steve.cramer@twcable.com).

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**TW Telecom** has an overhead cable crossing of West Lincoln Avenue on We Energies poles at Station 204+50. These TW Telecom facilities are on We Energy poles that are to be relocated prior to construction. TW Telecom will transfer their facilities on to the relocated We Energies poles prior to the start of construction.

The TW Telecom contact is Brahim Gaddour (414) 908-1027 (braimgaddour@twtelecom.com).

**WE-Energies** – **Electric** has aerial electric distribution facilities on the north side of the West Lincoln Avenue from Calhoun Road to a point approximately 430 feet east. These facilities will be relocated north several hundred feet, outside the construction limits prior to the start of construction.

We Energies Electric has an underground electric line on the south side of West Lincoln Avenue from Calhoun Road west to the Union Pacific Railroad right-of-way. These facilities will be abandoned prior to the start of construction.

We Energies Electric has an existing power pole on the north side of West Lincoln Avenue at Station 201+89. This facility will remain in place and a luminaire will be added to the power pole.

We Energies Electric has an existing power pole with a luminaire in the northwest quadrant of the intersection of West Lincoln Avenue and South 170th Street. This facility will remain in place without adjustment.

We Energies Electric has an existing power pole with a luminaire in the southwest quadrant of the intersection of West Lincoln Avenue and South Commerce Drive. This facility will remain in place without adjustment.

We Energies Electric has an existing power pole with a luminaire in the northeast quadrant of the intersection of West Lincoln Avenue and South 162nd Street. This facility will remain in place without adjustment.

The WE-Energies Electric contact is Clark Bohnert, (414) 994-5519 mobile, (414) 507-3946 (clark.bohnert@we-energies.com).

#### **WE-Energies** – **Gas** facilities include the following:

- 4-inch gas line is located approximately 20 feet south of the centerline of West Lincoln Avenue through the project limits with various laterals throughout the project.
- A 2-inch gas line runs along the LT ditch of South 170th Street crossing the mainline near Station 207+60
- A 6-inch gas line runs along the LT ditch of South Commerce Drive connecting with the mainline gas near Station 219+00
- A 2-inch gas line that runs south from the 4-inch gas line along West Lincoln Avenue at Station 228+20

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• A 2-inch gas line runs along the LT ditch of South 162nd Street crossing the mainline near Station 237+20

We Energies – Gas has perpendicular service connections from West Lincoln Avenue at the following stations:

210+33 RT	225+94 RT	239+18 RT
215+41 LT	226+18 LT	241+42 LT
215+85 RT	228+20 RT	244+03 RT
221+01 RT	228+65 RT	245+69 RT

Prior to construction, WE-Energies Gas will relocate all of their facilities through the entire project limits.

The 4-inch main along the south side of West Lincoln Avenue between South Calhoun Road and South 170th Street will be abandoned in place.

The 4-inch gas main on the south side of West Lincoln Avenue between South 170th Street and Deer Creek will be relocated to the north side of West Lincoln Avenue behind the proposed north side curb and gutter. The offset for this relocated 4-inch gas main on the north side of West Lincoln Avenue will vary between 25 feet and 36 feet from the roadway centerline, to work around existing and proposed water hydrants and the proposed bioswales.

The 4-inch gas main on the south side of West Lincoln Avenue between Deer Creek and South Moorland Road will be relocated approximately 8 feet farther south of the existing 4-inch main. The offset for this relocated 4-inch gas main will vary between 26 and 30 feet south of the West Lincoln Avenue centerline.

The 2-inch gas line on the west side of South 170th Street will be abandoned in place and relocated to the east side of the roadway through the construction limits, Station 18+35 to 22+12. This relocated 2-inch gas line will be installed approximately 3 feet west of the right-of-way line, approximately 37 feet east of the centerline of South 170th Street.

The 2-inch gas running south from West Lincoln Avenue at Station 228+20 will be abandoned in place for 60 feet and relocated 5 feet to the east from the north side of West Lincoln Avenue until reconnecting approximately 80 feet right of the West Lincoln Avenue reference line.

The 6-inch gas line along the west side of South Commerce Drive will be abandoned in place and relocated approximately 5 feet farther west through the construction limits, Station 43+30 to 45+00 at West Lincoln Avenue. This relocated 6-inch gas line will be installed approximately 23 feet west of the centerline of South Commerce Drive.

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The 2-inch gas line on the west side of South 162nd Street will be abandoned in place and relocated farther west through the construction limits, Station 57+70 to 62+50. This relocated 2-inch gas line will be installed approximately 3 feet east of the right-of-way line south of West Lincoln Avenue and approximately 1-foot east of the right-of-way line north of West Lincoln Avenue.

WE-Energies will adjust gas laterals as necessary during construction. The former gas lateral at Station 225+94, RT will be relocated to approximately Station 225+62, RT. The former gas lateral at Station 226+18, LT will be relocated to approximately Station 223+84, LT. The former gas lateral at Station 228+65, LT will be relocated to approximately Station 227+54, LT. The former gas lateral at Station 239+18, RT will be relocated to approximately Station 57+32, RT off of South 162nd Street. The former gas lateral at Station 241+42, LT will be relocated to approximately Station 241+79, LT. The former gas lateral at Station 244+03, RT will be relocated to approximately Station 243+11, RT. The former gas lateral at Station 245+69, LT will be relocated to approximately Station 245+88, LT. Give WE-Energies Gas 48 hours' notice for gas lateral adjustments.

The anticipated start date for the relocation of WE-Energies gas facilities is January 20, 2013 with estimated construction duration of 60 working days. The WE-Energies Gas contact is Joe Dable, (414) 944-5543, (joe.dable@we-energies.com).

#### **Railroad Fiber Optic Lines:**

#### **Union Pacific Railroad Company Fiber Optic Lines**

Call "Diggers Hotline" and additionally contact the Union Pacific Railroad Company "call before you dig" office at (800) 336-9193. Normal business hours are 7:00 AM to 9:00 PM, Central Time, Monday through Friday, except holidays. Reference New Berlin, Wisconsin, Mile Post MP 14.00 on the Waukesha Subdivision to verify the location of fiber optic lines located on railroad right-of-way at the construction site. Calls will be routed at all times in case of an emergency.

#### **Fiber Optic Lines**

Call "Diggers Hotline" and additionally contact John Venice Manager Special Projects – Industry and Public Projects Engineering Department, 101 North Wacker Drive, Suite 1920, Chicago, IL 60606, Telephone (312) 777-2043, Fax 402-233-2769, Email <a href="mailto:invenice@up.com">invenice@up.com</a>. five working days before any work is performed. The railroad will determine if fiber optic or other type of cable is buried in the general work location. If present, contact the owner of the fiber optic or cable line to determine its exact location.

Contact the local governing road authority to find out if there are any locally owned facilities within the project limits.

#### 7. Railroad Insurance and Coordination.

#### **A Description**

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

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#### A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to John Venice, Manager Special Projects – Industry and Public Projects Engineering Department, 101 North Wacker Drive, Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, Email <a href="mailto:invenice@up.com">invenice@up.com</a>.

. Include the following information on the insurance document:

Project 2722-11-70

Route Name Lincoln Avenue, Waukesha County

Crossing ID 177 289G

Railroad Subdivision Waukesha Subdivision

Railroad Milepost MP 14.00

#### 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. Upgrade crossing surface and install and maintain yield signs and crossbucks.

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

Contact John Venice, Manager Special Projects – Industry and Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, Email <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 two through freight trains operate weekly through the construction site. Through freight trains operate at up to 10 mph.

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### 8. Hauling Restrictions.

*Supplement standard spec 107.2 with the following:* 

Five business days in advance of any proposed hauling on local streets, present the proposed haul route plan to the City of New Berlin, to the attention of Mr. J P Walker, (262) 797-2453. The haul route submittal shall include the months, days of the week, time of day, number of trucks, types of trucks and maximum loads of trucks anticipated to accomplish the project work.

The City of New Berlin will review the submittal and issue a hauling permit or provide a letter with comments and proposed revisions to the contractor within five business days of its receipt. The contractor shall provide copies of the approval to the engineer prior to hauling on local streets. Any damage to the haul roads will be paid for by the contractor.

At all times, conduct operations in a manner that will cause a minimum of disruption to traffic on existing roadways.

#### 9. Environmental Protection and Erosion Control.

*Supplement standard spec 107.18 with the following:* 

Take adequate precautions to install and maintain necessary erosion and sediment control during grading and construction operations at curbs and gutters, and at other locations as determined by the engineer. Protect storm drain inlets and manholes at locations determined by the engineer with a filter fabric or equivalent barrier meeting accepted design criteria, standards, and specifications.

If dewatering is required, pump the water removed into a settling basin before it is allowed to reenter the storm/combined sewer system. The cost of settling basin(s) construction will be paid for as erosion bales and geotextile fabric Type FF. Maintenance, operation and removal of temporary settling basin(s) will be incidental to the cost of constructing the settling basin(s). It will not be paid for separately. The design of settling basin(s) shall be approved by the engineer.

Do not store equipment or material in areas that are within 10 feet of wetlands or existing waterways.

Do not use fertilizer in areas that are within 10 feet of wetlands or existing waterways.

Place stockpiled spoil material on an upland site an adequate distance from the stream and any open water created by excavation. Install silt fence between the spoil pile and excavation site and between any disturbed area and the waterway. Seed and mulch, or sod all disturbed areas as designated in the plans as soon as possible following construction. Leave the silt fence in place until the seeded area has produced sufficient grass cover to stabilize the area and thereby reduce the danger of site erosion.

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Store all containers (drums of concrete curing agents, petroleum storage tanks, pressurized gas cylinders, etc.) in secure locations to avoid an attractive nuisance and to prevent vandalism, spills, and unwanted dumping. If abandoned containers are found, notify Mike Thompson, DNR, (414) 263-8648 or the DNR Hotline (24hrs/day), (800) 943-0003 to report the incident.

*Supplement standard spec 107.20 with the following:* 

Provide the Erosion Control Implementation Plan (ECIP) 14 days prior to the pre-construction conference. Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion.

Topsoil terrace areas, as designated by the engineer, immediately after concrete curb and gutter has been completed within those areas. Seed, mulch and fertilize all topsoiled areas within five working days after placement of the salvaged topsoil.

Do not pump water from the construction site to a storm water conveyance without the water first passing through a sediment trap.

Construct temporary sediment traps at locations that do not interfere with construction operations.

*Replace standard spec 107.20(3) with the following:* 

Prepare and submit an Erosion Control Implementation Plan (ECIP) for the project, including borrow sites and material disposal sites, in accordance to Chapter TRANS 401 requirements. The ECIP shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan shall identify how the contractor intends to implement the project's erosion control plan.

## 10. Public Convenience and Safety.

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

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

#### 11. Lead Paint Notice.

Lead based paint is not present on the steel components of existing water appurtenances to be removed under this project. The existing water valve vaults were tested by The Sigma Group in June of 2013. For a copy of the report dated July 2, 2013. Contact J. P. Walker at the City of New Berlin, (262) 797-2453, jwalker@newberlin.org.

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

Both the department and the City of New Berlin personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and final acceptance of the sanitary sewer and water main construction will be by the City of New Berlin. Contact Mr. J. P. Walker, (262) 797-2453. 105-001 (Revised)

# 13. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The City of New Berlin has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the city by contacting Mr. J P Walker, (262) 797-2453. 107-054 (20080901)

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

Supplement standard spec 107.19 with the following:

The Deer Creek is classified as a navigable waterway. 107-060 (20040415)

#### 15. Notice to Contractor – 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:

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.

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

Blue ash (*F. quadrangulata*) is a threatened species that is currently found only at a few sites in Waukesha County. The species is at the edge of its range in Wisconsin, but is common in states farther south. The species is not of commercial importance. Blue ash twigs are 4-sided.

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.

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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 in accordance to standard spec 201.3 (14).

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

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

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

Chips must be disposed of immediately 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.

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#### Ash logs, Branches, and Roots

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

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

Burning is optional if in compliance with standard spec 201.3.

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

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

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

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#### **Regulated Items**

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

#### 16. Coordination with Businesses.

The contractor shall arrange and conduct a meeting between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting prior to the start of work under this contract and hold one meeting per month thereafter.

108-060 (Revised)

#### 17. Section Corner Monuments.

The Southeast Wisconsin Regional Planning Commission (SEWRPC) will remove and replace the section corners monuments within the project limits. Contact John Washburn at (414) 218-2866 to coordinate removal or replacement of section corner monuments at least 14 days prior to excavating and removing pavement near the monuments or paving near the section corners.

## 18. Abandoning Sewer, Item 204.0291.S.

#### **A Description**

This special provision describes abandoning existing sewer by filling it with cellular concrete according to the pertinent requirements of standard specs 204 and 501, as shown in the plans, and as hereinafter provided.

#### **B** Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3 Provide water meeting the requirements of standard spec 501.2.4.

#### **C** Construction

Fill the abandoned sewer pipe with cellular concrete as directed by the engineer. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

#### **D** Measurement

The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

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### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 204.0291.S Abandoning Sewer CY

Payment is full compensation for furnishing all materials, excavating and backfilling where necessary.

# 19. Removing Wall Modular Block, Item 204.9165.S.01.

# **A Description**

This special provision describes removing portions of a modular block wall in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

### B (Vacant)

### **C** Construction

Conduct removal work in a prudent manner and exercise care to preclude damage to any property. The contractor is responsible for any damage caused by their removal operations to facilities intended to remain. Protect parking lot pavement surfaces during the removal process.

All materials generated during removal activities shall become the property of the contractor for salvage and/or off-site disposal by contractor.

### **D** Measurement

The department will measure Removing Wall Modular Block by the square foot, acceptably completed.

### **E** Payment

Supplement standard spec 204.5 to include the following:

ITEM NUMBER DESCRIPTION UNIT 204.9165.S.01. Removing Wall Modular Block SF 204-025 (20041005)

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

### A Description

### A.1 General

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

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Orchard Ridge Recycling and Disposal Facility W124 N9355 Boundary Road Menomonee Falls, WI 53051 operated by Waste Management

Superior Emerald Park Landfill W124 S10629 South 124<sup>th</sup> Street Muskego, WI 53150 operated by Veolia Environmental Services

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 has not completed testing for soil and groundwater contamination for locations within this project where excavation is required. However, there is record of a historical spill on West Lincoln Avenue at South 163rd Street. The estimated volume of contaminated soil to be excavated at this location is 250 cubic yards.

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

### A.3 Coordination

Coordinate work under this contract with the environment consultant:

Name: STS Consultants, Ltd. (Please contact WisDOT, SE Region)

Address: 11425 West Lake Park Dr., Milwaukee, WI 53224

Contact: Dennis Lawton Phone: (414) 577-1368 Fax: (414) 359-0822

E-mail: <u>lawton@stsconsultants.com</u>

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated soil to be excavated based on, 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.

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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 off-site without prior approval from the environmental consultant.

# A.4 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

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

Supplement standard spec 205.3 with the following:

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,

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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.

### **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. 205-003 (20080902)

# 21. QMP Base Aggregate.

# **A Description**

### A.1 General

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

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

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

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

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

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

- If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.
- [2] For 3-inch material, obtain samples at load-out.
- [3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
- 3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
- 4. Department verification testing is optional for quantities of 6000 tons or less.

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(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

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

### **B.2** Personnel

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

Required Certification Level:	Sampling or Testing Roles:
Aggregate Technician IPP	Aggregate Sampling <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.

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

## **B.3** Laboratory

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

Materials Management Section 3502 Kinsman Blvd. Madison, WI 53704

Telephone: (608) 246-5388

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

# **B.4 Quality Control Documentation**

### **B.4.1** General

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

### **B.4.2 Records**

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

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

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

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

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

### **B.6 Test Methods**

### **B.6.1** Gradation

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

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

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- 1. Control limits are at the upper and lower specification limits.
- 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
- 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
- 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

### **B.6.2** Fracture

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

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

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

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

### B.7.1 General

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

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

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
  - 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
  - 2. For fracture, increase the QC testing frequency to at least one test per gradation test.

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

# **B.8 Department Testing**

# **B.8.1** General

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

# **B.8.2** Verification Testing

### B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
  - 1. One non-random test on the first day of placement.
  - 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

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- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

# **B.8.3** Independent Assurance

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

# **B.9 Dispute Resolution**

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

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(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

### C (Vacant)

### D (Vacant)

### **E** Payment

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

# 22. Base Aggregate Dense 1 1/4-Inch for Lower Base Layers.

*Replace standard spec 305.2.2.1(2) with the following:* 

- 1. Use 1 1/4-inch base throughout the full base depth.
- 2. Use 3/4-inch base in the top 3 inches of the unpaved portion of shoulders. Use 3/4-inch base or 1 1/4-inch base elsewhere in shoulders.

305-020 (20080902)

# 23. QMP HMA Pavement Nuclear Density.

### **A Description**

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

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- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
  - 1. Selection of test sites.
  - 2. Testing.
  - 3. Necessary adjustments in the process.
  - 4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:

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

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/mrs

### **B** Materials

### **B.1 Personnel**

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

### **B.2** Testing

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

# **B.3** Equipment

### **B.3.1** General

(1) Furnish nuclear gauges from the department's approved product list at <a href="http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm">http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm</a>.

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- (2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.
- (3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:

Materials Management Section 3502 Kinsman Blvd. Madison, Wisconsin 53704 Telephone: (608) 243-5998

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

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

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

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

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.
- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.

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- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft<sup>3</sup> of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft<sup>3</sup> of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

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

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

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

- (1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.
- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.
- (5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.
- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

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

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

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

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

# Table 2

# **B.4.2 Pavement Density Determination**

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

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

# **B.4.2.2** Mainline Shoulders

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

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

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

(1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.

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(2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

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

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

### **B.4.2.4 Documentation**

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

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

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

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# **B.5** Department Testing

# **B.5.1 Verification Testing**

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

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

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

### **B.6 Dispute Resolution**

(1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.

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

## **B.7** Acceptance

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

### C (Vacant)

### D (Vacant)

# **E** Payment

# **E.1 QMP Testing**

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

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

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

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

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

Pay Adjustment Per Ton
\$0
\$0.40
\$0.80

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

# 24. Concrete Curb and Gutter 30-Inch Type D.

The concrete curb and gutter shall conform to all requirements of standard spec 601, the construction detail in the plans and as herein after provided.

The concrete curb and gutter 30-inch Type D for this project shall be 9 1/2 inches thick at the flange line and 8 inches thick at the face of the curb as shown on the construction detail in the plans.

All materials shall conform to standard spec 601.2. All construction methods shall conform to standard spec 601.3.

# 25. Pipe Grates, Item 611.9800.S.

### **A Description**

This special provision describes furnishing and installing pipe grates on the ends of pipes as shown in the plans, and as hereinafter provided.

### **B** Materials

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish pipe grates galvanized according to ASTM A123.

Furnish angles and brackets galvanized according to ASTM A123.

Furnish required hardware galvanized according to ASTM A153.

### **C** Construction

Repair pipes, rods, angles and brackets on which the galvanized coating has been damaged in accordance to the requirements of AASHTO M36M.

### **D** Measurement

The department will measure Pipe Grates in units of work, where one unit is one grate completed and accepted.

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# E Payment

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

ITEM NUMBER DESCRIPTION UNIT 611.9800.S Pipe Grates Each

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting grates to pipes. 611-010 (20030820)

# 26. Landscape Planting Surveillance and Care Cycles.

Replace standard spec 632.3.18.1.1 General as follows:

The plant establishing period of one year shall follow the completion of planting.

Standard spec 632.3.19.1 is replaced as follows:

Properly care for plants from the time they sprout until final acceptance of the work.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of \$500 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

# 27. Removing and Replacing Roadway Signs.

The City of New Berlin will be responsible for removing and reinstalling any existing permanent signing along Lincoln Avenue project corridor that is in conflict with the proposed work. Provide a three day notice to Mr. Don Ullman to coordinate sign removal or reinstallation of any signs (262) 780-4609.

The contractor shall be responsible for any damage to these signs.

### 28. 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.

Provide the Waukesha County Sheriff's 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.

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

Yield to all through traffic at all locations. Equip all construction vehicles and equipment operating on or near roadways open or closed to traffic, with at least one flashing amber light. The flashing amber light shall be activated when vehicles or equipment are operated on the roadway, parked in close proximity to the roadway, and when entering or exiting live lanes of traffic. Mount the flashing amber light approximately midway between the transverse extremities of the vehicles or machinery and at the highest practical point that provides visibility from all directions. The light shall be of the flashing strobe or revolving type meeting the following minimum requirements:

Flashing Strobe Type Light	Revolving Type Light
360-degree lens	360-degree lens
60 to 90 flashes per minute	45 to 90 flashes per minute
5-inch minimum height	4-5/8 inch minimum height
3-3/4 inch minimum diameter	3-3/4 inch minimum diameter

Equip the light with bulbs of 50 candlepower minimum. Use magnetic or permanent mounting. No compensation for furnishing and installing the flashing amber light to contractor owned construction equipment or vehicles will be provided for in the contract.

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, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

*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. Restore any barricade, light, or other traffic control so that the device is not out of service for more than two hours.

# 29. Seedbed Preparation, Item SPV.0005.01.

### A Description

This work shall consist of preparing the seedbed for planting in the seeding zones of the bioswales, as shown on the plan and as hereinafter provided.

# **B** (Vacant)

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### **C** Construction

Disc the upper 6 inches of topsoil and the engineered soil at locations specified in the plans until the average size of existing vegetation, stalks, leaves, and other biomass does not exceed an average of 4 inches in size. Perform discing within 15 days prior to the time of planting or as directed by the engineer. If conditions do not permit planting within 15 days following discing, specified discing shall be repeated to ensure the proper seeding surface. Once discing has been performed, driving over the disced area with equipment or vehicles prior to seeding activities shall be prohibited.

#### **D** Measurement

The department will measure Seedbed Preparation by the acre disced, acceptably completed.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0005.01Seedbed PreparationACRE

Payment is full compensation for discing and preparing the seedbeds.

# 30. Seeding Special, Item SPV.0005.02.

### **A Description**

This work shall consist of storing, mixing, sowing, and raking the seed mix provided under Seed Mixture Special, in the designated seeding zone as shown in the plans or as directed by the engineer. All seeding shall be done in accordance to requirements hereinafter provided.

### **B** (Vacant)

### **C** Construction

**General.** Seed shall be mixed at the project site by the contractor according to the seeding schedules specified under the item of Seed Mixture Special, or as directed by the engineer. Sowing shall be accomplished after May 15. Seeding shall not take place in flooded areas or when conditions are otherwise unsatisfactory for seeding. The contractor shall give the engineer five working days' notice prior to any seeding activities.

**Sowing**. Seed shall be mixed and sown on the same day. Sowing shall be accomplished using the following methods.

**Seeding Zone**: Seed Mixture Special shall be sown by hand, at the rates as specified in the Article "Seed Mixture Special". Seed shall be mixed with moist sand or sawdust on site. The contractor shall provide water on site to moisten the sand or sawdust. A ratio of one part moist sand or moist sawdust to one part native seed mix by volume shall be

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used. After seeding, the area shall be lightly raked to cover the seed with approximately 1/2-inch of soil

### **D** Measurement

The department will measure Seeding Special by the acre, 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.0005.02 Seeding Special ACRE

Payment is full compensation for handling, on-site storage of seed, weighing, mixing, sowing, and raking; for supplying water, sand, and/or sawdust for mixing seed.

# 31. Engineered Soil, Item SPV.0035.01.

### **A Description**

This work shall consist of the furnishing and placing engineered soil for fill in the bioswales in accordance to the details shown on the plans, the requirements of the standard specifications and as hereinafter provided.

### **B** Materials

The engineered soil shall consist of a mixture of sand, compost and topsoil. The material furnished and used in the work shall conform to the following composition:

# **Engineered Soil Composition**

Component	Percentage by Composition (by Volume)
Mineral (SiO2) Sand	40%
Topsoil	20% (if loamy texture); 30% (if sandy texture)
Compost	30% to 40%

The sand gradation requirements shall conform to standard spec 501.2.5.2 Fine Aggregates.

The sand component shall consist of mineral sand. Substitutions, such as calcium carbonated sand, dolomitic sand, manufactured sand or stone dust are not allowed. The sand shall be washed to remove clay and silt particles, and well-drained prior to mixing.

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The topsoil component shall be a USDA classified sandy loam, loamy sand or loam texture. The topsoil component textural class shall be verified by a laboratory analysis provided by the contractor and approved by the engineer.

The engineered soil mix shall be free of rocks, stumps, roots, brush or other material over 1 inch in diameter. No planting soil that may be harmful to plant growth or prove a hindrance to planting or maintenance.

The engineered soil mix shall have a pH between 5.5 and 6.5.

Furnish the engineer with a certified test report stating that the furnish engineered soil mixture meets the above stated material requirements.

### C (Vacant)

### **D** Measurement

The department will measure Engineered Soil in cubic yards, acceptably furnished and placed.

### **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item in accordance to standard spec 208.5.

ITEM NUMBERDESCRIPTIONUNITSPV.0035.01Engineered SoilCY

Payment is full compensation for furnishing all materials, compacting in place.

# 32. Concrete Surface Drains Special, Item SPV.0035.02.

### A Description

This provision describes furnishing and installing concrete surface drains special in accordance to standard spec 416, the construction detail in the plans and as herein after provided.

### **B** Materials

Use materials for surface drains conforming to standard spec 501.

#### C Construction

Construct surface drains conforming to standard spec 416.3.5.

### **D** Measurement

The department will measure Concrete Surface Drains Special in cubic yards, acceptably furnished and placed.

### **E** Payment

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

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ITEM NUMBERDESCRIPTIONUNITSPV.0035.02Concrete Surface Drains SpecialCY

Payment is full compensation for furnishing all materials, and for compacting in place.

# 33. Backfill Slurry, Item SPV.0035.03.

## **A Description**

This provision describes furnishing and placing backfill slurry in accordance the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Use aggregates that conform to the standard specifications for Sewer & Water Construction, chapter 8.43.8 for class "C" concrete mix with cement deleted. Weigh aggregates at a batch plant suitable for batching concrete masonry. The material shall be mixed with water to inundate the aggregate sufficient to provide a 3-inch slump. In special cases, engineer may require Sand Slurry consisting of 50 pounds of flyash and a 1/2 bag of Portland cement per yard of mix.

### **C** Construction

Mix and deliver to project site using a truck mixer. Discharge in manner to prevent segregation. Completely fill excavation in a single operation. Follow depth of slurry as noted in construction details. For storm sewer construction use "Backfill Slurry Detail – Trench" and for water main construction use "Water Main Details" provided in the plans. Backfill consolidation or compaction effort of slurry will not be required. Twelve hours shall elapse before paving over the backfill.

#### **D** Measurement

The department will measure Backfill Slurry in volume by the cubic yard of material placed, acceptably completed. Such volume shall be computed from actual measurements of the trench area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0035.03 Backfill Slurry CY

Payment is full compensation for furnishing and placing the backfill slurry.

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# 34. Adjusting Sanitary Manhole Covers, Item SPV.0060.01.

### **A Description**

- (1) This work includes adjusting sanitary manholes to the elevation as shown on the plans as well as reinstalling the existing frame and cover and internal chimney seal in accordance to the standard specifications for Sewer & Water Construction in Wisconsin and as hereinafter provided.
- (2) Adjust existing sanitary manhole covers to grade by adding or removing concrete adjusting rings. This item applies to those structures that have adjustments of less than 12 inches.

### **B** Materials

- Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C-478. Precast rings shall have an inside diameter to match the manhole opening, be not less than 2 inches nor more than 6 inches high, and have a wall thickness of 6 inches unless otherwise specified. The rings shall contain a minimum of one No. 2 reinforcing rod centered within the ring. Do not use any cracked or broken rings. The manholes shall be built so that a minimum of two 2-inch rings are installed for adjustment. A maximum of 12 inches for adjustment will be allowed, but the top two rings shall be of 2-inch thickness. All joints between the adjusting rings shall be filled with grout or mortar, including between the cone and the adjusting ring and the adjusting ring and the frame. Use mortar to coat the rings inside and outside of the manhole for water tightness. Where necessary, rings shall be grooved to receive a step.
- (2) Manholes shall be constructed with a Type I Frame/Chimney Joint per subsection 3.5.4(f)1 of the Standard Specifications for Sewer & Water Construction in Wisconsin.
- (3) Sanitary Manhole Seal internal rubber seal, Cretex 26"x7" standard sleeve, part no. 092634; a 26"x7" standard extension, part no 092635 or equal as shown in the construction details on the plans. Where required by the engineer, a Cretex 26"x10" standard sleeve, part no. 092635; a 26"x10" extension, part no. 092638 or equal shall be installed. The internal manhole seals shall meet the material requirements of section 8.42.3 and the performance requirements of section 8.42.4 of the Standard Specifications for Sewer & Water Construction, latest edition.
- (4) Steps shall be Neenah Number R-1980-C or equal. Securely and permanently set in the manhole wall. Steps shall be set at 16-inch centers, and have a 6-inch projection from the wall. Steps must conform to ASTM and OSHA requirements.

### **C** Construction

(1) The approximate location of sanitary manholes is indicated on the plans. Adjust these items as necessary to proper placement according to the plans.

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- (2) Build up manholes so that the frames and cover when placed will be at the established required grade; remove and reinstall the existing frame and cover.
- (3) Set adjusting rings and manhole frames with both butyl rubber sealant and non-shrink grout as follows. Use EZ-Stik or Kent-Seal butyl base sealant in trowelable grade or equal butyl rubber sealant and apply in a 1/4-inch thick layer to the outside 1 inch of the 6 inch wide horizontal surface of all adjusting rings and cone section. Apply a non-shrink grout in a 1/4-inch thick layer to the remaining 5 inches of inside horizontal surface of all adjusting rings and cone section.
- (4) Furnish and use non-shrink grout that is a premixed, non-metallic, cementitious, controlled expansion, high strength, versatile grout; Penngrout by IPA Systems, Inc. or equal.
- (5) Cover the entire outside surface of the manhole chimney, including all adjusting rings, and overlap both the manhole cone or flat-top slab (a minimum of 4 inches) and the manhole frame with a minimum 1/4-inch thick coating of butyl rubber sealant. The butyl rubber sealant shall be EZ-Stik or Kent-Seal butyl base sealant in trowelable grade or equal.
- (6) Install seals in accordance to the manufacturer's recommended installation procedures. The City of New Berlin requires with the internal seal and extension, a minimum of 2-inches of overlap between the manhole cone and frame for sealing.
- (7) Use backfill slurry as described in the article "Backfill Slurry" in these specifications to backfill the manhole excavation area.

### **D** Measurement

(1) The department will measure Adjusting Sanitary Manhole Covers by each individual unit, acceptably completed including installation of new internal manhole chimney seal.

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.01 Adjusting Sanitary Manhole Covers Each

Payment is full compensation for furnishing and installing all materials including adjustment rings, masonry, backfill slurry and internal seals; for excavating; backfilling, and compaction; for disposing of surplus materials; and for cleaning out and restoring the structure.

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# 35. Reconstructing Sanitary Manholes, Item SPV.0060.02.

### **A Description**

- (1) This work includes reconstructing sanitary manholes to the elevation as shown on the plans as well as reinstalling the existing frame and cover, internal chimney seal in accordance to the standard specifications for Sewer & Water Construction in Wisconsin and as hereinafter provided.
- (2) Adjust existing sanitary manhole covers to grade by adding or removing concrete adjusting rings and/or mortar as needed. This item applies to those structures that have adjustments of 12 inches or greater.

### **B** Materials

- (1) Precast concrete manhole sections shall have a minimum inside diameter of 48 inches. Compressive strength of the concrete shall be 4000 psi and shall conform to ASTM C478. Wall thicknesses of manholes conform to ASTM C76 for CLASS B concrete tongue and groove joint pipe.
- (2) Steps shall be Neenah Number R-1980-C or equal. Securely and permanently set in the manhole wall. Steps shall be set at 16-inch centers, and have a 6-inch projection from the wall. Steps must conform to ASTM and OSHA requirements.
- (3) Manhole joint materials shall be rubber ring gasket material. Plastic gaskets shall be preformed, high adhesion material, packaged ready for use between protective paper strips conforming to Federal Specification SS-S-00210, Type I, Rope Form; Ram-Nek by K.T. Snyder Company, Incorporated, Houston, Texas: Kent Seal Number 2; or equal.
- (4) Manholes shall be constructed with a Type I Frame/Chimney Joint per subsection 3.5.4(f)1 of the standard specifications for Sewer & Water Construction in Wisconsin.
- (5) Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C-478. Rings shall be 2-inches or 4-inches in thickness. The manholes shall be built so that a minimum of two 2-inch rings are installed for adjustment. A maximum of 12 inches for adjustment will be allowed, but the top two rings shall be of 2-inch thickness. All joints between the adjusting rings shall be filled with grout or mortar, including between the cone and the adjusting ring and the adjusting ring and the frame. Use mortar to coat the rings inside and outside of the manhole for water tightness. Where necessary, rings shall be grooved to receive a step.
- (6) Sanitary Manhole Seal internal rubber seal, Cretex 26"x7" standard sleeve, part no. 092634; a 26"x7" standard extension, part no 092635 or equal as shown in the construction details on the plans. Where required by the engineer, a Cretex 26"x10" standard sleeve, part no. 092635; a 26"x10" extension, part no. 092638 or equal shall be installed. The internal manhole seals shall meet the material requirements of

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section 8.42.3 and the performance requirements of section 8.42.4 of the Standard Specifications for Sewer & Water Construction, latest edition.

### **C** Construction

- (1) Remove and reinstall the existing cone section. The maximum height of adjusting rings above the cone as measured from the top of the cone or slab top shall be 22 inches. If more than 22 inches of adjusting rings are needed to adjust the casting to finished grade, then an additional barrel section shall be installed on the manhole.
- (2) Build up manholes so that the frames and cover when placed will be at the established required grade; remove and reinstall the existing frame and cover.
- (3) Set adjusting rings and manhole frames with both butyl rubber sealant and non-shrink grout as follows. Use EZ-Stik or Kent-Seal butyl base sealant in trowelable grade or equal butyl rubber sealant and apply in a 1/4-inch thick layer to the outside 1 inch of the 6 inch wide horizontal surface of all adjusting rings and cone section. Apply a non-shrink grout in a 1/4-inch thick layer to the remaining 5 inches of inside horizontal surface of all adjusting rings and cone section.
- (4) Furnish and use non-shrink grout that is a premixed, non-metallic, cementitious, controlled expansion, high strength, versatile grout; Penngrout by IPA Systems, Inc. or equal.
- (5) Cover the entire outside surface of the manhole chimney, including all adjusting rings, and overlap both the manhole cone or flat-top slab (a minimum of 4 inches) and the manhole frame with a minimum 1/4-inch thick coating of butyl rubber sealant. The butyl rubber sealant shall be EZ-Stik or Kent-Seal butyl base sealant in trowelable grade or equal.
- (6) Install seals in accordance to the manufacturer's recommended installation procedures. The City of New Berlin requires with the internal seal and extension, a minimum of 2 inches of overlap between the manhole cone and frame for sealing.
- (7) Use backfill slurry as described in the article "Backfill Slurry" in these specifications to backfill the manhole excavation area.

### **D** Measurement

(1) The department will measure Reconstructing Sanitary Manholes by each individual unit, acceptably completed, including installation of new internal manhole chimney seal.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.02Reconstructing Sanitary ManholesEach

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Payment is full compensation for furnishing and installing all materials including precast reinforced concrete manhole sections, adjusting rings, masonry, steps, water tight joints, backfill slurry and internal seals; for excavating, backfilling, and disposing of surplus materials; and for cleaning out and restoring the structure.

# 36. Manhole Covers Sanitary, Item SPV.0060.03.

# **A Description**

This special provision describes furnishing covers for the City of New Berlin sanitary manholes as provided in this special provision.

### **B** Materials

Sanitary manhole covers; solid, gasketed lids (self sealing) with "T" gasket equal to Neenah or approved equal on R-1660 or R-1661 "K" Platen. Reference # 1660 - 5260 Neenah Foundry.

### **C** Construction

Deliver new sanitary manhole covers as listed in the quantity table with the words stating "City of New Berlin" stamped on the top surface. The manhole cover "T" gasket is to be placed onto a suitable manhole frame that has been thoroughly cleaned and inspected by the department prior to installation and sealing.

### **D** Measurement

The department will measure Manhole Covers Sanitary as each individual unit, acceptably completed.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.03Manhole Covers SanitaryEach

Payment is full compensation for furnishing and placing the manhole cover.

# 37. Salvaging Fire Hydrants and Abandoning Hydrant Tees, Item SPV.0060.04.

### **A Description**

(1) This special provision describes salvaging the existing hydrants and valves, abandonment of the existing hydrant tees, and furnishing and installing anchor tee plugs with buttressing in accordance to the Standard Specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

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#### **B** Materials

- (1) Acceptable plugs include Clow F-1155, F-1159 and F-1165 solid plug 6-inch or pre-approved equal.
- (2) Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.
- (3) Provide Stainless Steel bolts with Blue Loc-Tite; Cor-Blue T-Bolts manufactured by Tyler Union meeting ANSI/AWWA C600.
- (4) The concrete for the concrete buttresses shall be Class "F" 4.5 bag mix. The buttresses shall have wood thrust blocking per standard specifications for Sewer & Water Construction in Wisconsin.
- (5) Backfill slurry to comply with the contract bid item "Backfill Slurry" as described in these specifications.
- (6) Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5 with a minimum nominal thickness of 0.008 inches (8 mils).

# **C** Construction

- (1) To shut down the City of New Berlin water main follow the proper water main shutdown procedure by contacting the City of New Berlin Water Utility a minimum of 24 hours advance and a 3-day written notice to all properties that are connected to existing water main services within the area of shutdown. Only City of New Berlin personnel shall be allowed to operate existing valves during construction; call (262) 786-7086 before proceeding.
- (2) The City of New Berlin shall exercise all existing water main valves required for shutdown prior to ensure proper closure of the existing system.
- (3) Following the operation, inspection and approval of the new hydrant installation by the City of New Berlin water utility, salvage the existing hydrants, gate valves and valve boxes. Handle all water main materials carefully. Wrap the salvaged water main materials in polyethylene wrap and deliver to the construction staging area for pick-up by the City of New Berlin. Install a new 6-Inch solid plug at the location of the existing anchor tee. Each 6-Inch solid plug shall be bolted to the existing anchor tee with stainless steel bolts. Buttress this dead end in the water main system. The use of restraint glands shall be directed by the engineer where appropriate and is incidental to this item.
- (4) Buttresses and thrust blocking shall be constructed in accordance to the Sewer & Water Construction in Wisconsin, file 44 with wood blocking and Class "F" ready mix concrete. Job mix concrete may only be used with approval of the City of New Berlin engineer.

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### **D** Measurement

(1) The department will measure Salvaging Fire Hydrants and Abandoning Hydrant Tees as each individual hydrant salvaged and tee abandonment, acceptably completed.

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.03 Salvaging Fire Hydrants and Abandoning Each

Hydrant Tees

(2) Payment is full compensation for furnishing all materials, 6-Inch solid plug, gaskets, megalug restraints and other fittings; polyethylene wrap, for delivery to the staging pick-up area, for furnishing all excavation, trench wall support, for salvaging fire hydrants and abandoning hydrant tees, installing anchor tee plugs, buttresses if needed, backfilling, compacting, disposal of surplus material, cleanup, restoration of the work site.

# 38. Salvaging Water Valves 8-Inch, Item SPV.0060.05; Salvaging Water Valves 16-inch, Item SPV.0060.21.

### A Description

This special provision describes salvaging the existing 8-inch and 16-inch water gate valves in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Dual purpose cutting-in ductile iron sleeve that meets all applicable requirements of AWWA C153/A21.53 with mechanical joints and flanged ends per ANSI/AWWA C110/A21.10 or pre-approved equal. Joints shall be push-on type rubber gaskets and conform to ASTM C1869.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

Provide Stainless Steel bolts with Blue Loc-Tite; Cor-Blue T-Bolts manufactured by Tyler Union meeting ANSI/AWWA C600

The concrete for the concrete buttresses shall be Class "F" 4.5 bag mix. The buttresses shall have wood thrust blocking per standard specifications for Sewer & Water Construction in Wisconsin.

Backfill slurry to comply with the contract bid item "Backfill Slurry" as described in these specifications.

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Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5 with a minimum nominal thickness of 0.008 inches (8 mils).

### C Construction

Existing Water Main shutdown: follow the proper water main shutdown procedure by contacting the City Water Utility a minimum of 24 hours advance and a 3-day written notice to all properties that are connected to existing water main services within the area of shutdown. The City Water Utility shall exercise all existing water main valves required for shutdown prior to ensure proper closure of the existing system.

Existing Water Valve: Sawcut the ductile iron main on both sides of existing structure wall faces prior to removal of the valve tee. Handle all water main materials carefully. Wrap the salvaged water main materials in polyethylene wrap and deliver to the construction staging area for pick-up by the City of New Berlin. Install temporary solid plugs for each open pipe connection, prior to the removal of the existing valve vault shown on the plans. The use of restraint glands shall be directed by the engineer where appropriate and is incidental to this item.

Removal of Water: At all times during the excavation period and until its completion and acceptance at final inspection, ample means and equipment shall be provided with which to remove promptly, and dispose of properly, all water entering any excavation or other parts of the work. No water shall be allowed to rise over, or come in contact with open water main, per the standard specifications for sewer and water construction, chapter 4.3.9. Water pumped or drained from the work area hereunder shall be in accordance to standard spec 107.18 (7) to be treated with the use of a settling basin in a suitable manner without damage to adjacent property, to other work under construction, or to street pavements or municipal parks or property. Do not discharge water onto streets without adequate protection of the surface at the point of discharge. Do not discharge water into sanitary sewers. Do not discharge water containing settleable solids into storm sewers. Dewatering of the water main valve vault is incidental to this item.

#### **D** Measurement

The department will measure Salvaging Water Valves 8-Inch and Salvaging Water Valves 16-Inch as each individual salvaged water valve, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Removing Water Valves 8-inch	Each
SPV.0060.21	Removing Water Valves 16-inch	Each

Payment is full compensation for furnishing all materials required to salvage each valve, salvaging water main valves, delivery to the staging pick-up area, polyethylene wrap, temporary pipe plugs, gaskets, megalug restraints and other fittings. The excavation cost

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for each valve is incidental for trench wall support, backfilling, compacting, making all necessary pipe connections, disposal of surplus material, cleanup.

# 39. Removing Water Valve Vaults, Item SPV.0060.06.

# **A Description**

This provision describes removal of existing concrete water main valve vaults and salvaging the water valves in accordance to standard spec 204, and as hereinafter provided.

### **B** Materials

Acceptable caps include Clow F-1155, F-1159 and F-1165 solid cap pre-approved equal. Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5 with a minimum nominal thickness of 0.008 inches (8 mils).

#### **C** Construction

**Notification to Contractor:** The City Water Utility tested the water valve vaults for the presence of lead paint or other contaminants. These tests did not detect the presence of any contaminants. However, if during construction operations the contractor should discover suspected lead contaminant, the OSHA 29 CFR 1926.62 lead exposure guidelines should be followed.

**Existing Water Main Shutdown:** follow the proper water main shutdown procedure by contacting the City Water Utility a minimum of 24 hours advance and a 3 day written notice to all properties that are connected to existing water main services within the area of shutdown. The City Water Utility shall exercise all existing water main valves required for shutdown prior to ensure proper closure of the existing system.

**Removal of Concrete Structure:** All concrete, stone, brick and other material not designated for salvage within this structure shall excavated to the concrete floor surface of the valve vault. All solid waste associated with the demolition of the structure shall be disposed of by the contractor and is incidental to this item.

**Existing Water Valves:** Sawcut the cast iron main on both sides of existing structure wall faces prior to removal of the valve tee. Salvage all existing water main valves by wrapping the existing valves in polyethylene wrap and delivering to the construction staging area for pickup. Install temporary solid plugs for each open pipe connection, prior to the removal of the existing valve vault shown on the plans. The use of restraint glands shall be directed by the engineer where appropriate and is incidental to this item.

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**Existing Valve Manhole Cover:** Carefully remove and salvage all water main manhole covers and deliver to the construction staging area for pickup by the City Water Utility. Manhole covers that have been deemed unusable by the City Water Utility shall be removed by the contractor as required and is incidental to this item.

Removal of Water: At all times during the excavation period and until its completion and acceptance at final inspection, ample means and equipment shall be provided with which to remove promptly, and dispose of properly, all water entering any excavation or other parts of the work. No water shall be allowed to rise over, or come in contact with open water main, per the standard specifications for Sewer & Water Construction, chapter 4.3.9. Water pumped or drained from the work area hereunder shall be in accordance to standard spec 107.18 (7) to be treated with the use of a settling basin in a suitable manner without damage to adjacent property, to other work under construction, or to street pavements or municipal parks or property. Do not discharge water onto streets without adequate protection of the surface at the point of discharge. Do not discharge water into sanitary sewers. Do not discharge water containing settleable solids into storm sewers. Dewatering of the water main valve vault is incidental to this item.

#### **D** Measurement

The department will measure Removing Water Main Valve Vaults as 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.0060.06 Removing Water Valve Vaults Each

Payment is full compensation of all materials required to remove each vault including, removal of water main valves and delivery to the staging area, polyethylene wrap, temporary pipe plugs, gaskets, megalug restraints and other fittings. The excavation cost for each structure is incidental for trench wall support, backfilling, compacting, making all necessary pipe connections, disposal of surplus material, cleanup.

# 40. Adjusting Water Valve Boxes, Item SPV.0060.07.

### A Description

Adjust water value boxes to an elevation as determined by the engineer and in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Barrel extensions to adjust valves that match to valve boxes of Tyler series 6860, heavy duty, three piece, 5 1/4-inch shaft or equal.

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### **C** Construction

The approximate location of existing valve boxes is indicated on the plans. Adjust these items as necessary to proper placement according to the plans and standard drawings.

Obtain prior approval from the engineer for any method of adjustment of existing valves other than that indicated on the plans or standard drawings.

A valve extension is required if the valve nut is more than 8 feet below finished surface.

### **D** Measurement

The department will measure Adjusting Water Valve Boxes per each individual unit, acceptably completed.

### **E** Payment

Payment will be for measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.07Adjusting Water Valve BoxesEach

Payment is full compensation for furnishing all materials including excavation, disposal of surplus materials, backfilling and compacting; for barrel extensions.

### 41. Hydrant Assemblies, Item SPV.0060.08.

### **A Description**

This special provision describes furnishing and installing hydrants in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Hydrants shall be Clow Medallion, Mueller Centurian, Kennedy Guardian (with reservoir), AWWA C-502 breakaway type meeting requirements of Chapter 8.26.0 of the SWS. All hydrants shall be supplied as follows: MJ connection; Turn left to open; Weather shield top; Painted Bright Hydrant Red (5 mil dry film thickness); Break flange (traffic) type; 5.25-Inch main valve opening; two, 2.5-Inch hose nozzles outlets and one 4.5-Inch pumper nozzle with an integral "STORZ" connection. One 5 ft. high heavy duty fiberglass candy cane hydrant finder or marker, with "L" type bracket spring distributed by Davies Water (part# CHMHRW) or HD Supply waterworks (part# 134358) or USA Bluebook (part# md-22516) or pre-approved equal.

### **C** Construction

Construct all hydrants at location shown on drawings and per section 4.8.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. Hydrants and valves installed with restraint glands. All hydrants shall have minimum depth of bury of 6.5 feet unless specified in drawings. Hydrant flange line elevations as shown on the plans are approximate and can be amended by the engineer prior to installation. The contractor shall be responsible to install each hydrant to proper bury

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depth with the breakaway flange shall be set a minimum of 2 inches and a maximum of 6 inches above the proposed finished grade. All hydrants that exceed these limits shall be adjusted at the contractor's expense.

Setting Hydrants: Locate as shown or as directed and in a manner to provide complete accessibility, also in such a manner that the possibility of damage from vehicles or injury to pedestrians will be minimized. Stand plumb and have the pumper nozzle aligned as per the owner's direction. Provide a minimum of 4-Inches of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Set to the established grade, connect to the main with a 6-inch branch controlled by an independent gate valve. Level the hydrant and 6-inch gate valve set on hardwood blocking followed by Buttresses and thrust blocking. All Hydrants shall be wrapped with polyethylene prior to backfilling of trench.

Where a hydrant is set in pervious soil, provide drainage at the base of the hydrant by placing coarse gravel or crushed stone mixed with coarse sand, from the bottom of the trench to at least 6 inches above the waste opening in the hydrant and to a distance of 12 inches around the elbow.

Wherever a hydrant is set in clay or other impervious soil, excavate a drainage pit 2 feet in diameter and 3 feet deep below each hydrant and fill compactly with coarse gravel or crushed stone mixed with coarse sand, under and around the elbow of the hydrant to a level of 6 inches above the waste opening.

Brace the shoe of each hydrant against unexcavated earth at the end of the trench with a concrete buttress. Buttresses and thrust blocking shall be constructed per the standard specifications for sewer and water construction in Wisconsin, file 44 with wood blocking and Class "F" ready mix concrete. Job mix concrete may only be used with approval of the engineer.

Provide drain pocket at base of hydrant of 1.5 cubic yards of crushed stone or rock conforming to requirements of ASTM C33, Gradation Number 2.

Provide pipe cover of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Below the roadway and curb and gutter, Backfill Slurry is required in the main trench areas, including the hydrant lead between the stone chip pipe cover to the bottom of subgrade. Granular backfill or suitable backfill material defined by the engineer may be used to restore the hydrant assembly to finished grade and is incidental to construction.

A fire hydrant finder or marker device shall be installed on each hydrant prior to acceptance by the department.

An integral "STORZ" connection shall be installed on each hydrant prior to acceptance by the department and the City Water Utility.

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#### **D** Measurement

The department will measure Hydrant Assemblies as each individual unit, acceptably installed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.08Hydrant AssembliesEach

Payment is full compensation for furnishing all materials including crushed stone, buttresses and blocking, and incidentals for excavating, trench wall support, backfilling, for compacting, making all necessary pipe connections, disposal of surplus material, cleanup.

## 42. Gate Valves Hydrant 6-Inch, Item SPV.0060.09; Gate Valves 8-Inch, Item SPV.0060.10.

### A Description

This provision describes furnishing and installing gate valves and valve boxes in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Valves shall be smooth bore resilient seat valves and shall be Clow right-of-way, stainless steel Bolts; Mueller right-of-way A-2360, stainless steel Bolts; Kennedy right-of-way-4571, stainless steel Bolts; M&H 4067 or 4068, stainless steel Bolts, or preapproved equal, meeting requirements of section 8.27.1 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. Valves shall open left.

Each valve shall have manufacturer's name, pressure rating and year of manufacture cast on the body. Prior to shipping from factory, hydrostatically pressure test to equal twice specified working pressure.

Provide resilient wedge type gate valves meeting all applicable requirements of AWWA C509 with mechanical joints, cast iron body, bronze-mounted with bronze non-rising stems, and O-ring seals.

Provide Clow F1217 Anchoring Tee or pre-approved equal meeting all applicable requirements of AWWA C153, class 350 fitting with mechanical joints, as noted on drawings for size and location.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

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Valve boxes shall be Tyler series 6860 heavy duty, three-piece, 5 1/4-inch shaft or pre-approved equal, with a two-piece cast iron with lid. A valve box adaptor by Adapter, Inc., or pre-approved equal, shall be furnished as part of the complete valve box for direct-bury valves.

Pipe bedding material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Pipe cover material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

### **C** Construction

Construct all 6-Inch gate valves, anchoring tees and valve boxes at locations shown on the plans. Each 6-Inch hydrant gate valve shall be mounted adjacent to the new Anchoring Tee with stainless steel bolts and Restraint glands connecting to ductile iron pipe. Construct all 8-Inch gate valves with stainless steel bolts and Restraint glands connecting to the new tee connection or existing ductile iron main.

Provide a minimum of 4-Inches of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Support valves in vertical position on level hardwood blocking prior to the wrenching of Restraint glands.

Restraint glands shall be installed according to the manufacturer instructions. The contractor shall use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used.

Provide pipe cover of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Below the roadway and curb and gutter, Backfill Slurry is required in the main trench areas, including the hydrant lead between the stone chip pipe cover to the bottom of subgrade.

NOTE: Any resilient wedge type gate valve used for cutting in must use a cutting tool that will develop a hole not less 1/2-inch smaller than the valve. Any test plugs included on valves shall be replaced with stainless steel plugs.

Valve boxes and adapter shall be centered, plumb over the wrench nut of the valve and set to finished grade at which point a minimum of 2 inches of adjustment up and down shall remain. All valves and valve boxes shall be fully operated and checked by the department, the City Water Utility and contractor prior to acceptance. Deviation from vertical or horizontal from center of operating nut in excess of 1 inch shall not be acceptable.

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All valve boxes deeper than 10.0 feet from top of the operating nut to finish grade shall have solid extension rods with a centering ring. The extension rod shall be pinned to operating nut as approved by the City Water Utility. Valve boxes shall be externally encased with polyethylene wrap per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 6.21.0, with a maximum encasement of 18 inches above the adapter section.

### **D** Measurement

The department will measure Gate Valves Hydrant 6-inch and Gate Valves 8-inch as each individual unit, acceptably installed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Gate Valves Hydrant 6-Inch	Each
SPV.0060.10	Gate Valves 8-Inch	Each

Payment is full compensation for furnishing all materials including gate valve, valve box, valve support, anchoring tee, water main connections and other fittings; for furnishing all excavation, trench wall support, backfilling, compaction, making all necessary pipe connections, disposal of surplus material, cleanup.

### 43. Butterfly Valves 16-Inch, Item SPV.0060.11.

### **A Description**

This provision describes furnishing and installing butterfly valves and valve boxes in accordance to the Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Butterfly Valves - conforming to AWWA C504-94, stems sealed by at least two O-Rings and worm gear operators for 2-inch square valve key operation from above, turn left or counter clock-wise to open. Acceptable valves include: Clow 2810 (F-5365) with stainless steel bolts, Pratt Groundhog with SS bolts, M&H 450 with SS bolts, Mueller LineSeal III-3211-20 or XP-5227-20 with stainless steel bolts or pre-approved equal.

Provide resilient seat valves meeting all applicable requirements of AWWA C504 with mechanical joints. Valves shall have the manufacturer's name, pressure rating and year of manufacture cast on the body. Prior to shipping from factory, each valve pass hydrostatic pressure test to equal twice specified working pressure.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

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Valve boxes shall be Tyler series 6860 heavy duty, three-piece, 5 1/4-inch shaft or pre-approved equal, with a two-piece cast iron with lid. A valve box adaptor by Adapter, Inc., or pre-approved equal, shall be furnished as part of the complete valve box for direct-bury valves.

Pipe bedding material, 3/8-Inch crushed stone chips that conforms to the Sewer & Water Construction in Wisconsin, latest edition chapter 8.43.2, table 32.

Pipe cover material, 3/8-Inch crushed stone that conforms to the Sewer & Water Construction in Wisconsin, latest edition. chapter 8.43.2, table 32..

### **C** Construction

Construct all butterfly valves and valve boxes at locations shown on the drawings.

Provide a minimum of 4-Inches of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Support valves in vertical position on level hardwood blocking prior to the wrenching of Restraint glands.

Restraint glands shall be installed according to the manufacturer instructions. The contractor shall use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used.

The direction of the operating nut on the butterfly valve shall be set to the North or to the East side of the Water main. Valve boxes and adapter shall be centered, plumb over the wrench nut of the valve and set to finished grade at which point a minimum of 2 inches of adjustment up and down shall remain. All valves and valve boxes shall be fully operated and checked by the department, the City Water Utility and contractor prior to acceptance. Deviation from vertical or horizontal from center of operating nut in excess of 1 inch shall not be acceptable.

All valve boxes deeper than 10.0 feet from top of the operating nut to finish grade shall have solid extension rods with a centering ring. The extension rod shall be pinned to operating nut as approved by the City Water Utility. Valve boxes shall be externally encased with polyethylene wrap per the Sewer & Water Construction in Wisconsin, latest edition, chapter 6.21.0 with a maximum encasement of 18 inches above the adapter section.

Provide pipe cover of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Below the roadway and curb and gutter, Backfill Slurry is required in the main trench areas, including the hydrant lead between the stone chip pipe cover to the bottom of subgrade.

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Notification to contractor: A 2-Inch diameter air release valve / riser pipe is required for the installation of a 16-inch pipe sleeve at the intersection of West Lincoln Avenue and South Moorland Road. The contractor shall provide the 2-Inch air release valve and attach the riser pipe to a 16-inch pipe sleeve connection noted on the plans. The Air release valve shall be in accordance to file numbers 42 and 43 of the Sewer & Water Construction in Wisconsin, latest edition and shall be incidental to the cost of installation for this item

#### **D** Measurement

The department will measure Butterfly Valves 16-inch as each individual unit, acceptably completed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.11Butterfly Valves 16-InchEach

Payment is full compensation for furnishing all materials, including butterfly valve, valve box, valve support, water main connections, megalug restraints and other fittings; for furnishing all excavation, trench wall support, backfilling, compaction, making all necessary pipe connections, disposal of surplus material, cleanup.

# 44. Pipe Sleeves Ductile Iron 8-Inch, Item SPV.0060.12; Pipe Sleeves Ductile Iron 16-Inch, Item SPV.0060.13.

### **A Description**

This provision describes furnishing and installing pipe sleeves in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Dual purpose cutting-in ductile iron sleeve that meets all applicable requirements of AWWA C153/A21.53 with mechanical joints and flanged ends per ANSI/AWWA C110/A21.10 or pre-approved equal. Joints shall be push-on type rubber gaskets and conform to ASTM C1869

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

### **C** Construction

Install a new pipe sleeve of the appropriate size, connecting between the existing ductile iron main to the extension of new ductile iron pipe from each new valve. Each new pipe sleeve shall be bolted to the cast iron pipe with stainless bolts and restraint glands. Follow the manufacturer instructions for bolt torque limits. Install megalug restraint glands at all

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fittings locations. Restraint glands or shall be installed according to the manufacturer instructions. Use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used. The cost for the restraint glands or other additional items required to connect to the existing main shall be incidental to the cost of construction.

### **D** Measurement

The department will measure Pipe Sleeves Ductile Iron 8-Inch or Pipe Sleeves Ductile Iron 16-Inch as each unit, acceptably installed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Pipe Sleeves Ductile Iron 8-Inch	Each
SPV.0060.13	Pipe Sleeves Ductile Iron 16-Inch	Each

Payment is full compensation for furnishing all materials, all excavation, trench wall support, bedding, cover, backfill, compaction, pipe laying, bands, megalug restraints and other fittings, crosses, tees, bends, restraint glands, bulkheads, thrust restraints, buttresses, making all necessary pipe connections, insulation, sheathing, shoring, dewatering, disinfection, testing, disposal of surplus material, cleanup.

### 45. Underdrain Cleanouts, Item SPV.0060.14.

### **A Description**

Furnish and install PVC underdrain cleanouts in accordance to the Sewer and Water Construction in Wisconsin specifications, current edition and as hereinafter provided.

### **B** Materials

Use Polyvinyl Chloride drainage pipe for pipe underdrain cleanouts conforming to AASHTO M278

### C (Vacant)

### **D** Measurement

The department will measure Underdrain Cleanouts by each individual unit, acceptably completed.

### **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Underdrain Cleanouts	Each

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Payment is full compensation for furnishing and installing PVC pipe, cast iron cleanout covers and concrete pads.

# 46. Apron Endwalls For Underdrain Reinforced Concrete 8-Inch, Item SPV.0060.15; Apron Endwalls For Pipe Underdrain Reinforced Concrete 12-Inch, Item SPV.0060.16.

### A Description

Furnish and install apron endwalls for underdrain reinforced concrete 8-inch and 12-inch in accordance to standard spec 612 as hereinafter provided.

#### **B** Materials

Use materials for endwalls conforming to standard spec 504.

### C (Vacant)

### **D** Measurement

The department will measure Apron Endwalls for Underdrain Reinforced Concrete 8-Inch and 12-Inch by the unit, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.15	Apron Endwalls for Underdrain	Each
	Reinforced Concrete 8-Inch	
SPV.0060.16	Apron Endwalls for Underdrain	Each
	Reinforced Concrete 12-Inch	

Payment is full compensation for furnishing and installing apron endwalls.

### 47. Construction Staking Bioswales, Item SPV.0060.17.

### **A Description**

Furnish and set construction stakes or control points as necessary to establish horizontal and vertical position of the bioswales and underdrains in accordance to standard spec 650 as hereinafter provided.

### **B** (Vacant)

### **C** Construction

Obtain or calculate benchmark data, grades, and alignment from date in the plan and verify with the engineer prior to beginning the work. The engineer will furnish horizontal alignment, horizontal alignment ties, and control point data.

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Maintain neat, orderly, and complete survey notes and computations used in establishing the lines and grades. Make available to the engineer the survey notes and computations within 24 hours upon request as the work progresses.

#### **D** Measurement

The department will measure Construction Staking Bioswales by each individual unit of bioswales staking, acceptably completed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.17Construction Staking BioswalesEach

Payment for Construction Staking Bioswales is full compensation for survey work necessary to locate and set construction stakes, for checking location, grades of the bioswales including the underdrains.

### 48. Exposing Existing Utility, Item SPV.0060.18.

### **A Description**

This work includes exposing existing utilities which are in direct conflict with proposed facilities. The location of existing utilities not in direct conflict with proposed construction is not included and shall be addressed using standard utility location procedures. The work includes exposing existing utilities under paved and unpaved surfaces, and providing both lateral and depth measurements for use in determining potential utility conflict solutions.

### **B** Materials

### **B.1 Granular Backfill**

Furnish granular backfill that conforms to standard spec 209.

### **B.2 Slurry Backfill**

Use aggregates that conform to standard spec 501 of the standard specifications for grade A concrete. 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 to enable the mixture to flow readily.

### **C** Construction

### C.1 General

Submit all requests for exposing existing utilities in writing to the engineer for approval prior to performing the work. Coordinate utility exposures with the engineer and notify the utility owner or their agents of this work two working days in advance so that they may be present when the work commences.

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### C.2 Excavation

Remove all paved and unpaved surfaces at locations where the existing utility is being exposed. Saw or remove concrete and asphaltic pavements to the nearest joint. Remove all pavement surfaces in such a way that all existing edges consist of a true line having a perpendicular edge with no unraveling. Maintain drainage at all times in accordance to standard spec 205.3.3. Take precautions, including temporary shoring, in order to prevent any undermining of the existing roadway. Perform work in accordance to all applicable laws, ordinances, rules, regulations, and OSHA standards.

Expose all utility locations within a given location to a minimum depth of 18 inches below the bottom of each utility. Excavate in a manner that protects the integrity of the utilities and prevents any damage to wrappings or protective coatings such as by any mechanical method or hand digging. Notify the utility owner promptly if damage or interruption of service occurs. Repair all damage caused to such utilities resulting from negligence or carelessness on the part of the contractor's operation at contractor expense.

Take all lateral and depth measurements in US feet and tenths thereof. Identify horizontal locations of each exposed utility with a coordinate northing and easting referenced to the Wisconsin County Coordinate System (WCCS), Waukesha County, NAD 83 (97). Provide vertical elevations for each exposed utility and reference to NAVD 88 (91).

The utility location shall remain exposed and available for visual inspection until the completion of all work in a given location. If the utility shall remain exposed overnight or for prolonged periods of time, protect the location with traffic-rated steel plating, safety barriers, and all necessary traffic control devices that may be required under applicable standards or as directed by the engineer.

### C.3 Backfilling

Upon completion of the utility exposure, restore the location in kind to its original condition. Use granular backfill, conforming to standard spec 209, to backfill the exposed utility locations to the subgrade elevation except for areas located within local streets. All granular material placed to an elevation of 18 inches above each exposed utility shall consist substantially of sand with all particles retained on a one-inch (25.0 mm) sieve removed. The remaining granular material shall conform to the specifications for backfill for trench excavation. When exposed utility locations fall within local streets or city right-of-way, use slurry backfill to fill the entire location to the subgrade elevation.

Restore asphaltic pavement to the depth found in the existing roadway with HMA Pavement Type E-3 to a depth as directed by the engineer. Apply tack coat to composite pavement structures and between lifts. Replace all locations that fall within live lanes of the roadway if the area is used for traffic handling.

Place base aggregate dense between the subgrade surface and the bottom of the pavement. In grassy areas, place 6-inches of topsoil, sod or seed and mulch, and fertilizer. Alternate restoration methods may be used upon written approval from the engineer.

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### C.4 Documentation

Provide documentation to the engineer and include the coordinates, elevations, and sketches of the utility locations tied to known features in the plans. Each utility shall be referenced to a proposed alignment with a station and offset. The size and/or diameter, composition, and a description of each utility shall be documented and the location of the elevation with respect to each utility noted. Supply digital photographs of the uncovered utility to the engineer in .jpeg format for future reference.

### **D** Measurement

The department will measure Exposing Existing Utility as a unit for each location, acceptably completed. A location may have multiple utilities located within the same exposure area. An exposure area will include all utilities within 6 lateral feet of each other and payment will only be made for one unit regardless of the number of utilities exposed. If the distance from the existing ground elevation, located above the existing utility, to a point 18 inches below the exposed utility is between 0 and 6-feet, the department will measure each location as a single unit of work. If the distance from the existing ground elevation, located above the existing utility, to a point 18 inches below the exposed utility is greater than 6 feet and less than twelve feet, the department will pay for the item as two units of work. Exposures in depth greater than 12 feet are not covered under this item.

### **E Payment**

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.18Exposing Existing UtilityEach

Payment is full compensation for sawing all pavement; for removing all pavement; for furnishing all excavation; for disposing of all materials; for locating all utilities within each respective location; for providing documentation and photographs of utility locations to the engineer; for furnishing all surveying associated with exposing existing utilities; for furnishing all maintenance of the location during construction; for furnishing all traffic control, safety barriers, and steel plating required; for furnishing and placing granular backfill and slurry backfill; for temporary shoring. All finishing items including, but not limited to, base aggregate dense or HMA pavement located above the subgrade elevation will be paid for using other contract items.

# 49. Atrium Assembly 12-Inch, Item SPV.0060.19; Atrium Assembly 24-Inch, Item SPV.0060.20.

### **A Description**

This work shall consist of furnishing and installing atrium assemblies as the outlets from the bioswales as indicated on the plan, in accordance to the pertinent provisions of standard specs 607, 611 and 612 and as hereinafter provided.

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### **B** Materials

An atrium assembly includes the catch basin grate, catch basin, any required plugs and extensions as shown on the plan details.

The 12-inch atrium grate shall be a green domed grate with UV inhibitor. The open surface area of the grate shall at least be 50.6 square inches. Use NDS #1280 or equal.

Use the 12-inch atrium grates with 12-Inch by 12-Inch catch basins, black. Use NDS #1200 or equal.

The 24-Inch atrium grate shall be a green square grate with UV inhibitor. The open surface area of the grate shall at least be 231.7 square inches. Use NDS #2412 or equal.

Use the 24-Inch atrium grates with 24-inch by 24-inch catch basins, black. Use NDS #2400 or equal.

Provide bedding materials as recommended by the manufacturer.

#### C Construction

Install atrium assemblies in accordance to the manufacturer's recommendations.

Once the atrium assemblies have been installed, do not drive construction equipment over the grates. The grates are capable of withstanding loads of 61-175 psi, which would include medium duty pneumatic tire traffic, autos and light trucks at less than 20 mph.

Install a culvert end marker by each installed atrium assembly. The flexible marker is paid under a separate bid item.

#### **D** Measurement

The department will measure Atrium Assembly (Size) as each individual unit, acceptably completed.

### **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.19	Atrium Assemblies 12-Inch	Each
SPV.0060.20	Atrium Assemblies 24-Inch	Each

Payment is full compensation for providing all materials; for excavation; for forming foundation; installing the atrium assembly, for sealing joints and making connections, for backfilling; for providing granular backfill material, including bedding material; for cleaning out.

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### 50. Seeding Mixture Special, Item SPV.0085.01.

### **A Description**

This work shall consist of supplying native seed for planting areas indicated on the plan, supplying seed samples, germination test data, storage, and delivery of seed, all in accordance to the special provisions provided herein. All work shall conform to the requirements of standard spec 630 of the standard specifications and as hereinafter provided.

### **B** Materials

*Supplement standard spec 630.2.1.5.1.1.1 with the following:* 

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

Replace both the TABLE OF NATIVE SEED MIXTURES with the following table below:

### **Infiltration Seed Mix – Planting Zone 1.**

SPECIES	SPECIES BOTANICAL NAME	PURITY AND GERMINATION minimum percent	MIXUTRE PROPORTIONS in percent
FORBS (22.75%)			
New England Aster	Aster novae-angliae	PLS	1.31
Wild Senna	Cassia Hebecarpa	PLS	3.27
Joe Pye Weed	Eupatorium maculatum	PLS	1.31
Sneezeweed	Helenium Autumnale	PLS	1.31
Prairie Blazing Star	Liatria pyconostachya	PLS	2.62
Great Blue Lobelia	Lobelia Siphilitica	PLS	0.82
Marsh Betony	Pedicularis lanceolata	PLS	1.31
Black-eyed Susan	Rudbeckia hirta	PLS	1.31
Brown-eyed Susan	Rudbeckia triloba	PLS	2.62
Cup Plant	Silehium perforliatum	PLS	1.64
Riddell's Goldenrod	Solidago riddellii	PLS	1.31
Blue Vervain	Verbena hastata	PLS	0.65
Common Ironweed	Vernonia fasciculata	PLS	1.31
Golden Alexanders	Zizia aurea	PLS	1.96

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GRASSES, SEDGES and RUSHES (77.25%)			
Big Bluestem	Andropogan Gerardii	PLS	52.37
Canada Wild Rye	Elymus Canadensis	PLS	10.47
Virginia Wild Rye	Elymus virginicus	PLS	10.47
Switchgrass	Panicum virgatum	PLS	2.62
Dark-green Bulrush	Scirpus atrovirens	PLS	1.31

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

### **Prairie Mix – Planting Zone 2.**

	SPECIES	PURITY AND	MIXUTRE
SPECIES	BOTANICAL NAME	GERMINATION	PROPORTIONS
	DOTANICAL NAME	min percent	in percent
FORBS (50%)			
Smooth Blue	Aster laevis	PLS	0.85
Aster			
New England	Aster novae-angliae	PLS	0.85
Aster			
Canadian Milk	Astragalus canadensis	PLS	.43
Vetch			
White Wild	Baptisia leucantha	PLS	5.11
Indigo			
Pale Indian	Arnoglossum	PLS	1.70
Plantain	atriplicifolium		
Rattlesnake	Eryngium yuccifolium	PLS	7.62
Master			
Biennial Gaura	Gaura biennis	PLS	3.40
Cream Gentian	Gentiana alba	PLS	.85
Early Sunflower	Heliopsis	PLS	1.70
	helianthoides		
Great St. John's	Hypercium	PLS	.85
Wort	pyramidatum		
Prairie Blazing	Liatris pycnostachya	PLS	5.11
Star			
Wild Bergamot	Monarda fistulosa	PLS	.85
Foxglove	Penstemom digitalis	PLS	.85
Beardtongue			
Yellow	Ratibida pinnata	PLS	1.70
Coneflower			
Black-eyed Susan	Rudbeckia hirta	PLS	1.70

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CDECIEC	SPECIES	PURITY AND	MIXUTRE	
SPECIES	BOTANICAL NAME	GERMINATION	PROPORTIONS	
		min percent	in percent	
<b>FORBS</b> (50%)				
Sweet Black-eyed	Rudbeckia	PLS	.43	
Susan	subtomentosa			
Brown-eyed	Rudbeckia triloba	PLS	3.40	
Susan				
Compass Plant	Silphium laciniatum	PLS	5.11	
Stiff Goldenrod	Solidago rigida	PLS	.85	
Showy Goldenrod	Solidago speciosa	PLS	.43	
Purple Meadow	Thalictrum	PLS	3.40	
Rue	dasycarpum			
Golden	Zizia aurea	PLS	2.81	
Alexanders				
GRASSES (50%)	GRASSES (50%)			
Big Bluestem	Andropogan Gerardii	PLS	18.72	
Canada Wild Rye	Elymus Canadensis	PLS	12.50	
Indiangrass	Sorgastrum nutans	PLS	15.37	
Switchgrass	Panicum virgatum	PLS	1.70	
Cord Grass		PLS	1.70	

**Storage of Seed.** Any seed delivered prior to use shall be stored in such manner that it will be protected from damage by heat, moisture, rodents or other causes. Any previously tested and accepted seed that has become damaged shall be discarded and replaced by the contractor.

Mulching material shall be as specified under the bid item "Mulching Special".

Tackifier shall be a product from the WisDOT's Product Acceptability List (PAL) for tackifiers. Asphalt based products or any product deemed environmentally incompatible are not allowed. Tackifiers shall be mixed and applied in accordance to the manufacture's published directions.

### **C** Construction

Perform this work in accordance to standard spec 630 of the standard specifications and as hereinafter provided Use the following sowing rate in pounds per 1000 square feet of area:

Seed Mix	Rate
Infiltration	0.2 lbs per 1000 SF
Prairie	0.2 lbs per 1000 SF

Proper site preparation is vital to successfully establishing native plants from seed. Existing vegetation must be removed before sowing seed. In major construction projects general site grading will normally accomplish this. If there is not enough grading

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involved it will be necessary to eliminate existing vegetation using an herbicide like Round-Up (glyphosate) at the labeled rate.

Plantings need a firm seedbed for successful establishment. The soil is too loose and will need additional packing if compaction of soil greater than 1/2-inch occurs as a result of walking on soil. Packing can be done with a culti-packer or similar implement.

Fall seedings must occur after October 15 to ensure that soil conditions are cold enough to prevent seed germination of native seeds. If seeds germinate at this time of year they will winter-kill.

Spring seedings shall occur between May 1 and June 30.

Cover crops are planted to hold the soil while the native seeds become established. See the article in these specifications for the cover crop details.

To plant the native seed, small areas (less than 1 acre) can be seeded by hand. To distribute the seed evenly across the site a filler must be added. Moistened sawdust, peat moss, or coarse grade vermiculite can be used as fillers to spread the seed. Use 1/2 to 1 bushel of filler per 1000 square foot of area seeded.

Larger areas (more than 1 acre) may be seeded by machine. A Brillion seeder with a brush attachment works well on newly worked soil. A Truax or similar drill designed specifically for native seed planting is also acceptable. Small seeds shall be surface-sown and not drilled with larger seeds (to prevent the small seeds from being planted to deeply). Site shall be lightly raked after planting by hand or machine.

Mowing is the main management tool used to prevent weeds from shading out native seedlings. During the first growing season the planting shall need to be mowed several times. The cutting height shall be 4 to 5 inches. The planting shall be mowed each time weed growth reaches 6 to 10 inches high to prevent weeds from setting seed.

During the second growing season one mowing may be required in late spring or early summer if weed growth is thick. Raise the cutting height to 6 to 12 inches for this mowing.

No fertilizer shall be applied with native plant seedings.

Mulch Special shall be placed on the seeded bioswales areas within three days after the seeding has been completed.

Mulching operations shall not be performed during periods of excessively high winds which would preclude the proper placing of the mulch.

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The placed mulch shall be loose enough to allow some sunlight to penetrate and air to slowly circulate but thick enough to shade the ground, conserve soil moisture and prevent or reduce erosion.

The contractor shall maintain the mulched areas and shall repair any areas damaged by wind, erosion, traffic, fire, or other causes prior to final or partial acceptance of work under the contract

All seeded areas shall be watered immediately after seeding and shall be kept moist by watering or sprinkling by the contractor for a period of 30 days after the seed has germinated and grown to a height of 1 inch.

### **D** Measurement

The department will measure Seeding Mixture Special by the pound, acceptably completed.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0085.01Seeding Mixture SpecialLB

Payment for the seeding bid item is full compensation for providing, handling, and storing all seed; for providing the required culture and inoculating seed as specified; and for preparing the seed bed, sowing, covering and firming the seed.

### 51. Seeding Cover Crop, Item SPV.0085.02.

### A Description

This work shall consist of supplying cover crop seed for bioswale areas, supplying seed samples, germination test data, storage, and delivery of seed, all in accordance to the special provisions provided herein. All work shall conform to the requirements of standard spec 630 and as hereinafter provided.

### **B** Materials

Supplement standard spec 630.2.1.5.3 with the following:

Cover crops are planted to hold the soil while the native seed becomes established. Acceptable cover crops are oats or Regreen (sterile wheat hybrid). Rye grass is not allowed because of allelopathic effects, which inhibit germination of native seeds.

### **C** Construction

Apply oats at a rate of 9.6 pounds per acre when planted between mid-July and early September. This will serve as a cover crop for a fall planting. A spring planting of oats would occur between May 1 and July 15, and would have an application rate of 10 pounds per acre.

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Cyclone seeders while not effective for native seed can be used for planting cover crops. Smaller areas can be seeded by hand.

### **D** Measurement

The department will measure Seeding Cover Crop by the pound, acceptably completed.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0085.02Seeding Cover CropLB

Payment for the seeding cover crop bid item is full compensation for providing, handling, and storing all seed; for providing the required culture and inoculating seed as specified; and for preparing the seed bed, sowing, covering and firming the seed.

# 52. Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 43X68-Inch, Item SPV.0090.01.

### A Description

Perform this work in accordance to the pertinent requirements of standard spec 608.

### **B** Materials

Use materials as described in the standard spec 608.2.

#### C Construction

Perform work in accordance to standard spec 607.3.

### **D** Measurement

The department will measure Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 43X68-Inch per linear foot, acceptably completed and in conformance to standard spec 608.4.

### **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.01 Storm Sewer Pipe Reinforced Concrete LF

Horizontal Elliptical Class HE-IV 43X68-Inch

Payment is full compensation for furnishing all providing all materials; for excavation; for forming foundation; for providing and removing sheeting and shoring; for laying pipe; for sealing joints and making connections to new fixtures; for joint ties; for backfilling; for providing granular backfill material, including bedding material; for cleaning out.

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### 53. Steel Casing W/ Ductile Iron 36-inch Carrier, Item SPV.0090.02.

### A Description

This special provision describes the bore and jack of a steel casing pipe and the installation of a 36-inch diameter Ductile Iron carrier pipe to the length and elevations as shown on the plans.

### A.l General

Perform work under these items in accordance to the details as shown on the plans and the requirements of the Sewer and Water Construction in Wisconsin Specifications, current edition.

#### **B** Materials

### **B.1 Steel Casing Pipe**

For casing pipe over 24-inch diameter, provide extra strong, spiral welded steel pipe conforming to ASTM A139, Grade B. Provide all steel casing pipe fabricated in sections for welded field joints. Steel casing shall have minimum yield strength of 35,000 psi, minimum thickness of .625', and shall be spiral-welded steel pipe, uncoated, or equal. The casing pipe must have sufficient thickness to withstand both earth loads and live loads imposed from traffic. Provide engineer with manufacturer certification of steel casing pipe, including minimum yield strength, wall thickness, manufacturer, and ASTM Grade and class.

All welds shall be free from embedded scale and slag, and have a tensile strength across the weld not less than that of the thinner of the connected sections. Make all pipe welds watertight. Use butt welds for all shop-welded joints. Welders shall be certified as specified in AWWA C200 and C206. The use of back-up welding strips or rings for welds will not be permitted. Repair leaks and defects in welds as directed by the engineer.

Install wrap around pull on type boot seals, or approved equal on both ends of the Steel Casing pipe after pipe installation. The seals shall be watertight and the type of seal shall be approved by the engineer before backfilling. Seals shall have a minimum of two type 304 stainless steel bands with worm screws. Boot seals shall be provided by same manufacturer as casing spacers.

### **C** Construction

Notify engineer and the WisDOT in accordance to permit requirements before commencing casing installation. Provide complete installation at line and grade indicated on the plans.

Prepare and submit a plan to the engineer for approval for casing installation means and methods. Submittal shall include detailed information on bore pit size and location, type and size of equipment, shaft construction, advance auger tooling, means for controlling grade line, lubrication, welding, means for preventing voids, over-ream, and means to fill over-ream voids, and any information necessary for casing installation.

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The 36-inch Ductile Iron carrier pipe shall be restrained using stainless steel factory-fabricated (wood not allowed) spacers. Provide a minimum three spacers for each pipe length. Spacers shall be located within 2 feet of the end of casing. Design spacers to prevent uplifting of carrier pipe by hydrostatic forces and attach to pipe using stainless steel bands minimum (1 inch) wide. Spacers shall be a minimum 12 inches wide with a minimum 6 runners per spacer. Shell, risers and spacers shall be type 304 stainless steel or approved equal. Casing spacers shall be provided by same manufacturer as end boot seals.

Store pipes on level ground free of sharp objects which could damage the pipe. Limit the Stacking of the pipe to a height that will not cause excessive deformation of the bottom layers of pipes under anticipated temperature condition. Where necessary due to ground conditions, store the pipe on wooden sleepers, spaced suitably and of such widths as not to allow deformation of the pipe at the point of contact with the sleeper or between supports.

Pipe shall be homogenous throughout and free of voids cracks, inclusions and other defects and shall be uniform in color, density and other physical characteristics.

Plug all open ends of all sections of joined and/or installed pipe (not in service) at night to prevent anything from entering the pipe line or section. The practice of stuffing cloth or paper in the open ends of the pipe will be considered unacceptable.

Prepare and submit a plan to the engineer for approval for insertion of the storm sewer into the casing. Include pullback procedure, ballasting, use of rollers, side booms and side rollers, coating protection, internal cleaning, internal gauging, and purging in the plan.

Store excavated material from the boring and receiving pits in locations that minimize the interference with operations, minimize environmental damage, and protect adjacent areas from flooding, runoff and sedimentation.

Damage to utilities and the resulting repair, temporary service cost, etc., shall be borne by the contractor. Backfill access pits in accordance to the appropriate specifications.

Properly sheet/shore all excavations in accordance to relevant specifications for trench safety systems. Any damage resulting from improperly shored excavations shall be corrected to the satisfaction of the engineer with no compensation due to the contractor.

Provide all surveying required to layout and construct the casing pipe.

### **D** Measurement

The department will measure Steel Casing w/ Ductile Iron 36-Inch Carrier by the linear foot of pipe in place measured along the top centerline of the casing, acceptably complete.

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### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.02 Steel Casing w/ Ductile Iron 36-Inch Carrier LF

Payment is full compensation for furnishing all materials, for surveying; excavating for sheeting and shoring, for laying pipe, for boring and receiving pit; for sheeting, shoring, bracing; for installing casing pipe, carrier pipe, spacers, end seals and lubricant work; for sealing joints and making connections to new or existing facilities; for dewatering; for removing shoring, sheeting, bracing; for site cleaning.

### 54. Hydrant Leads Ductile Iron 6-Inch, Item SPV.0090.03.

### **A Description**

This special provision describes furnishing and installing hydrant leads and plug tee or tapping sleeve connections in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Hydrant leads shall be Class 52 Ductile Iron pipe. Refer to special provisions for Water Main Ductile Iron, materials section for class of pipe adjoining hydrant.

Provide Clow F1217 Anchoring Tee or Romac Stainless Steel Tapping Sleeve meeting all applicable requirements of AWWA C153, class 350 fitting with mechanical joints, as noted on drawings for size and location.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

Provide Stainless Steel bolts with Blue Loc-Tite; Cor-Blue T-Bolts manufactured sby Tyler Union meeting ANSI/AWWA C600.

The concrete for the concrete buttresses shall be Class "F" 4.5 bag mix. The buttresses shall have wood thrust blocking per standard specifications for Sewer & Water Construction in Wisconsin.

Pipe bedding material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Pipe cover material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Backfill slurry to comply with the contract bid item "Backfill Slurry" as described in these specifications.

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Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5. Wrap shall be Class "C" - black, with a minimum nominal thickness of 0.008 inches (8 mils).

### **C** Construction

Lay hydrant lead in accordance to chapter 4.3.0 through 4.3.13 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. Provide a minimum of 4-Inches of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. install new megalug restraint glands at all fittings locations between the hydrant and the anchor tee. Restraint glands shall be installed according to the manufacturer instructions. Use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used.

All new pipe and fittings shall be disinfected prior to and inspected at time of installation. The contractor will coordinate with the inspector to confirm proper disinfection procedures prior to laying new water main.

Direction of Laying: Unless otherwise ordered, lay pipe with the bell ends facing the direction of laying. Bells face upgrade when the grade exceeds 30 feet of rise per one hundred feet of trench.

Joint Deflection: The maximum allowable deflection will be as described in chapter. 4.4.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. If excess deflection is required, special bends shall be furnished to provide angular deflections.

Joining of Pipe: Take precautions to prevent foreign material from entering the pipe while it is being placed in the line.

Cutting of Pipe: Cut pipe at right angles to the centerline of the pipe. Cutting shall be done in a neat competent manner without damage to the pipe and to leave smooth ends. Cut all pipes with an approved mechanical cutter. The cut end of the pipe to be used with a rubber gasket joint shall be tapered by grinding or filing about 1/8-inch back at an angle of approximately 30 degrees with the centerline of the pipe, and remove any sharp or rough edges.

Install new stainless steel bolts at non-restraint connections and assemble with Blue Loc-Tite. Install and torque set T-Bolts connections to required manufacture limits.

Buttresses and thrust blocking shall be constructed per the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, file 44 with wood blocking and Class "F" ready mix concrete. Job mix concrete may only be used with approval of the department.

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Whenever water mains cross over sewers, the water main shall be laid at such an elevation that the bottom of the water main is at least 6 inches above the top of the sewer.

Whenever water mains cross under sewers, a minimum vertical separation of 18 inches shall be maintained between the top of the water main and the bottom of the sewer. At crossings, center one full length of water pipe on the sewer so that both joints will be as far from the sewer as possible.

**Obstructions in Line or Grade:** Whenever it becomes necessary to lay a main over, under or around a known obstruction, the contractor will furnish and install the required fittings. The laying of such fittings will be paid for at the unit price bid for each size of main. No additional compensation will be paid to the contractor for any expenses incurred because of such obstruction. When an unknown underground structure interferes with the work to such an extent that an alteration of the plan is required, and which such alteration results in a change in the cost to the contractor, the engineer may issue a written change order for such altered work, specifying the basis of payment or credit for such altered work.

**Polyethylene Wrap:** Corrosion protection shall be provided for all ductile iron tees, crosses, bends, etc. and all valves by use of polyethylene wrap. Tape for securing the wrap shall be a thermoplastic material with a pressure sensitive adhesive face capable of bonding to metal, bituminous coating, ductile iron water main. Tape shall have a minimum thickness of 8 mils, and a minimum width of 1 inch.

Extend the wrap approximately 18 inches beyond all joints. Tape all seams securely. Place a cover material with care to prevent damage to the polyethylene wrap. Immediately repair any rips or punctures in the wrap. A minimum of 18 inches of cover material shall be required above the top of pipe and shall be incidental to installation of this item

Insulation shall be in accordance to section 4.17.2(a) of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition and shall be installed as indicated on the plans or whenever the water main has less than 6 feet of cover or when crossing within 1 foot of a sanitary sewer or storm sewer.

Provide pipe cover of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Backfill slurry to comply with the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, chapter 8.43.8 and shall be required to the bottom pavement sub-grade below all roadway and driveway pavement surfaces. Trench backfill within roadway shoulders shall be granular material conforming to section 8.43.4. Granular backfill and spoil backfill shall be mechanically compacted in accordance to sections 2.6.14(a) and 2.6.14(b) of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, respectively. Settlement of backfill shall be corrected by the contractor.

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Water for filling, testing and flushing for safe sampling of water main will be supplied only by permission of the City Water Utility via Permit. All water used that is used for filling new mains, pressure testing, flushing of mains, trench flushing and safe sampling etc., will be charged at the current rates. A permit is required from the City Water Utility prior to any water usage.

Test water main, including hydrants and valves, in accordance to AWWA C600 section B. Pressure and leakage test to be conducted at 150 PSI for 1 hour and in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition and under the jurisdiction of the department and the City Water Utility. Leaking test shall be performed no sooner than 48 hours after the last buttress was poured. Concrete tickets showing the mix design shall be provided to the department. Furnish and operate all equipment required by hydrostatic testing subject to the approval of the engineer.

Prior to payment, flushing and disinfection shall be completed in accordance to section 4.15.0 and 4.16.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, in a manner satisfactory for protecting existing pressurized mains and shall result in a prompt safe water sample. The contractor shall take safe water sample and submit sample to a state approved lab. A copy of the safe sample report shall be submitted to the department and the City Water Utility. All new water mains shall be flushed and disinfected prior to placing in service. Delays in disinfection shall in no way create liability on the part of the department. Flush new water main under engineer's supervision. Do not drain disinfecting solution into storm sewer or wetland.

Only the City of New Berlin personnel shall be allowed to operate existing valves during construction; call (262) 786-7086 before proceeding.

Upon completion of the water main, the contractor shall request a final walk through inspection with the department and the City Water Utility to check all of the completed construction including valve boxes, hydrants, tees, and other appurtenances. The contractor shall verify that all valves are open.

#### **D** Measurement

The department will measure Hydrant Leads Ductile Iron 6-Inch per linear foot, acceptably completed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.03Hydrant Leads Ductile Iron 6-InchLF

Payment is full compensation for furnishing all materials including all excavation, trench wall support, bedding, cover, backfilling, compacting, pipe laying, bands, megalug restraints, anchor tees or tapping sleeves, bends, restraint glands, bulkheads, thrust

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restraints, buttresses, making all necessary pipe connections, sheathing, shoring, dewatering, disinfection, testing, disposal of surplus material, cleanup.

# 55. Water Mains Ductile Iron 8-Inch, Item SPV.0090.04; Water Mains Ductile Iron 16-Inch, Item SPV.0090.05.

### **A Description**

This special provision describes furnishing and installing water mains and fittings in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

All Ductile Iron pipe shall be pressure Class 350 or greater unless otherwise noted on the plans approved by the department and the City Water Utility. Approved Ductile Iron pipe manufacturing companies are listed below:

American Cast Iron Pipe Company Clow Water Systems, Company Griffin Pipe Products Company U.S. Pipe and Foundry Company.

All pipe listed above shall be manufactured in the USA, subject to a hydrostatic pressure test of at least 500 psi at point of manufacture. All pipes shall be furnished with Push-On type joints such as "Tyton" or "Fastite" complete with all necessary accessories.

Fittings shall be short-bodied ductile iron and shall be Class 350 or greater, conforming to the current ANSI/AWWA C-110/A21.10 or ANSI/AWWA C-153/A21.53. Joints shall be push-on type rubber gaskets and conform to ASTM C1869. The fittings shall have a standard asphaltic coating and shall have a cement mortar lining on the interior in accordance to current ANSI/AWWA C-104/A21.4.

Provide mechanical joint 8"x16" Crosses, 8"x16" Anchoring Tee or 8"x16" Romac Stainless Steel Tapping Sleeve meeting all applicable requirements of AWWA C153, class 350 fitting with mechanical joints, as noted on drawings for size and location.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

All pipe trenches shall be Class "C" with bedding to be 3/8-inch crushed limestone chips (no sand allowed) and cover material conforming to the requirements of sections per the standard specifications for Sewer & Water Construction in Wisconsin, latest edition chapter 8.43.2 through 8.43.3 and file 36.

Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5. Wrap shall be Class "C" - black, with a minimum nominal thickness of 0.008 inches (8 mils).

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The concrete for the concrete buttresses shall be Class "F" 4.5 bag mix. The buttresses shall have wood thrust blocking per standard specifications for Sewer & Water Construction in Wisconsin.

Pipe bedding material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Pipe cover material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Backfill slurry to comply with the contract bid item "Backfill Slurry" as described in these specifications.

### **C** Construction

Expose utilities that cross proposed facility prior to construction to allow the engineer to check for conflicts. Protect utilities from disturbance throughout work. When removing water main, salvage existing valves and hydrants; store these items within the specified construction staging area. Remove, dispose and replace the existing water main and appurtenances as indicated on the plans. Water main and appurtenances shall be removed in accordance to chapter 4.14.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition.

**Installation:** Have sufficient and adequate equipment on the site of the work for unloading and lowering pipe and fittings into the trench. Exercise extreme care in handling all pipe, fittings and special castings to prevent breakage. Do not drop into the trench or so handled as to receive hard blows or jolts when being moved. Water mains that are to be relayed shall include the removal or abandonment of the existing water main pipe and appurtenances.

**Field Inspection of Materials:** Inspect fitting for defects before lowering and while suspended. All materials used in the work must pass field inspection.

Removal of Water: At all times during the excavation period and until its completion and acceptance at final inspection, ample means and equipment shall be provided with which to remove promptly, and dispose of properly, all water entering any excavation or other parts of the work. No water shall be allowed to rise over, or come in contact with open water main, per the standard specifications for sewer and water construction, chapter 4.3.9. Water pumped or drained from the work area hereunder shall be in accordance to standard spec 107.18 (7) to be treated with the use of a settling basin in a suitable manner without damage to adjacent property, to other work under construction, or to street pavements or municipal parks or property. Do not discharge water onto streets without adequate protection of the surface at the point of discharge. Do not discharge water into sanitary sewers. Do not discharge water containing settleable solids into storm sewers. Promptly repair all damage caused by dewatering the work. Dewatering of the water main trench is incidental to this item.

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All new pipe and fittings shall be disinfected prior to and inspected at time of installation. The contractor will coordinate with the inspector to confirm proper disinfection procedures prior to laying new water main.

**Direction of Laying:** Unless otherwise ordered, lay pipe with the bell ends facing the direction of laying. Bells face upgrade when the grade exceeds 30 feet of rise per one hundred feet of trench.

**Joint Deflection:** The maximum allowable deflection will be as described in chapter. 4.4.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. If excess deflection is required, special bends shall be furnished to provide angular deflections.

**Joining of Pipe:** Take precautions to prevent foreign material from entering the pipe while it is being placed in the line.

**Cutting of Pipe:** Cut pipe at right angles to the centerline of the pipe. Cutting shall be done in a neat competent manner without damage to the pipe and to leave smooth ends. Cut all pipes with an approved mechanical cutter. The cut end of the pipe to be used with a rubber gasket joint shall be tapered by grinding or filing about 1/8-inch back at an angle of approximately 30 degrees with the centerline of the pipe, and remove any sharp or rough edges.

Whenever water mains cross over sewers, the water main shall be laid at such an elevation that the bottom of the water main is at least 6 inches above the top of the sewer.

Whenever water mains cross under sewers, a minimum vertical separation of 18 inches shall be maintained between the top of the water main and the bottom of the sewer. At crossings, center one full length of water pipe on the sewer so that both joints will be as far from the sewer as possible.

**Obstructions in Line or Grade:** Whenever it becomes necessary to lay a main over, under or around a known obstruction, the contractor will furnish and install the required fittings. The laying of such fittings will be paid for at the unit price bid for each size of main. No additional compensation will be paid to the contractor for any expenses incurred because of such obstruction. When an unknown underground structure interferes with the work to such an extent that an alteration of the plan is required, and which such alteration results in a change in the cost to the contractor, the engineer may issue a written change order for such altered work, specifying the basis of payment or credit for such altered work.

Unless otherwise indicated, water main trench section shall be Class "C" with bedding to be 3/8-inch crushed limestone chips (no sand allowed) and 3/8-inch cover material conforming to the requirements of sections 8.43.2 of the standard specifications for Sewer & Water Construction in Wisconsin. Where called for in the plans, granular backfill and spoil backfill shall conform to the requirements of sections 8.43.4 and 8.43.5,

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respectively of the standard specifications for Sewer & Water Construction in Wisconsin. Crushed stone or crushed concrete backfill shall conform to the 1-1/2 inch graded crushed stone called for in section 8.43.7 of the standard specifications for Sewer & Water Construction in Wisconsin. In unstable trenching conditions, an additional 3 inches of graded crushed stone shall be provided in accordance to section 8.43.6 of the standard specifications for Sewer & Water Construction in Wisconsin and is incidental to this item

**Lugged Restraint Glands:** Megalug or pre-approved equal mechanical joint lugged restraint glands may be used with Ductile iron water main. The gland shall be such that it can replace the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA C111/A21.11 and ANSA/ AWWA C153/A21.53 of latest revision. Restraint glands or shall be installed according to the manufacturer instructions. The contractor shall use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used. Pipe lengths of 20 feet or more from the valve to tee connection or longer shall require restraint harnesses at bell ends. The harness shall that comply with AWWA C600 and ASTM D2774.

**Protective Coating:** Apply a protective coating of one heavy coat of Koppers Bitumastic 50 or 505 or equal to all straps, the rods, bolts, nuts and washers after installation. The coating shall be smooth and impervious to water without any tendency to scale off and shall not be brittle. Care shall be taken that the coating shall be complete without bare spots.

Buttresses and thrust blocking shall be constructed per the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, file 44 with wood blocking and Class "F" ready mix concrete. Job mix concrete may only be used with approval of the department.

**Polyethylene Wrap:** Corrosion protection shall be provided for all ductile iron tees, crosses, bends, etc. and all valves by use of polyethylene wrap. Tape for securing the wrap shall be a thermoplastic material with a pressure sensitive adhesive face capable of bonding to metal, bituminous coating, ductile iron water main. Tape shall have a minimum thickness of 8 mils, and a minimum width of 1 inch.

Extend the wrap approximately 18 inches beyond all joints. Tape all seams securely. Place a cover material with care to prevent damage to the polyethylene wrap. Immediately repair any rips or punctures in the wrap. A minimum of 18 Inches of cover material shall be required above the top of pipe and shall be incidental to installation of this item.

Pipe insulation shall be installed as indicated on the plans or whenever the water main has less than 6 feet of vertical cover while crossing a sanitary sewer or storm sewer. Pipe insulation is paid for under a separate bid item.

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Backfill slurry is required to the bottom pavement subgrade below all roadway and driveway pavement surfaces. Trench backfill within roadway shoulders shall be granular material conforming to section 8.43.4. Granular backfill and spoil backfill shall be mechanically compacted in accordance to sections 2.6.14(a) and 2.6.14(b) of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, respectively. Settlement of backfill shall be corrected by the contractor.

Water for filling, testing and flushing for safe sampling of water main will be supplied only by permission of the Water Utility via Permit. All water used that is used for filling new mains, pressure testing, flushing of mains, trench flushing and safe sampling etc., will be charged at the current rates. A permit is required from the City Water Utility prior to any water usage.

Test water main, including hydrants and valves, in accordance to AWWA C600 section B. Pressure and leakage test to be conducted at 150 PSI for 1 hour and in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition and under the jurisdiction of the department and the City Water Utility. Leaking test shall be performed no sooner than 48 hours after the last buttress was poured. Concrete tickets showing the mix design shall be provided to the department. Furnish and operate all equipment required by hydrostatic testing subject to the approval of the engineer.

Prior to payment, flushing and disinfection shall be completed in accordance to section 4.15.0 and 4.16.0 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, in a manner satisfactory for protecting existing pressurized mains and shall result in a prompt safe water sample. The contractor shall take safe water sample and submit sample to a state approved lab. A copy of the safe sample report shall be submitted to the department and the City Water Utility. All new water mains shall be flushed and disinfected prior to placing in service. Delays in disinfection shall in no way create liability on the part of the department. Flush new water main under engineer's supervision. Do not drain disinfecting solution into storm sewer or wetland.

Only the City of New Berlin personnel shall be allowed to operate existing valves during construction; call (262) 786-7086 before proceeding.

Upon completion of the water main, the contractor shall request a final walk through inspection with the department and the City Water Utility to check all of the completed construction including valve boxes, hydrants, tees, and other appurtenances. The contractor shall verify that all valves are open.

#### **D** Measurement

The department will measure Water Mains Ductile Iron 8-Inch and 16-Inch by the linear foot, completed and accepted in accordance to contract, measured along centerline of pipe, center to center of junctions and fittings. Footage to be paid for shall include construction through valves and other fittings.

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### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Water Mains Ductile Iron 8-Inch	LF
SPV.0090.05	Water Mains Ductile Iron 16-Inch	LF

Payment is full compensation for furnishing all materials including all excavation, trench wall support, bedding, cover, backfilling, compacting, pipe laying, bands, megalug restraints and other fittings, crosses, anchor tees or tapping sleeves, bends, restraint glands, bulkheads, thrust restraints, buttresses, making all necessary pipe connections, insulation, sheathing, shoring, dewatering, disinfection, testing, disposal of surplus material, site cleanup.

# 56. Water Services 1 1/4-Inch Open Cut, Item SPV.0090.06; Water Services 2-Inch Open Cut, Item SPV.0090.07.

### A Description

This special provision describes furnishing and installing water service laterals, curb stops and service boxes by open cutting as shown on the plans in accordance to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition, and as hereinafter provided.

### **B** Materials

Water laterals shall be HDPE and shall be 1 1/4-inch or 2-inch in diameter meeting requirements of Chapter 8.24.0 of Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition.

Curb stops shall be manufactured in accordance to AWWA C-800 and ASTM B-62. The existing service box shall be used unless the casting is defective. Service boxes shall be of the "Arch' or "Minneapolis Pattern" made with cast iron conforming to ASTM Designation A-48, Class 20. The castings shall be free from blowholes, porosity, hard spots, shrinkage defects or cracks or other injurious defects and shall have a normal casting finish. The pentagon head bolt shall be brass.

The casting shall be thoroughly coated with a 1-mil thickness bituminous coating.

Insulation shall be in accordance to Section 8.50.1 of the Standard Specifications for Sewer and Water Construction in Wisconsin, except that polystyrene boards shall be 4-inches thick.

### **C** Construction

HDPE water services shall be installed in accordance to Chapter 5.5.0 and Section 5.6.3 of the Standard Specifications for Sewer and Water Construction in Wisconsin, except as modified below.

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- 1. Install all curb boxes at location shown on drawings.
- 2. Backfill and compact as specified for adjacent water main.
- 3. Delete use of lead disc from Section 5.5.15.
- 4. Any damage to private property, landscaping or trees caused by contractor's operation for installation of piping, shall be replaced to the owner's and city's satisfaction at no additional cost.
- 5. Insulation shall be installed as indicated on the plans or whenever the water main has less than 6 feet of vertical cover or when crossing a sanitary sewer or storm sewer.
- 6. The locations and elevations of the existing private water service laterals as shown on the plans are approximate. The contractor shall be responsible for verifying the location and elevation of the existing private water service laterals.

### **D** Measurement

The department will measure Water Services 1 1/4-Inch and 2-Inch Open Cut by the linear foot, acceptably completed. Footage to be paid for shall include installation of curb stops, and service boxes.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.06	Water Services 1 1/4-Inch Open Cut	Each
SPV.0090.07	Water Services 2-Inch Open Cut	Each

Payment is full compensation for furnishing all materials, all excavation, trench wall support, bedding, cover, backfill, compaction, pipe laying, making all necessary pipe connections, curb stops, service boxes, shoring, dewatering, disinfection, testing, disposal of surplus material, site cleanup.

### 57. Water Services 4-Inch Open Cut, Item SPV.0090.08.

### **A Description**

This special provision describes furnishing and installing 4-inch ductile iron laterals, open cut, with fittings to an existing service connection in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

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### **B** Materials

4-Inch laterals shall be pressure class 350 or greater ductile iron pipe. Refer to special provisions for Water Main Ductile Iron 8-Inch, materials section for approved ductile iron pipe manufacturing companies.

Provide resilient wedge type gate valves meeting all applicable requirements of AWWA C509 with mechanical joints, ductile iron body, bronze-mounted with bronze non-rising stems and O-rings seals.

Provide Anchoring Tee or Romac Stainless Steel Tapping Sleeve meeting all applicable requirements of AWWA C153, class 350 fitting with mechanical joints, as noted on drawings for size and location.

Valve boxes shall be Tyler series 6860 heavy duty, three-piece, 5 1/4-inch shaft or pre-approved equal, with a two-piece cast iron with lid. A valve box adaptor by Adapter, Inc., or pre-approved equal, shall be furnished as part of the complete valve box for direct-bury valves.

Restraint glands shall be Megalug series 1100 or pre-approved equal. Restraint glands shall have been tested to UNI-B-13-92, be listed by Underwriters Laboratories and be approved by Factory Mutual.

Provide Stainless Steel bolts with Blue Loc-Tite; Cor-Blue T-Bolts manufactured by Tyler Union meeting ANSI/AWWA C600.

Class "F" 4.5 bag mix Concrete Buttresses with wood thrust blocking per the standard specifications for Sewer & Water Construction in Wisconsin, file 43 through 46.

Pipe bedding material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Pipe cover material, 3/8-Inch crushed stone chips that conforms to the standard specifications for Sewer & Water Construction in Wisconsin, chapter 8.43.2, table 32.

Backfill slurry to comply with the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, chapter 8.43.8 and as defined in these special provisions. Granular backfill shall meet the requirements of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, chapter 8.43.4 and standard spec 209.2.2 of the standard specifications for Grade 2 material.

Polyethylene wrap shall conform to AWWA C-105 or ANSA A21.5. Wrap shall be Class "C" - black, with a minimum nominal thickness of 0.008 inches (8 mils).

Insulation shall be in accordance to section 8.50.2 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition.

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### C Construction

Lay 4-inch ductile iron lateral in accordance to chapter 4.3.0 through 4.3.13 of the standard specifications for Sewer & Water Construction in Wisconsin, latest edition. Provide a minimum of 4-inches of compacted 3/8-inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Construct all 4–Inch gate valves and valve boxes at locations shown on the plans. Each 4-Inch gate valve shall have stainless steel bolts and Restraint glands connecting between the new pipe sleeve connection to the existing cast iron main tee connection. Restraint glands shall be installed according to the manufacturer instructions. The contractor shall use the provided torque limiting twist off nuts, sized same as tee-head bolts, to ensure proper actuation of restraining devices. The restraint glands shall have a pressure rating equal to that of the pipe on which it is used.

NOTE: Any resilient wedge type gate valve used for cutting in must use a cutting tool that will develop a hole not less 1/2 inch smaller than the valve. Any test plugs included on valves shall be replaced with stainless steel plugs.

Valve boxes and adapter shall be centered, plumb over the wrench nut of the valve and set to finished grade at which point a minimum of 2 inches of adjustment up and down shall remain. All valves and valve boxes shall be fully operated and checked by the department, the City Water Utility and contractor prior to acceptance. Deviation from vertical or horizontal from center of operating nut in excess of 1 inch shall not be acceptable.

Provide a minimum of 4-Inches of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Support valves in vertical position on level hardwood blocking prior to the wrenching of Restraint glands.

Buttresses and thrust blocking shall be constructed per the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, file 44 with wood blocking and class "F" ready mix concrete. Job mix concrete may only be used with approval of the department.

**Polyethylene Wrap:** Corrosion protection shall be provided for all ductile iron tees, crosses, bends, etc. and all valves by use of polyethylene wrap. ape for securing the wrap shall be a thermoplastic material with a pressure sensitive adhesive face capable of bonding to metal, bituminous coating, ductile iron water main. Tape shall have a minimum thickness of 8 mils, and a minimum width of 1 inch.

Extend the wrap approximately 18 inches beyond all joints. Tape all seams securely. Place a cover material with care to prevent damage to the polyethylene wrap. Immediately repair any rips or punctures in the wrap. A minimum of 18 Inches of cover material shall be required above the top of pipe and shall be incidental to installation of this item.

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Provide pipe cover of compacted 3/8-Inch stone chips per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 4.3.3 and chapter 8.43.2. Below the roadway and curb and gutter, backfill slurry is required in the main trench areas to the bottom of subgrade. Trench backfill within roadway shoulders shall be granular material conforming to section 8.43.4.

All valve boxes deeper than 10.0 feet from top of the operating nut to finish grade shall have solid extension rods with a centering ring. The extension rod shall be pinned to operating nut as approved by the City Water Utility. Valve boxes shall be externally encased with polyethylene wrap per the standard specifications for Sewer & Water Construction in Wisconsin, chapter 6.21.0, with a maximum encasement of 18 inches above the adapter section

Insulation shall be installed as indicated on the plans or whenever the water main has less than 6 feet of vertical cover or when crossing a sanitary sewer or storm sewer.

Water for filling, testing and flushing for safe sampling of water main will be supplied only by permission of the City Water Utility via Permit. All water used that is used for filling new mains, pressure testing, flushing of mains, trench flushing and safe sampling etc., will be charged at the current rates. A permit is required from the City Water Utility prior to any water usage.

#### **D** Measurement

The department will measure Water Services 4-Inch Open Cut per linear foot, acceptably completed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.08Water Services 4-Inch Open CutLF

Payment is full compensation for furnishing all materials including gate valves, valve boxes, and valve supports, anchor tees or tapping sleeves; all excavation, trench wall support, bedding, cover, backfilling, compacting, pipe laying, bands, megalug restraints and other fittings, crosses, tees, bends, restraint glands, bulkheads, thrust restraints, buttresses, making all necessary pipe connections, insulation, sheathing, shoring, dewatering, disinfection, testing, disposal of surplus material, site cleanup.

# 58. Construction Staking Sanitary Sewers, Item SPV.0105.01; Construction Staking Water Mains, Item SPV.0105.02.

### **A Description**

(1) This special provision describes construction staking work. Furnish and set construction stakes or control points, including all calculations required, necessary to establish the horizontal and vertical position of water main and sanitary sewer

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(includes water main pipe and sanitary sewer manholes). Check plan dimensions, alignment, and elevations for accuracy with existing field conditions. Check horizontal and vertical position of all water main pipe and sanitary sewer manholes for accuracy with existing field conditions. Call to the engineer attention any errors and apparent discrepancies for correction of interpretation prior to proceeding with the work.

### **B** (Vacant)

### C Construction

### C.1 General

- Obtain or calculate benchmark data, grades, and alignment from date in the plan and verify with the engineer prior to beginning the work. The engineer will furnish horizontal alignment, horizontal alignment ties, and control point data. Reestablish the plan horizontal roadway alignment, alignment ties, and control points. Engineer will approve methods of survey and staking prior to beginning the work. The degree of accuracy used in the survey work shall be consistent with third order, Class II. Additional benchmarks and control points shall be established as necessary or as directed by the engineer. Check plan dimensions, alignment, and elevations for accuracy with existing field conditions. Immediately call to the engineer's attention any errors and apparent discrepancies for correction of interpretation prior to proceeding with the work.
- (2) Maintain neat, orderly, and complete survey notes and computations used in establishing the lines and grades. Make available to the engineer the survey notes and computations within 24 hours upon request as the work progresses.

### **C.2** Sanitary Sewer

(1) Set and maintain construction stakes for sanitary sewer manholes to achieve the required accuracy and to satisfy the contractor's method of operations. Locate all construction stakes to within 0.02 feet of the true horizontal position and establish the grade elevation to within 0.01 feet of the true vertical position.

### C.3 Water Main

(1) Set and maintain as necessary construction stakes for water main to achieve the required accuracy and to satisfy the contractor's method of operations. Locate all breakpoint construction stakes to within 0.02 feet of the true horizontal position and establish the grade elevation to within 0.01 feet of the true vertical position.

### **D** Measurement

- (1) The department will measure Construction Staking Sanitary Sewers by the lump sum unit of work, acceptably completed.
- (2) The department will measure Construction Staking Water Mains by the lump sum unit of work, acceptably completed.

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#### **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Construction Staking Sanitary Sewers	LS
SPV.0105.02	Construction Staking Water Mains	LS

- Payment for Construction Staking Sanitary Sewers is full compensation for survey work necessary to locate and set all sanitary manhole construction stakes; and for furnishing all labor, tools, stakes, flags, pins, lath, equipment, and incidentals necessary to complete the contract work.
- (3) Payment for Construction Staking Water Mains is full compensation for survey work necessary to locate and set all hydrants, valves, and water main pipe construction stakes; for checking location, grade, and alignment of all hydrants, valves, and water main pipe for accuracy with existing field conditions; for resetting damaged or missing hydrant, valve, and water main pipe construction stakes; and for furnishing all labor, tools, stakes, flags, pins, lath, equipment, and incidentals necessary to complete the contract work.
- (4) Give to the engineer all survey notes and computations used in establishing the required lines and grades within 21 days of completing the work under the above items and must be received before final payment for the work will be made.

## 59. Walls Modular Block Gravity Special, Item SPV.0165.01.

#### **A Description**

This special provision describes designing, furnishing and construction of modular block walls special in accordance to these specifications and in reasonably close conformity with the lines, grades, design and dimensions as shown on the plans.

#### **B** Materials

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

**Segmental Retaining Wall Units.** Segmental standard unit, straight-faced department of transportation gray or equal meeting the requirements for ASTM C-1372 and NCMA SRWU-2. The Wall units shall be pinned-type with vendor supplied 1/2-inch x 5 1/4-inch fiberglass pins meeting requirements for ASTM D-4475; two pins per unit minimum. Cap units shall be straight face with straight sides having a minimum height of 4-inches.

**Geo-Synethic Grid Units.** Where required by the engineer, Geosynthetic reinforcement shall consist of geogrids manufactured from high tenacity polyester filament yarn or high density polyethylene. Polyester geogrid shall be coated with an impregnated PVC coating that resists peeling, cracking, and stripping.

Granular Backfill shall be between the back of the concrete block and existing embankment. It shall meet the requirements of with Sewer & Water Specifications Chapter 8.43.4 and standard spec 209.2.2 for Grade 2 material.

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#### **B.1.1 Leveling Pad**

A compacted leveling pad made from base aggregate dense 3/4-inch as given in standard spec 305.5 shall be used. The thickness of the aggregate leveling pad shall be 6 inches minimum. The aggregate leveling pad shall be as wide as the blocks plus 6 inches with 6 inches of pad extending beyond the front face of the wall.

#### **B.2 Design Requirements**

It is the responsibility of the contractor to supply supporting documentation, including shop drawings of each wall location with lengths and wall height, as required by this special provision for review by the engineer and the department to show that the supplied vendor materials for the proposed wall design adjacent to the new fire hydrants comply with design specifications described above. The supporting wall documentation shall be submitted to the engineer for review and acceptance no later than 10 days prior to the preconstruction conference.

#### **C** Construction

The modular block walls shall be constructed behind hydrants at the locations shown on the plans. The elevations for the top of wall and bottom of wall are shown on the Sanitary and Water Main adjustment plans and shall be field verified by the engineer prior to construction. The contractor shall construct leveling pad at the appropriate line and grade as shown on the plans or as directed by the engineer.

The wall system shall be battered, utilizing the placement of shear pin connections between pre-drilled holes provided with each concrete unit. Layout of corners or curves shall be in accordance to the manufacturer's recommendations and approved shop drawings. Sawcuts of units to match wall corners shall be incidental to the cost of construction.

Place a minimum of two fiberglass shear pins in units which are stacked more than one course high.

Backfill lifts shall be no more than 12 inches in thickness, and shall be benched into the existing embankment. Backfilling and compaction shall closely follow erection of each course of facing units. Backfilling operations shall be conducted in such a manner as to prevent damage or misalignment of the stone facing units. Any such damage or misalignment shall be corrected at the contractor's expense as directed by the engineer.

Where the block wall height exceeds 6 courses or as directed by the engineer, geosynthetic reinforcement shall be oriented with the highest strength axis perpendicular to the wall alignment. The geogrid shall be laid horizontally on compacted backfill and attached by the shear pins to the block wall units. The geogrid shall be pulled taut, and anchored prior to backfill placement over the geogrid.

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Cap units shall be pinned below and glued to underlying units with an all-weather concrete adhesive. Sawcuts of units to match wall corners shall be incidental to the cost of construction

The surrounding area located above and below the retaining wall site shall be restored to its original condition and to the finished details on the plans after construction of the wall.

#### **D** Measurement

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

The leveling pad and asphalt surface will be measured and paid for separately under the respective bid items "Base Aggregate Dense 3/4-Inch" and "Asphaltic Surface", The granular backfill quantity is shown in the table on the plans, however is denoted on the plans that payment for such item is incidental to construction.

#### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0165.01Walls Modular Block GravitySF

Payment is full compensation for supplying a design site preparation, including all necessary excavation and disposal of surplus materials; supplying all necessary wall components to produce a functional system including cap, constructing the retaining system, providing backfill, backfilling, and compacting the backfill; and furnishing and installing geotextile fabric.

## 60. Pipe Insulation, Item SPV.0165.02.

#### A Description

In pipe insulation to the elevations and dimensions as determined as shown in the plans in accordance to the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

#### **B** Materials

Pipe insulation materials shall be polystyrene boards in accordance to 8.50.2 of the Sewer & Water Construction in Wisconsin, latest edition.

#### **C** Construction

The locations of required pipe insulation is indicated on the plans. Typically the insulation shall be placed over the exposed water services to be protected. Any proposed storm sewer crossing of the existing water facilities without 5 feet of cover will require a minimum of 3-foot cover and 4 inches of pipe insulation.

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Obtain prior approval from the engineer for any method of pipe insulation other than that indicated on the plans.

#### **D** Measurement

The department will measure Pipe Insulation by the square foot of 2-inch insulation board, acceptably installed.

#### **E** Payment

Payment will be for measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0165.02Pipe InsulationSF

Payment is full compensation for furnishing all materials including excavation; furnishing and placing the pipe insulation board.

### 61. Geotextile Fabric Type FF, Item SPV.0180.01.

#### **A Description**

This special provision describes furnishing, installing and removing geotextile fabric and fabric hold down systems for filtering storm water, as shown in the plans and as hereinafter provided.

#### **B** Materials

Furnish type FF geotextile fabrics conforming to standard spec 645.2.1 except use a woven polypropylene fabric. Furnish type FF geotextile fabrics selected from the department's erosion control product acceptability list (PAL). Obtain copies of the erosion control PAL and prequalification procedure from the Bureau of Technical Services.

#### **C** Construction

Meet the pertinent requirements as set forth in standard spec 645.3 and as follows:

Install in accordance to the plan details for the intended use in such a manner to preclude ripping and tearing of the fabric, or otherwise rendering the fabric or assembly ineffective for its intended use.

#### **D** Measurement

The department will measure Geotextile Fabric, Type FF by the square yard of surface area of the fabric placed, acceptably completed.

#### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0180.01Geotextile Fabric, Type FFSY

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Payment is full compensation for furnishing, transporting, installing and removing the fabric and fabric hold down systems.

## 62. Mulching Special, Item SPV.0180.02.

#### **A Description**

This special provision describes furnishing and installing special mulch for the detention pond seeding zones, in accordance to standard spec 627, and as hereinafter provided.

#### **B** Materials

Mulching material for the detention pond will consist of clean straw free of debris, with no weed seed, including reed canary grass, purple loosestrife, box elder, buckthorn species, phragmites (tall reed grass) or other invasive species.

#### C Construction

Place mulch the same day of seeding. Spread the straw uniformly over the seeded zone as indicated on the plan, to a loose depth of 1/2 to 1 inch, by blowing from a machine, by hand, or as directed by the engineer.

#### **D** Measurement

The department will measure Mulching Special by the square yard of mulching, 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.0180.02	Mulching Special	SY

Payment is full compensation for providing all materials; for furnishing all hauling, placing, and spreading the mulch material; for maintaining the work and repairing all damaged areas.

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# 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 <u>4</u> (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>2</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 PROGRAM

#### 1. Description

#### General

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

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

#### 2. Definitions

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

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

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

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

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

#### a. Documentation Submittal

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

#### i. Bidder Meets DBE Goal

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

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

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

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

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

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

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

capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.

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

**DBE Support Services Office** 6150 Fond du Lac Ave. Milwaukee, WI 53218 Phone: 414-438-4583 / 608-266-6961

Fax: 414-438-5392

E-mail: DOTDBESupportServices@dot.wi.gov

#### 6. Bidder's Appeal Process

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

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

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

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

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

#### 8. Counting DBE Participation

#### **Assessing DBE Work**

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

#### 9. Commercially Useful Function

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

#### 10. Trucking

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

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

#### 11. Manufacturers and Suppliers

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

#### 12. DBE Prime

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

#### 13. Joint Venture

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

#### 14. Mentor Protégé

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

#### 15. DBE Replacement

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

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

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

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

#### 17. Contract Modifications

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

#### 18. Payment

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

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

#### GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: REQUEST FOR DBE QUOTES

LET DATE & TIME

**DATE:** MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

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

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

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

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

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <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: Joe@joetheplumber.com

Fax: (000) 123-4657

# Sample Contractor Solicitation Letter Page 2 This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name:  Letting Date:  Project ID:							
Please check all that apply  ☐ Yes, we will be quoting on the p ☐ No, we are not interested in quo ☐ Please take our name off your n ☐ We have questions about quotin	oting on the nonthly DBl ng this lettin	letting or it E contact li	es items refer st	ne contact m	ne at this nur		
Prime Contractor 's Contact Perso	n	_		DBE Co	ontractor Co	ntact Person	
TNI			TO!				
Phone:		_	Phone				
Fax:Email:		_	Fax Email				
Eman:		_	Eman				
Please circle t	he jobs and	l items you	ı will be qu	oting belov	w		
Proposal No.	1	2	3	4	5	6	7
WORK DESCRIPTION: Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X
Again please make every effort to have your quotes into our office by time deadline prior to the letting date.  We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.  If there are further questions please direct them to the prime contractor's contact person at phone number.							

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

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

#### **Primes**

- > Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- ➤ Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- > Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE 'training session' Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- > Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- P 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

- 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;
- Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
- 7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
- 8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
- 9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
- 10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
- 11. Whether the contractor returned calls of firms expressing interest in a timely manner.

#### **APPENDIX D**

## Good Faith Effort Evaluation Guidance Excerpt from Appendix A of 49 CFR Part 26

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

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

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

# Appendix E Small Business Network [SBN] Overview

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

#### 1. Easily select proposals, work types and items:

a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.

#### 2. Create sub-quotes for the subcontracting community:

- a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
- b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
- c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
- d. Add attachments to sub-quotes

#### 3. View sub-quote requests & responses:

- a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
- b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing

#### 4. View Record of Subcontractor Outreach Effort:

- a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
- b. Easily locate pre-qualified and certified small and disadvantaged businesses
- c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
- d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

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

#### 1. View and reply to sub-quote requests from primes:

a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.

#### 2. Select items when responding to sub-quote requests from primes:

- a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
- b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
- c. Add attachments to a sub-quote

#### 3. Create and send unsolicited sub-quotes to specific contractors:

a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.

#### 4. Easily select and price items for unsolicited sub-quotes:

- a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
- b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
- c. Add attachments to a sub-quote
- d. Add unsolicited work items to sub-quotes that you are responding to

#### 5. Easy Access to Valuable Information

- a. Receive a confirmation that your sub-quote was opened by a prime
- b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
- c. View important notices and publications from DOT targeted to small and disadvantaged businesses

#### 6. Accessing Small Business Network for WisDOT contracting opportunities

- a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
- b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

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#### ADDITIONAL SPECIAL PROVISION 4

#### **Payment to First-Tier Subcontractors**

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

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

### **Payment to Lower-Tier Subcontractors**

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

#### **Release of Routine Retainage**

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

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

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

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

#### **ADDITIONAL SPECIAL PROVISION 6**

#### ASP 6 - Modifications to the standard specifications

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

#### 101.3 Definitions

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

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

#### 105.11.1 Partial Acceptance

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

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

#### 105.11.2 Final Acceptance

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

#### 105.11.2 Project Acceptance

105.11.2.1 Inspection

#### 105.11.2.1.1 General

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

#### 105.11.2.1.2 Unacceptable or Not Complete

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

#### 105.11.2.1.3 Substantially Complete

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

#### 105.11.2.1.4 Complete

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

#### 105.11.2.2 Conditional Final Acceptance

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

#### 105.11.2.3 Final Acceptance

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

#### 105.13.3 Submission of Claim

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

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

#### 107.17.3 Railroad Insurance Requirements

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

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

#### 107.26 Standard Insurance Requirements

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

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

#### TABLE 107-1 REQUIRED INSURANCE AND MINIMUM COVERAGES

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

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

<sup>&</sup>lt;sup>[2]</sup> The Wisconsin Department of Transportation, its officers, agents, and employees shall be named as an additional insured under the general liability and automobile liability insurance.

#### 108.14 Terminating the Contractor's Responsibility

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

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

#### 109.2 Scope of Payment

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

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

#### 109.6.1 General

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

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

#### 109.7 Acceptance and Final Payment

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

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

#### 450.3.3 Maintaining the Work

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

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

#### 455.3.2.5 Maintaining Tack Coat

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

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

#### 460.2.2.3 Aggregate Gradation Master Range

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

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

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

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

<sup>[1] 14.5</sup> for E-3 mixes.

#### 460.2.7 HMA Mixture Design

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

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

<sup>[2] 15.5</sup> for E-3 mixes.

#### **TABLE 460-2 MIXTURE REQUIREMENTS**

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

<sup>[1]</sup> The percent maximum density at initial compaction is only a guideline.

<sup>&</sup>lt;sup>[2]</sup> For a gradation that passes below the boundaries of the caution zone(ref. AASHTO MP3), the dust to binder ratio limits are 0.6 - 1.6.

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

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

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

#### 460.2.8.2.1.5 Control Limits

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

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

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

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

#### 460.2.8.2.1.6 Job Mix Formula Adjustment

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

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

#### 520.3.8 Protection After Laying

Delete the entire subsection.

#### 614.2.1 General

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

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

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

#### 614.2.3 Steel Rail and Fittings

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

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

#### 614.2.7 Crash Cushions

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

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

#### 616.3.1 General

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

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

#### 618.3.3 Restoration

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

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

#### 627.3.1 General

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

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

#### 637.3.2.1 General

Delete paragraph three effective with the December 2013 letting.

#### 670.3.4.2 Post-Construction Work

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

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

#### **Errata**

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

#### 415.3.14 Protecting Concrete

Correct errata by referencing the opening to service specification.

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

#### 501.2.9 Concrete Curing Materials

Correct errata by changing AASHTO M171 to ASTM C171.

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

#### 607.2 Materials

Correct errata by changing AASHTO M198 to ASTM C990.

#### 637.2.1.3 Sheet Aluminum

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

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

#### 637.3.3.4 Performance

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

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

#### 646.3.3.4 Proving Period

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

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

#### **ADDITIONAL SPECIAL PROVISION 7**

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

# **ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal**

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

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## 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.

### **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_	<u>%</u>	_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.

#### **DECEMBER 2013**

### **BUY AMERICA PROVISION**

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

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

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

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

1 of 1

### WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

### SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

### I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

### II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

### III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

### IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

### V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

- 1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
- 2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
- 3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
- 4. The unlisted classification must be commonly employed in the area where the project is located.
- 5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
- 6. The request should be made prior to the actual performance of the work by the unlisted classification.
- 7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
- 8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

### ANNUAL PREVAILING WAGE RATE DETERMINATION FOR ALL STATE HIGHWAY PROJECTS WAUKESHA COUNTY

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

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

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

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

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

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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.58	19.20	54.78
Carpenter	32.93	19.81	52.74
Future Increase(s): Add \$.75/hr on 6/3/2013. Add \$1.25/hr on 6/2/201 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.		ar's Day, Memor	ial Day,
Cement Finisher	30.69	17.53	48.22
Future Increase(s): Add \$1.87 on 6/1/13; Add \$1.87 on 6/1/14; Add \$1.87	ate on Sunday, Nev Day. 2) Add \$1.40/l res that work be pe	w Year's Day, Me hr when the Wisc erformed at night	morial consin
Electrician	31.54	21.14	52.68
Fence Erector	28.00	4.50	32.50
Ironworker	31.31	21.99	53.30
Line Constructor (Electrical)	31.29	15.34	46.63
Painter	29.22	16.69	45.91
Pavement Marking Operator	29.22	16.69	45.91
Piledriver	30.66	15.31	45.97
Roofer or Waterproofer	29.40	15.05	44.45
Teledata Technician or Installer	23.10	10.11	33.21
Tuckpointer, Caulker or Cleaner	34.35	12.36	46.71
Underwater Diver (Except on Great Lakes)	37.45	19.45	56.90
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ON		16.95	46.59
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	′33.35	14.23	47.58
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.94	13.57	39.51

WAUKESHA COUNTY Page 2

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	<b>\$</b>
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.08	12.96	37.04
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.90	33.65
TRUCK DRIVERS			
Single Axle or Two Axle	22.22	18.90	52.12
Three or More Axle	23.31	17.13	40.44
Future Increase(s): Add \$1.85/hr on 6/1/2013.  Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.		ar's Day, Memor	ial Day,
Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	27.77	19.90	47.67
Day, Independence Day, Labor Day, Thanksgiving Day & Christmas See DOT's website for details about the applicability of this night wo http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. she Pavement Marking Vehicle	rk premium at:	nr night work pre	mium. 38.76
Shadow or Pilot Vehicle	33.22	18.90	52.12
Truck Mechanic	22.50	16.19	38.69
LABORERS			
General Laborer Future Increase(s): Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/20 Premium Pay: Add \$.15/hr for air tool operator, joint sawer and filler (mechanical hand operated), chain saw operator and demolition burn bituminous worker (raker and luteman), formsetter (curb, sidewalk at \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powe \$2.46/hr for bottomman; Add \$3.23/hr for pipelayer. / DOT PREMIUN on Sunday, New Year's Day, Memorial Day, Independence Day, Laborator 2) Add \$1.25/hr for work on projects involving temporary traffic contrawhen work under artificial illumination conditions is necessary as recorded to the prior to and/or cleanup after such time period).	(pavement), vibrato ning torch laborer; A nd pavement) and s derman; Add \$2.01. AS: 1) Pay two time or Day, Thanksgivin ol setup, for lane ar quired by the projec	Add \$.35/hr for strike off man; Ad /hr for topman; A s the hourly basing Day & Christman shoulder closi	dd dd c rate as Day. ures,
Asbestos Abatement Worker	40.00	0.00	18.00
Landscaper	25.39	18.40	43.79
Future Increase(s): Add \$1.70/hr on 6/1/13; Add \$1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includi such time period).	ate on Sunday, Nev Day. 2) Add \$1.25/I res, when work und	w Year's Day, Me nr for work on pr ler artificial illumi	morial ojects ination
Flagperson or Traffic Control Person Future Increase(s): Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/20	21.88 014	18.40	40.28
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Department of Transportation or responsible governing agency requartificial illumination with traffic control and the work is completed after	ate on Sunday, Nev Day. 2) Add \$1.25/I ires that work be pe	nr when the Wisc erformed at night	consin
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.24	15.03	32.27
Railroad Track Laborer	14.50	4.81	19.31

WAUKESHA COUNTY Page 3

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL \$
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 L Crane With Boom Dollies; Traveling Crane (Bridge Type).  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day See DOT's website for details about the applicability of this night work http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. sht	or 0 bs., te on Sunday, New 0ay. 2) Add \$1.50/h c premium at:		
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. of Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Unde Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day See DOT's website for details about the applicability of this night work http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. sht	r; te on Sunday, Nev Day. 2) Add \$1.50/h c premium at:		
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Scre Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vlbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutt Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Gre Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor) Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid R Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Wind & A- Frames.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	34.22 ed; Tub but b; Rig;	19.90	54.12

WAUKESHA COUNTY Page 4

Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/index. shtm.  Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor 33.96 19.90 53.86 (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Eroklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.  Air Compressor (∨ 400 CFM or Over); Air, Electric or Hydraulic Jacking 33.67 19.90 53.57 System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.  P	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL \$
(Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.  Air Compressor (&/or 400 CPM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.	Day, Independence Day, Labor Day, Thanksgiving Day & Christmas E See DOT's website for details about the applicability of this night work	te on Sunday, Nev Pay. 2) Add \$1.50/ c premium at:	w Year's Day, Me	
System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.	(Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industria Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Perform Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); J Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas E See DOT's website for details about the applicability of this night work.	e ing eep the g te on Sunday, Nev Day. 2) Add \$1.50/log gremium at:	w Year's Day, Me	emorial
http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.	System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or W Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.  Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D	ne); /ell te on Sunday, Nev Day. 2) Add \$1.50/	w Year's Day, Me	emorial
	http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. sht	m.	 9 90	29 90

# SUPERSEDES DECISION WI20120010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

Truck Drivers:

Three or More Axles: Euclids, Dumptor &

STATE: Wisconsin GENERAL DECISION NUMBER: WI130010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

Basic Hourly Fringe LABORERS CLASSIFICATION: Rates Benefits Group 1: General Laborer: Tree Trimmer: Conduit Laver: Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler: Stone Handler: Bituminous Worker (Shoveler. Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer......26.21......26.21 Group 3: Bituminous Worker (Raker and Luteman); Formsetter 

 DATE: December 20, 2013

Fringe

**Benefits** 

Basic Hourly

Rates

# Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0, dated January 4, 2013; Modification #1 dated February 1, 2013; Modification #2 dated June 7, 2013; Modification #3 dated July 19, 2013; Modification #4 dated August 23, 2013; Modification #5 dated September 13, 2013; Modification #6 dated September 27, 2013; Modification #7 dated December 20, 2013.

Articulated Truck Mechanic 23.97 18.32

#### CLASSES OF LABORER AND MECHANICS

Bricklayer	35.58	16.07
Carpenter	30.52	14.41
Piledriverman		
Ironworker		
Cement Mason/Concrete Finisher	30.69	17.53
Electrician		
Line Construction		J
Lineman	38.25	18.00
Heavy Equipment Operator	34.43	16.71
Equipment Operator		
Heavy Groundman Driver		
Light Groundman Driver		
Groundsman		
Millwrights	26.32	13.98
Painter, Brush		
Painter, Spray and Sandblaster		
Painter, Bridge		
Well Drilling:		
Well Driller	16.52	3.70

Waukesha County
Page 1 of 3

#### SUPERSEDES DECISION WI20120010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI130010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

POWER EQUIPMENT OPERATO	DRS CLASSIFICATION:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>		PMENT OPERATORS ION: (Continued)	Basic Hourly Rates	Fringe <u>Benefits</u>
Group 1: Cranes, tower cranes an with or without attachm lifting capacity of over or cranes, tower cranes aderricks with boom, lear jib lengths measuring 1 longer	ents, with a 100 tons and ds and/or	\$36.72	\$20.10		(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);		
Group 2: Cranes, tower cranes an with or without attachm lifting capacity of 100 to less or cranes, tower craderricks with boom, lean jib lengths measuring 1: less, and backhoes (excapacity of 3 cu. yds. ar caisson rigs, pile driver, operator, dredge engine	ents, with a ons or nes and ds and/or 75 feet or avators) a rated nd over,	\$36.22	\$20.10	Group 4:	tugger; boatmen; winches and A-frames; post driver; material hoist operator.  Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting	\$35.72	\$20.10
Group 3: Mechanic or welder - he equipment, cranes with of 25 tons or less, concr (manual or remote); vib breaker; concrete laser s slipform paver; concrete	a lifting capacity ete breaker rator/sonic concrete ocreed; concrete			Group 5:	machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner	\$35.46	\$20.10
operator; concrete paver duty (rubber tired); cond distributor, automatic su	ment spreader - heavy crete spreader and ubgrader (concrete); aning machine; concrete machine; slipform nisher; hydro blaster uridge paver; concrete			3.346	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);		
mixer (self propelled); s asphalt plant engineer; k cutter and grooving mad screed (bituminous pave	oituminous paver; bump chine; milling machine;			Group 6:	drilling machine helper  Off – road material hauler with or without ejector		\$20.10 \$20.10
planer and scarifier; bac having a manufacturers 3 cu. yds.; grader or mo	khoes (excavators) rated capacity of under			EPA Leve	Pay: If "A" protection - \$3.00 per hour If "B" protection - \$2.00 per hour If "C" protection - \$1.00 per hours		

DATE: December 20, 2013

STATE: Wisconsin

Area3-

GENERAL DECISION NUMBER: WI130010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

TREMPEALEAU. VERNON and WASHBURN COUNTIES

FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

**Benefits** LABORERS CLASSIFICATION: Rates Area 4 -BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West Electricians boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Area 1 \$28.40 16.676 Hutchins) COUNTIES. Area 2: Electricians..... 29.13 17.92 Area 5 -ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Area 3: Electrical contracts under \$130,000 ..... 26.24 16.85 Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto Electrical contracts over \$130,000 ..... 29.41 16.97 County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and 28.10 Hutchins), VILAS AND WOOD COUNTIES Area 4: ..... 17.24 28.61 16.60 Area 5 Area 6 ..... 35.25 19.30 Area 6 -KENOSHA COUNTY Area 8 DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Area8-30.60 24.95% + 10.33 Electricians..... township), ROCK and WALWORTH COUNTIES Area 9: Electricians..... 32.94 18.71 Area 9 -COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), 28.97 19.55 Area 10 GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE Area 11 ..... 31.91 23.60 (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES Area 12 ..... 32.87 19.23 Area 13 ..... 32.82 22.51 Area 10 -CALUMET (Township of New Holstein), DODGE (East of Hwy, 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES Teledata System Installer Area 14 **DOUGLAS COUNTY** Area 11 -Installer/Technician ..... 21.89 11.83 Area 12 -RACINE (except Burlington township) COUNTY Sound & Communications Area 15 Area 13 -MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES 14.84 Installer..... 16.47 24.75 16.04 Technician..... Area 14 -Statewide. CALUMET (except township of New Holstein), GREEN LAKE Area 1 -Area 15 -DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (N. part, including Townships of Berlin, St. Marie and Seneca), (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & AND WAUKESHA COUNTIES. Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES. Area 2 -ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA. CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR,

DATE: December 20, 2013

### 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.

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CONTRACT:	PROJECT(S):	<pre>FEDERAL ID(S):</pre>
20140211026	2722-11-70	WISC 2014003

CONTR	ACTOR :			
LINE NO	ITEM   DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
110		! "	DOLLARS   CTS	DOLLARS CTS
SECTI	ON 0001 HIGHWAY ITEMS			
0010	201.0105 CLEARING   	   25.000  STA		       .
0020	201.0120 CLEARING   	   53.000  ID		   
0030	201.0205 GRUBBING   	   25.000  STA		
0040	201.0220 GRUBBING   	   53.000  ID	-	
	203.0100 REMOVING SMALL  PIPE CULVERTS 	   48.000  EACH		     
	204.0110 REMOVING  ASPHALTIC SURFACE 	5,590.000 SY		     
0070	204.0115 REMOVING  ASPHALTIC SURFACE BUTT  JOINTS	   460.000  SY		     
	204.0150 REMOVING CURB &  GUTTER 	   86.000  LF		
	204.0180 REMOVING  DELINEATORS AND MARKERS 	   30.000  EACH		     
	204.0185 REMOVING  MASONRY 	361.000   CY		     

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CONTRACT:

ONTRACT: PROJECT(S): FEDERAL ID(S): 20140211026 2722-11-70 WISC 2014003

LINE	!	!		BID AMOUNT	
NO	DESCRIPTION 	QUANTITY AND UNITS	DOLLARS   CTS	DOLLARS CTS	
	204.0215 REMOVING CATCH  BASINS 	   1.000  EACH	-     	     	
0120	204.0245 REMOVING STORM  SEWER (SIZE) 01.  18-INCH	   50.000   LF	-     	     	
0130	204.0245 REMOVING STORM  SEWER (SIZE) 02.  24-INCH	   25.000   LF		     	
0140	204.0245 REMOVING STORM  SEWER (SIZE) 03.  36-INCH	   48.000   LF	   	     	
	204.0275 CLOSING CULVERT  PIPES 	   17.000   EACH		   	
	204.0291.S ABANDONING  SEWER			   	
0170	204.9165.S REMOVING ((ITEM DESCRIPTION) 01.  WALL MODULAR BLOCK	   1,545.000   SF		   	
	205.0100 EXCAVATION  COMMON	40,500.000   CY		   	
0190	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	250.000			
	213.0100 FINISHING  ROADWAY (PROJECT) 01.  2722-11-70	1.000   EACH		   	
0210	305.0110 BASE AGGREGATE  DENSE 3/4-INCH	480.000		     	

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LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	!	DOLLARS CTS
	305.0120 BASE AGGREGATE  DENSE 1 1/4-INCH	   31,000.000  TON	   	   
0230	310.0115 BASE AGGREGATE  OPEN GRADED 	   95.000  CY	     	   
	416.0170 CONCRETE  DRIVEWAY 7-INCH 	   1,980.000  SY		   
	416.0270 CONCRETE  DRIVEWAY HES 7-INCH 	   520.000  SY		
	416.1010 CONCRETE  SURFACE DRAINS 	   38.000  CY		     .
	455.0105 ASPHALTIC  MATERIAL PG58-28 	   533.000  TON		
0280	455.0605 TACK COAT   	   1,670.000  GAL	   	   
	460.1103 HMA PAVEMENT  TYPE E-3 	   8,860.000  TON		   
	460.2000 INCENTIVE DENSITY HMA PAVEMENT	   5,670.000  DOL	1.00000	   5670.00
	465.0105 ASPHALTIC  SURFACE	   10.000  TON	   	       .
0320	465.0120 ASPHALTIC  SURFACE DRIVEWAYS AND  FIELD ENTRANCES	   390.000  TON		   

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CONTRACTOR : UNIT PRICE | BID AMOUNT | APPROX. | UNIT PRICE | BID AMOUNT | QUANTITY | ------ | AND UNITS | DOLLARS | CTS | DOLLARS | CTS LINE DESCRIPTION NO | 600.000| |TON 465.0125 ASPHALTIC 0330 | SURFACE TEMPORARY 0340 FOR CULVERT PIPE 18-INCH 2.000| |EACH |520.4018 CULVERT PIPE | 245.000 |LF 0350 TEMPORARY 18-INCH 520.8000 CONCRETE 3.000 EACH 0360 COLLARS FOR PIPE |522.0312 CULVERT PIPE | 0370 REINFORCED CONCRETE | 162.000 | CLASS IV 12-INCH | LF 522.0315 CULVERT PIPE 0380 REINFORCED CONCRETE | 16.000| |LF CLASS IV 15-INCH |522.0318 CULVERT PIPE 0390 REINFORCED CONCRETE 40.000 | CLASS IV 18-INCH | LF | 522.1012 APRON ENDWALLS | 0400 FOR CULVERT PIPE | 12.000 EACH REINFORCED CONCRETE | 522.1015 APRON ENDWALLS | 0410 FOR CULVERT PIPE | REINFORCED CONCRETE | EACH 9.000 15-INCH | 522.1018 APRON .... 0420 FOR CULVERT PIPE | EACH 10.000 18-INCH

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LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS   CTS	   DOLLARS  CTS
0430	522.1024 APRON ENDWALLS  FOR CULVERT PIPE  REINFORCED CONCRETE  24-INCH	2.000   2.000  EACH		
0440	523.0543 APRON ENDWALLS   FOR CULVERT PIPE   REINFORCED CONCRETE   HORIZONTAL ELLIPTICAL   43X68-INCH	   1.000  EACH 		         
0450	601.0407 CONCRETE CURB &  GUTTER 18-INCH TYPE D	   104.000   LF		     
	601.0411 CONCRETE CURB &  GUTTER 30-INCH TYPE D	   10,100.000   LF	·	   
	603.8000 CONCRETE  BARRIER TEMPORARY  PRECAST DELIVERED	   1,037.500   LF	·	   
0480	603.8125 CONCRETE  BARRIER TEMPORARY  PRECAST INSTALLED	   1,862.500  LF		   
0490	606.0200 RIPRAP MEDIUM   	   80.000  CY		   
0500	606.0300 RIPRAP HEAVY   	   50.000  CY	-	
	608.0324 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS III 24-INCH	   844.000  LF		     
0520	608.0330 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS III 30-INCH	559.000   LF		

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LINE NO	!	APPROX.	UNIT PRICE	BID AMOUNT
INO	DESCRIPTION	QUANTITY   AND UNITS	DOLLARS   CTS	DOLLARS CTS
0530	608.0336 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS III 36-INCH	   479.000  LF	     	   
0540	608.0412 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS IV 12-INCH			   
	608.0415 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS IV 15-INCH	   632.000  LF	     	     
	608.0418 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS IV 18-INCH	   702.000  LF		
0570	608.0424 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS IV 24-INCH		     	   
0580	608.0430 STORM SEWER  PIPE REINFORCED CONCRETE  CLASS IV 30-INCH	   304.000  LF	     	     
0590	610.0143 STORM SEWER  PIPE REINFORCED CONCRETE  HORIZONTAL ELLIPTICAL  CLASS HE-III 43X68-INCH			       
	611.0530 MANHOLE COVERS  TYPE J 	   4.000  EACH		   
	611.0555 MANHOLE COVERS  TYPE Q 	   29.000  EACH	     	   
	611.0660 INLET COVERS  TYPE WM 	   36.000  EACH		       .

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LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS CTS
	611.2004 MANHOLES 4-FT  DIAMETER 	   15.00  EACH	         	
	611.2005 MANHOLES 5-FT  DIAMETER 	   11.00  EACH	    0    .	
	611.2008 MANHOLES 8-FT  DIAMETER 	   9.00  EACH	0	     .
0660	611.2044 MANHOLES 4X4-FT   	   1.00  EACH	0	
	611.3004 INLETS 4-FT  DIAMETER 	   2.00  EACH	o   	
0680	611.3225 INLETS 2X2.5-FT   	   30.00  EACH	0   .	     .
0690	611.9800.S PIPE GRATES   	   3.00  EACH	0   .	
	612.0106 PIPE UNDERDRAIN  6-INCH 	   3,370.00  LF	0	
	612.0108 PIPE UNDERDRAIN  8-INCH 	   373.00  LF	0	
	612.0206 PIPE UNDERDRAIN  UNPERFORATED 6-INCH 	   2,420.00  LF	         	       .
0730	612.0208 PIPE UNDERDRAIN  UNPERFORATED 8-INCH 	   160.00  LF	         .	       .

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LINE	!	APPR		UNIT PR		BID AM	TUUC
NO	DESCRIPTION 	QUANT AND U	:	DOLLARS	. !	DOLLARS	CTS
	612.0212 PIPE UNDERDRAIN  UNPERFORATED 12-INCH 	:	520.000  				
0750	612.0806 APRON ENDWALLS  FOR UNDERDRAIN  REINFORCED CONCRETE  6-INCH	    EACH	11.000			   	
0760	614.0905 CRASH CUSHIONS  TEMPORARY 	      EACH	5.000    5.000				
0770	619.1000 MOBILIZATION   	    EACH	1.000		•		
	623.0200 DUST CONTROL  SURFACE TREATMENT 	   20,  SY	000.000		·		· 
0790	624.0100 WATER   	    MGAL	100.000  				
0800	625.0100 TOPSOIL   	   27,  SY	  680.000 				
0810	627.0200 MULCHING   	   21,  SY	000.000				
0820	628.1104 EROSION BALES   	    EACH	500.000  				
0830	628.1504 SILT FENCE   	    LF	900.000		•		
	628.1520 SILT FENCE  MAINTENANCE 	      LF	900.000		.	   	

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LINE	ITEM   DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	AND UNITS	· :	DOLLARS CTS
	628.1905 MOBILIZATIONS  EROSION CONTROL 	   10.000  EACH	     	
	628.1910 MOBILIZATIONS  EMERGENCY EROSION  CONTROL	   8.000  EACH	       .	
0870	628.2033 EROSION MAT  CLASS III TYPE B 	2,100.000	 	
	628.6510 SOIL STABILIZER  TYPE B 	   5.000  ACRE	)     .	
	628.7005 INLET  PROTECTION TYPE A 	   50.000  EACH	     	
	628.7020 INLET  PROTECTION TYPE D 	   50.000  EACH	)   	
	628.7504 TEMPORARY DITCH  CHECKS 	300.000	)   	
	628.7555 CULVERT PIPE  CHECKS 	   80.000  EACH	       .	
0930	628.7560 TRACKING PADS   	   10.000  EACH	   	
0940	628.7570 ROCK BAGS   	   100.000  EACH	        .	
0950	629.0210 FERTILIZER TYPE  B 	   14.000	     	

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LINE	TITEM DESCRIPTION	A	PPROX.	UNIT PH		BID AM	
NO	DESCRIPTION		ANTITY D UNITS			   DOLLARS	
	630.0130 SEEDING MIXTURE  NO. 30 	    LB	330.000		•	   	•
	630.0200 SEEDING  TEMPORARY 	    LB	10.000			   	•
0980	631.0300 SOD WATER   	    MGAL	230.000		·	   	
0990	631.1000 SOD LAWN   	    SY	2,800.000			   	
1000	632.9101 LANDSCAPE  PLANTING SURVEILLANCE  AND CARE CYCLES	    EACH	12.000			   	
1010	633.5200 MARKERS CULVERT  END 	    EACH	46.000  			   	
	642.5201 FIELD OFFICE  TYPE C 	    EACH	1.000			   	
1030	643.0100 TRAFFIC CONTROL  (PROJECT) 01.  2722-11-70	    EACH	1.000		·	   	•
1040	643.0300 TRAFFIC CONTROL  DRUMS 		37,800.000  			   	
1050	643.0420 TRAFFIC CONTROL  BARRICADES TYPE III 	1	18,300.000		•	   	
1060	643.0705 TRAFFIC CONTROL  WARNING LIGHTS TYPE A 		36,700.000    36,700.000			   	

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LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS CT
	643.0715 TRAFFIC CONTROL  WARNING LIGHTS TYPE C 	   3,900.000  DAY		     
	643.0900 TRAFFIC CONTROL  SIGNS	   23,800.000  DAY	     	       .
	643.1000 TRAFFIC CONTROL  SIGNS FIXED MESSAGE 	   66.000  SF	     	     
	643.1050 TRAFFIC CONTROL  SIGNS PCMS 	   28.000  DAY		   
1110	643.2000 TRAFFIC CONTROL  DETOUR (PROJECT) 01.  2722-11-70	   1.000  EACH	     	     
	643.3000 TRAFFIC CONTROL  DETOUR SIGNS	   3,850.000  DAY		     
1130	645.0112 GEOTEXTILE  FABRIC TYPE DF SCHEDULE  B	   3,520.000  SY		     
	645.0120 GEOTEXTILE  FABRIC TYPE HR	   1,300.000  SY		     
	645.0130 GEOTEXTILE  FABRIC TYPE R 	   960.000  SY		     
	646.0106 PAVEMENT  MARKING EPOXY 4-INCH 	   17,570.000  LF	   	   
	646.0126 PAVEMENT  MARKING EPOXY 8-INCH		     	     

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TIME	 		INITE DELCE	
LINE NO	ITEM   DESCRIPTION 	APPROX.   QUANTITY   AND UNITS		BID AMOUNT    DOLLARS  CTS
	646.0600 REMOVING  PAVEMENT MARKINGS 	   1,220.000  LF		
	647.0110 PAVEMENT  MARKING RAILROAD  CROSSINGS EPOXY	   2.000  EACH		
	647.0166 PAVEMENT  MARKING ARROWS EPOXY  TYPE 2	3.000 EACH		
1210	647.0356 PAVEMENT  MARKING WORDS EPOXY 	   2.000  EACH	 	
1220	647.0566 PAVEMENT  MARKING STOP LINE EPOXY  18-INCH	   162.000  LF		
1230	647.0576 PAVEMENT  MARKING STOP LINE EPOXY  24-INCH	   27.000  LF		
1240	649.0400 TEMPORARY  PAVEMENT MARKING  REMOVABLE TAPE 4-INCH	770.000		
1250	649.0701 TEMPORARY  PAVEMENT MARKING 8-INCH 	   40.000  LF		
1260	649.0801 TEMPORARY  PAVEMENT MARKING  REMOVABLE TAPE 8-INCH	   210.000  LF		
1270	649.1100 TEMPORARY  PAVEMENT MARKING STOP  LINE 18-INCH	   40.000  LF	 	
1280	649.1200 TEMPORARY  PAVEMENT MARKING STOP  LINE REMOVABLE TAPE  18-INCH	   60.000  LF		

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LINE	1	!	PPROX.		RICE	BID AM	OUNT
NO	DESCRIPTION		ANTITY D UNITS	   DOLLARS	   CTS	DOLLARS	CTS
1290	650.4000 CONSTRUCTION  STAKING STORM SEWER	      EACH	85.000	   	.	   	
1300	650.4500 CONSTRUCTION  STAKING SUBGRADE	      LF	5,800.000	   	.	   	
1310	650.5000 CONSTRUCTION  STAKING BASE 	      LF	5,800.000	   	     	   	
	650.5500 CONSTRUCTION  STAKING CURB GUTTER AND  CURB & GUTTER	      LF	7,560.000	   	.	   	
1330	650.6000 CONSTRUCTION  STAKING PIPE CULVERTS	      EACH	15.000	   	.	   	
1340	650.9910 CONSTRUCTION  STAKING SUPPLEMENTAL  CONTROL (PROJECT) 01.  2722-11-70	    LUMP 		  LUMP 	     		
1350	650.9920 CONSTRUCTION  STAKING SLOPE STAKES 	      LF	6,000.000	   	.   	   	
1360	690.0150 SAWING ASPHALT   	      LF	6,400.000	   	.	   	
1370	690.0250 SAWING CONCRETE	      LF	130.000	   	.	   	
1380	ASP.1T0A ON-THE-JOB  TRAINING APPRENTICE AT  \$5.00/HR	        HRS	2,400.000	     	5.00000	     120	00.00

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LINE	1		PPROX.	UNIT P		BID AM	OUNT
NO	DESCRIPTION		ANTITY   D UNITS	DOLLARS	   CTS	DOLLARS	CTS
1390	ASP.1T0G ON-THE-JOB  TRAINING GRADUATE AT \$5.  00/HR	    HRS	1,400.000		  5.00000 	70	00.00
1400	SPV.0005 SPECIAL 01.  SEEDBED PREPARATION	    ACRE	3.810		.		
1410	SPV.0005 SPECIAL 02.  SEEDING SPECIAL 	    ACRE	3.810   		.		
1420	SPV.0035 SPECIAL 01.  ENGINEERED SOIL 	    CY	7,020.000		.		
	SPV.0035 SPECIAL 02.  CONCRETE SURFACE DRAINS  SPECIAL	    CY	75.000    75.000		.   		
	SPV.0035 SPECIAL 03.  BACKFILL SLURRY 	    CY	4,470.000  		     		
1450	SPV.0060 SPECIAL 01.  ADJUSTING SANITARY  MANHOLE COVERS	    EACH	16.000    		.   		
1460	SPV.0060 SPECIAL 02. RECONSTRUCTION SANITARY MANHOLES	    EACH	6.000    		.		
1470	SPV.0060 SPECIAL 03.  MANHOLE COVERS SANITARY 	    EACH	2.000		.		
1480	SPV.0060 SPECIAL 04.  SALVAGING FIRE HYDRANTS  AND ABANDONING HYDRANT  TEES	      EACH	13.000		       		

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	ACTOR :			 	
LINE NO	TTEM DESCRIPTION	APPROX.   QUANTITY	UNIT PRICE	BID AMOUNT 	
	İ	AND UNITS	DOLLARS   CTS	DOLLARS CTS	
1490	SPV.0060 SPECIAL 05.  SALVAGING WATER VALVES  8-INCH	   8.000  EACH		       .	
	SPV.0060 SPECIAL 06.  SALVAGING WATER VALVE  VAULTS	   6.000  EACH			
1510	SPV.0060 SPECIAL 07.  ADJUSTING WATER VALVE  BOXES	   13.000  EACH	   	   	
	SPV.0060 SPECIAL 08.  HYDRANT ASSEMBLIES 	   13.000  EACH		     	
	SPV.0060 SPECIAL 09.  GATE VALVES HYDRANT  6-INCH	   13.000  EACH		   	
	SPV.0060 SPECIAL 10.  GATE VALVES 8-INCH 	   8.000  EACH		   	
	SPV.0060 SPECIAL 11.  BUTTERFLY VALVES 16-INCH 	   8.000  EACH		     	
1560	SPV.0060 SPECIAL 12.  PIPE SLEEVES DUCTILE  IRON 8-INCH	   5.000  EACH		     	
1570	SPV.0060 SPECIAL 13.  PIPE SLEEVES DUCTILE  IRON 16-INCH	   18.000  EACH	   	   	
1580	SPV.0060 SPECIAL 14.  UNDERDRAIN CLEANOUT 	   25.000  EACH	       .	       .	

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LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS   CTS	DOLLARS CTS
	SPV.0060 SPECIAL 15. APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 8-INCH	   1.000  EACH		
	SPV.0060 SPECIAL 16. APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 12-INCH	   2.000  EACH		
	SPV.0060 SPECIAL 17.  CONSTRUCTION STAKING  BIOSWALES	   38.000  EACH	   	   
	SPV.0060 SPECIAL 18. EXPOSING EXISTING UTILITY	   42.000  EACH		
1630	SPV.0060 SPECIAL 19.  ATRIUM ASSEMBLY 12-INCH	   29.000  EACH		   
	SPV.0060 SPECIAL 20. ATTRIUM ASSEMBLY 24-INCH	   20.000  EACH		   
1650	SPV.0060 SPECIAL 21.  SALVAGING WATER VALVES  16-INCH	   1.000  EACH	     	     
1660	SPV.0085 SPECIAL 01.  SEEDING MIXTURE SPECIAL	   37.000  LB		   
	SPV.0085 SPECIAL 02. SEEDING COVER CROP	   37.000  LB	   	   
	SPV.0090 SPECIAL 01.  STORM SEWER PIPE  REINFORCED CONCRETE  HORIZ ELLIPTICAL CLASS  HE-IV 43X68-INCH	1,340.000  LF		       

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### SCHEDULE OF ITEMS

REVISED:

LINE NO	!	APPROX. QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			DOLLARS   CTS	DOLLARS CT
1690	SPV.0090 SPECIAL 02. STEEL CASING WITH DUCTILE IRON 36-INCH CARRIER	90.000   90.000  LF	     	
	SPV.0090 SPECIAL 03.  HYDRANT LEADS DUCTILE  IRON 6-INCH	   210.000  LF	     	     
	SPV.0090 SPECIAL 04.  WATER MAINS DUCTILE IRON  8-INCH	   280.000  LF	     	     
1720	SPV.0090 SPECIAL 05.  WATER MAINS DUCTILE IRON  16-INCH	   290.000  LF	     	     
	SPV.0090 SPECIAL 06.  WATER SERVICES 1  1/4-INCH OPEN CUT	   50.000  LF		   
1740	SPV.0090 SPECIAL 07.  WATER SERVICES 2-INCH  OPEN CUT	   50.000  LF		   
1750	SPV.0090 SPECIAL 08.  WATER SERVICES 4-INCH  OPEN CUT	   45.000  LF		   
1760	SPV.0105 SPECIAL 01.  CONSTRUCTION STAKING  SANITARY SEWERS	  LUMP	  LUMP	   
	SPV.0105 SPECIAL 02.  CONSTRUCTION STAKING  WATER MAINS	  LUMP	  LUMP	   
1780	SPV.0165 SPECIAL 01.  WALLS MODULAR BLOCK  GRAVITY SPECIAL	   344.000  SF	       .	     
1790	SPV.0165 SPECIAL 02.  PIPE INSULATION	   1,470.000  SF	     	     

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REVISED: SCHEDULE OF ITEMS

CONTRACTOR :								
LINE NO	ITEM   DESCRIPTION 	APPROX. QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT				
			DOLLARS   CTS	DOLLARS   CTS				
!	SPV.0180 SPECIAL 01. GEOTEXTILE FABRIC TYPE FF	   800.000  SY						
   1810 	SPV.0180 SPECIAL 02. MULCHING SPECIAL	   18,430.000  SY	   					
	SECTION 0001 TOTAL			·				
   	TOTAL BID		   	·				

### PLEASE ATTACH SCHEDULE OF ITEMS HERE