HIGHWAY WORK PROPOSAL

Proposal Number: 1 2

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Oneida	1174-10-70	WISC 2013 051	Minocqua - Woodruff Front St. - Old Hwy 70	USH 51
Oneida	1174-10-71		Minocqua - Woodruff Front St. - Old Hwy 70 Sanitary & Water Utilities	USH 51

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

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: February 12, 2013 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time November 30, 2013	
Assigned Disadvantaged Business Enterprise Goal 8 %	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Grading, base, storm sewer, sanitary sewer and water, concrete curb and gutter, HMA pavement, signal bases, mono-tube signal poles installation, railing steel – type C2.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

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

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

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

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

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

1. Have a properly executed annual bid bond on file with the department.
2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

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

(3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at **http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm**. Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite™ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

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

C Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

FEBRUARY 1999

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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 1174-10-70, Minocqua – Woodruff, Front Street – Old Hwy 70, USH 51, 1174-10-71, Minocqua – Woodruff, Front Street – Old Hwy 70, Sanitary and Water Utilities, USH 51, Oneida County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2013 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.
100-005 (20120615)

2. Scope of Work.

The work under this contract shall consist of grading, base, storm sewer, sanitary sewer and water, concrete curb and gutter, pavement, signal bases, mono-tube signal poles, railing steel – type C2 and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

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

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

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

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

Complete stage 1, as described under staging, on USH 51 prior to 12:01 AM June 28, 2013.

Supplement standard spec 108.11 as follows:

If the contractor fails to complete the work under stage 1 on USH 51 prior to 12:01 AM June 28, 2013, the department will assess the contractor $1,605 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, June 28, 2013. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Start construction operations on Stage 2 on or after September 3, 2013.

Staging
Stage 1 from Station 436+36 to 470+00: Complete concrete curb and gutter, storm sewer, sidewalk/path, municipal utilities, HMA pavement, pavement marking and signing with all lanes open to traffic with the exception landscaping, finishing and WPS street light pole installations. Landscaping, finishing, and WPS street light pole installation may be completed between Stage 1 and Stage 2 construction operations.

Stage 2 from Station 470+00 to 487+50 will complete concrete curb and gutter, storm sewer, sidewalk/path, municipal utilities, landscaping and finishing, HMA pavement, pavement marking and signing with all lanes open to traffic.

Mill and overlay Station 425+61 to 431+96 may be completed under Stage 1 or 2 to coincide with the HMA pavement items. Cover the milled surface with HMA pavement within 72 hours of milling.

4. Traffic.

Maintain access to all businesses and residences at all times. Do not close any driveways without permission of the engineer and provide a minimum of 2 business days advance notice to the property owner. Do not close entrances longer than ½ day unless other arrangements are made with the property owners affected.

Maintain access through work zones to local streets at all times. Control any disruptions to access by the use of proper traffic control measures, including flaggers, and with prior approval of the engineer.

All lanes open to traffic will have a minimum 12-foot clear lane width.

Temporary pavement shall consist of 4-inches asphaltic surface temporary, over a minimum of 18 inches of base aggregate dense 1 ¼-inch.

No lane closures allowed on USH 51 between June 28, 2013 and September 3, 2013.

Stage 1 includes the following sub-stages:

Stage 1.1: Close northbound lanes from Station 442+00 to Station 447+00 to construct right half of 3 – 48-inch pipes and place temporary pavement.

Stage 1.2: Close southbound lanes from Station 442+00 to 447+00 to construct left half or remainder of 3 – 48-inch pipes and place temporary pavement.

Stage 1.3: Close northbound lanes from Station 442+00 to Station 447+00 to remove right half of steel arch pipe at Station 443+45 and place temporary pavement.

Stage 1.4: Close southbound lanes from Station 442+00 to 447+00 to remove left half of steel arch pipe at Station 443+45 and place temporary pavement.

Stages 1.1 – 1.4: Traffic may be reduced to one lane under flagging operations from 6:00 AM Monday to 12:00 PM Friday and Friday to Sunday between the hours of 6:00 PM – 9:00 AM from the spring construction start to Monday May 20, 2013.

Stage 1.5: Close outside lanes from Station 436+36 to Station 470+00 to reconstruct the complete outside lanes according to plan and construct lower layers of HMA pavement.

Stage 1.6: Close inside lanes and center turn-lane from Station 436+36 to Station 470+00 to reconstruct according to plan and construct HMA pavement through the upper layer on all lanes.

Stages 1.5 and 1.6: Traffic may be reduced to one lane under flagging operations from 6:00 AM Monday to 12:00 PM Friday and Friday to Sunday between the hours of 6:00 PM – 9:00 AM from the spring construction start to Monday May 20, 2013.

After Monday May 20, 2013, traffic may be reduced to one lane under flagging operations between the hours of 6:00 PM – 9:00 AM for any Stage 1 work.

Stage 2 includes the following sub-stages:

Stage 2.1: Close outside lanes from Station 470+00 to Station 487+50 to reconstruct the complete outside lanes according to plan and construct lower layers of HMA pavement.

Stage 2.2: Close inside lanes and center turn-lane from Station 470+00 to Station 487+50 to reconstruct according to plan and construct HMA pavement through the upper layer on all lanes.

Stages 2.1 and 2.2: From the start of work operations to Monday October 7, 2013, traffic may be reduced to one lane under flagging operations between the hours of 6:00 PM – 9:00 AM for any Stage 2 work. From Monday October 7, 2013 to the completion of the project, traffic may be reduced to one lane under flagging operations Monday – Thursday between the hours of 9:00 AM – 3:00 PM or 6:00 PM – 9:00 AM.

5. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and Lakeland Sanitary District 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 Lakeland Sanitary District.
105-001 (20061009)

6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 51 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 24 to 6:00 AM Tuesday, May 28 for Memorial Day;
- From noon Wednesday, July 3 to 6:00 AM Monday, July 8 for Independence Day.

107-005 (20050502)

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

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Richard Simon at (715) 365-5775.
107-054 (20080901)

8. Environmental Protection, Invasive Plant Control.

Supplement standard spec 107.18 as follows:

To preclude the spread of the invasive plants purple loosestrife (Lythrum salicaria) and common reed grass (Phragmites australis) use extreme caution to prevent any soil containing roots or seeds from spreading into uncontaminated areas of the project. Landscape and revegetate areas below as soon as possible after being disturbed.

Purple loosestrife is known to exist in the area from Station 442+00 - Station 456+50.

Properly dispose of any topsoil, marsh or common excavated material, or other waste dirt that is excavated from these sites so as not to contaminate wetland areas. The material may be spread and disced into an upland agricultural area or properly buried on an upland site approved by the engineer.

Wash all equipment utilized in this area to excavate, grade, haul or spread the soil with pressurized water to remove all soil that may contain seeds or roots before this equipment is removed from the contaminated areas.

All costs incurred in hauling and disposing of waste material and washing equipment shall be considered incidental to the unit price costs of topsoil, common excavation and marsh excavation.

9. Environmental Protection, Aquatic Exotic Species Control.

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

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

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

1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    a. Washing with ~212º F water (steam clean), or
    b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or

c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.
107-055 (20110615)

10. Environmental Protection, Culverts and Storm Sewer.

Isolate work areas for culvert work on waterways, including but not limited to Removing Old Structure, Station 443+45; Culvert Pipe 48—Inch, Station 444+85. Use impermeable barriers such as sheet piling, sandbags wrapped in plastic, or other engineer-approved method both upstream and downstream.

Place and shape riprap in such a manner that it does not inhibit aquatic organism movement.

Include the cost of all work and materials associated with water treatment and/or dewatering in the unit bid price for the culvert pipe or storm sewer item being installed. Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material, removal of the basin after completion of dewatering operations, and all labor, tools, equipment and incidentals necessary to complete the work in accordance to the contract.

11. Environmental Protection - Dewatering.

Supplement standard spec 107.18 as follows:

If dewatering is required, treat the water to remove suspended solids before allowing it to enter any waterway or wetland. Provide a settling basin, or other suitable means approved by the engineer, with sufficient capacity and size to provide an efficient means to filter the water from the dewatering operation before it is discharged back into the wetland or waterway as provided in the standard specifications and these special provisions. Treatment practices may include the use of natural polyacrylamide such as chitosan, as approved by the engineer.

Conform to dewatering guidelines of WisDNR Storm Water Construction Technical Standards, Code #1061, “Dewatering”. This document can be found at the WisDNR website: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

Include the cost of all work and materials associated with water treatment and/or dewatering in the unit bid price for Removing Old Structure, Culvert Pipe, Storm Sewer Pipe, Removal/Installation of Sanitary sewers, Forcemains, Watermains and appurtenance. Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material, removal of the basin after completion of dewatering

operations, and all labor, tools, equipment and incidentals necessary to complete the work in accordance to the contract.

12. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

Notify the following organizations and departments at least two business days before road closures, lane closures or detours are put into effect:

- Oneida County Sheriff's Department
- Wisconsin State Patrol
- Town of Minocqua
- Minocqua School District
- Howard Young Medical Center
- Marshfield Clinic

The Oneida County Sheriff's Department 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor.

13. Public Convenience and Safety - Lane Closure Notification.

Supplement standard spec 107.8 with the following:

At least 14 days prior to the preconstruction meeting submit to the engineer for approval a schedule of closures necessary for completion of the contract. Identify general information including the construction activity requiring a closure, location of closure, type of closure, duration of closure, and times of closure.

All closures must be in accordance to the contract unless approved by the engineer. Submit any changes to the traffic control plan or other traffic related requirements of the contract to the engineer for approval at a minimum of 14 calendar days prior to the closure.

Review the closure schedule with the engineer at the preconstruction meeting. Within five days after the meeting, the engineer will accept the contractor's initial schedule or request additional information. Provide additional information requested by the engineer within five days after the request. Provide the engineer with an updated closure schedule whenever changes are necessary.

Provide the engineer a detailed closure schedule weekly, by noon on Wednesday, that covers planned closures for the following two weeks. Include detailed information on the construction activity, location, type, duration, and time of closures. Verify with the engineer that the closure is approved in the Wisconsin Lane Closure System prior to implementing the closure. Immediately notify the engineer if there are any changes in the schedule, early completions, or cancellations of scheduled work.

Provide the minimum advance notification to the engineer for the following closures:

Shoulder closures	3 business days
Ramp closures	3 business days
Lane closures	3 business days
Local street closings	7 calendar days
System ramp closures	14 calendar days
Full freeway closures	14 calendar days
Construction stage changes	14 calendar days
Detours	14 calendar days

Non-compliance with the above requirements may result in non-approval of a closure. No time extensions as described in subsection 108.10 of the standard specifications will be granted for non-approval of a closure. The department will not assume damages accrued due to non-approval of a closure, including but not limited to mobilization costs, traffic control costs, and other damages for delays to the contract.
(NCR-05312011)

14. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.
107-065 (20080501)

Wisconsin Public Service (Gas) – Will relocate gas facilities along the project. A new 4-inch gas main will follow the west highway right of way. Lateral crossings will be at Station 437+45 for a 4-inch main, Station 448+63 for a 1-inch service lateral, Station 464+90 for a 4-inch main lateral. A new 2-inch gas main will follow the east highway right-of-way from station 454+30 to the north end of the project. All existing lateral services will be replaced with short side services from the new mains. Gas facility work is anticipated to start early spring 2013 and continue concurrent with the project and will require coordination with the contractor.

WPS contact: Rich Reitz, (715) 369-7111.

Wisconsin Public Service (Electric) – Will replace poles with taller poles at Stations 435+32 LT, 437+14 LT, 439+13 LT, 463+42 LT, 465+34 LT move to 465+68 LT, 467+40 LT, 468+14 LT, 471+11 LT, 473+80 LT move 4-feet west, 474+84 LT move 8-feet west, 476+40 LT move 10-feet west, 478+37 LT move 10-feet west to provide clearance for new street lights. Relocate pole Station 461+08 LT with two poles at station 460+87 LT and 461+08 LT. Remove pole Station 461+25 RT. WPS will install new street lighting and remove the existing wood pole street lights concurrent with the project. All street lighting will need to be completed prior to final landscaping and finishing items. All street lighting work will require coordination with the contractor to accommodate plan staging.

Electric facility work is anticipated to start February 1, 2013 and take 60 working days.

WPS contact: Rich Reitz, (715) 369-7111.

Lakeland Sanitary – Sanitary and water utility work is included in this contract under project ID 1174-10-71.

LSD contact: Ron Groth, (715) 356-4454.

Charter Communications – Will require coordination with the contactor to make adjustments during construction. Facilities consist of coax and fiber optic. There are underground facilities from approximate Station 442+00 to 456+00 in the west right-of-way. The remaining facilities are aerial attached to WPS poles along the project and will be moved with WPS work. The contactor will notify the Charter contact 48 hours in advance to coordinate adjustments to underground facilities. This work is estimated to take 1-3 days.

Charter contact: Mark Olejniczak, (715) 370-4106.

Frontier Communications – Has a duct system that runs the entire length of the project under the southbound lane. It consists of fiber optic and air pressurized copper cable housed in 12 or 8, 4-inch PVC conduits connected to a series of manhole vaults that are 5'x10'. Conflicts with the duct system at station 479+65 RT and 480+85 LT will require adjustments. The contactor will notify the Frontier contact 48 hours in advance to coordinate adjustments to facilities during construction.

Frontier contact: Calvin Klade, (715) 573-2110.

15. Coordination with Businesses.

The contractor will 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 two meetings per month thereafter.
108-060 (20030820)

16. Notice to Contractor – HAWK Cabinet Installation (USH 51 and Rogers Drive) (WDOT Maintains).

HAWK Controller and Cabinet.
The department will furnish and install the controller and cabinet for the HAWK installed at (USH 51 and Rogers Drive). The contractor shall notify the department's NCR-Rhinelander Office electrician, Rick McCaigue at (715) 365-5789 a minimum of ten working days prior to the desired HAWK controller and cabinet installation date.

Concrete Control Cabinet Bases Type (#9 Special).
The contractor will be responsible for the installation of the concrete control cabinet base under the pertinent bid item provided in the contract. The contractor shall finish grade the service trench, replace topsoil which may become lost or contaminated, seed, fertilize, and mulch all areas which are disturbed by the electric utility company after installing the electric service lateral.

17. Notice to Contractor – Contamination Beyond Construction Limits.

The department and others have completed testing for soil and ground water contamination for locations within or adjacent to this project where excavation or grading may be required. Testing indicated that contaminated soil and/or ground water known to be impacted or potentially impacted by petroleum hydrocarbons or chlorinated volatile organic compounds is present at the following sites as shown on the plans:

1. Chequamegon's Adventure Bicycles (former dry cleaners) - 8576 USH 51 N: Station 463+25 to Station 464+25 approximately 100 feet RT of centerline.

2. Leather & Lace (former filling station) – 8613 USH 51 N: Station 468+50 to Station 470+25, approximately 70 feet LT of centerline.

3. Minocqua Tire & Auto (filling station) – 8627 USH 51 N: Station 472+75 to Station 474+75, approximately 100 feet LT of centerline.

4. Island City Antique Market (former filling station) – 8661 USH 51 N: Station 482+75 to Station 484+00, approximately 90 feet LT of centerline.

5. Marathon Gas Station (filling station) – 8684 USH 51 N: Station 487+50 to Station 489+00, approximately 75 feet RT of centerline.

The contaminated soil and/or groundwater at the above sites is expected to be beyond the excavation and grading limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation or grading limits indicated in the plans unless expressly directed to do so by the engineer.

If contaminated soil, groundwater or underground storage tanks are encountered at these sites or elsewhere on the project during excavation or grading, then terminate excavation or grading in the area and notify the engineer.

Information pertaining to the presence of hazardous materials at each site is available by contacting the department's environmental coordinator: Janet Smith, Wisconsin Department of Transportation – North Central Region, 1681 Second Avenue South, Wisconsin Rapids, WI 54495; (715) 421-8089; email Janet.Smith@dot.wi.gov.

18. Backfill Granular.

Conform to the requirements of standard spec 209 and as hereinafter provided.

Material
Furnish and use material that consists of granular material meeting the following requirements: Section 209.2.2 Grade 1.

19. QMP Base Aggregate.

A Description

A.1 General

(1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

(2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

(3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.

(4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
1. Production and placement control and inspection.
2. Material sampling and testing.

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

A.2 Contractor Testing for Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

(2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

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

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

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

[2] For 3-inch material, obtain samples at load-out.

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

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Department verification testing is optional for quantities of 6000 tons or less.

(3) Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.

(2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.

4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

B.4.3 Control Charts

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

(2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:

1. Contractor individual QC tests.
2. Department QV tests.
3. Department IA tests.
4. Four-point running average of the QC tests.

(3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

(1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.

(2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

(3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.

(4) The engineer may require additional sampling and testing to evaluate suspect material or the technician’s sampling and testing procedures.

(5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

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

B.6 Test Methods

B.6.1 Gradation

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

Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

(2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.

(3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

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

B.6.2 Fracture

(1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.

(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

(1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

(1) Do not blend additional material on the roadbed to correct gradation problems.

(2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:

1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

(4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

(1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
1. One non-random test on the first day of placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.

(4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review

according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

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

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

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

C (Vacant)

D (Vacant)

E Payment

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

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

301-010 (20100709)

20. QMP Base Aggregate Lab Location.

Add the following as paragraph 2 to "B.3 Laboratory" of the QMP Base Aggregate special provision:

(2) Locate the QC laboratory for base aggregate placement sample testing within 30 miles of the project.

301-020 (20080902)

21. 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:

(1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.

(2) Provide and maintain a quality control program defined as all activities and documentation of the following:

1. Selection of test sites.
2. Testing.
3. Necessary adjustments in the process.
4. Process control inspection.

(3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:

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

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

http://www.atwoodsystems.com/mrs

B Materials

B.1 Personnel

(1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.

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

B.2 Testing

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

B.3 Equipment

B.3.1 General

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

(2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.

(3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:

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

B.3.2 Correlation of Nuclear Gauges

B.3.2.1 Correlation of QC and QV Nuclear Gauges

(1) Select a representative section of the compacted pavement prior to or on the first day of paving for the correlation process. The section does not have to be the same mix design.

(2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.

(3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft^3. Measure and record the density on the 5 additional test sites for each gauge.

(4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft^3 and repeat correlation process from B.3.2.1 (2).

(5) Furnish one of the QC gauges passing the allowable correlation tolerances to perform density testing on the project.

B.3.2.2 Correlation Monitoring

(1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.

(2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.

(3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft^3 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^3 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

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, Roundabouts: Sublot/Layer tonnage	Minimum Number 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.

(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.

(2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted 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.

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^3 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^3 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^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

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

B.6 Dispute Resolution

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

(2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.

(3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV 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:

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

(3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.

(4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.

(5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.

460-020 (20100709)

22. Riprap.

Replace standard spec 606.2(3) with the following:

Do not substitute waste concrete for stones.

23. Catch Basins, Manholes, and Inlets.

Construct catch basins, manholes, and inlets in accordance to standard spec 611 except as hereinafter modified:

Construct catch basins, manholes and inlets using only precast or cast in place concrete masonry options. The brick masonry or concrete brick or block masonry options shall not be used.

24. Abatement of Asbestos Containing Material Sanitary Sewer and Forcemain Pipe Item 203.0210.S.

A Description

This special provision describes abating asbestos containing material (structure) sanitary sewer and force main pipe in accordance to the plans, the pertinent provisions of the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction

The Lakeland Sanitary District No. 1 has indicated the sanitary sewer and forcemain pipe installed in 1965 is asbestos cement pipe. Regulated Asbestos Containing Material (RACM) is found in the following locations and quantities:

Item	Station	Offset	Station	Offset	LF
8 inch sanitary sewer	437+66	45LT	400+43	41LT	282
6 inch forcemain	433+86	15RT	439+90	15RT	4
6 inch forcemain	444+87	14RT	445+13	15RT	26
6 inch forcemain	446+23	14RT	446+27	14RT	4
6 inch forcemain	456+68	44LT	456+88	44LT	20
4 inch forcemain	451+20	104RT	451+2	102RT	4

The RACM on this structure must be abated by a licensed abatement contractor. In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to DOT NC Region Rhinelander Office, Rich Simon, PE, 510 Hanson Lake Road, Rhinelander, WI 54501, (715) 365-5775 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI. 53707-7965. In addition, comply with all local or municipal asbestos requirements.

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

- Site Name: USH 51 over underground asbestos cement pipe for sanitary forcemain
- Site Address: USH 51Town 39N, Range 6E, Minocqua, Oneida County
- Ownership Information: Lakeland Sanitary District, 8780 Morgan Road, Minocqua, WI
- Contact: Rich Simon, PE WDOT NC Region Rhinelander
- Phone: (715) 365-5775
- Age: 47 years old. This structure was constructed in 1965.
- Area: 340

Insert the following paragraph in Section 6.g.:

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

D Measurement

The department will measure Abatement of Asbestos Containing Material (Structure) Sanitary Sewer and Forcemain pipe, completed in accordance to the contract and accepted, as a single complete unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
203.0210.S	Abatement of Asbestos Containing Material (Structure) Sanitary Sewer and Forcemain Pipe	LS

Payment is full compensation for submitting necessary forms; removing all asbestos; properly disposing of all waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

25. Wall Modular Block Gravity, Item 532.0200.S.

A Description

This special provision describes designing, furnishing materials, and erecting a permanent earth retention system in accordance to the lines, dimension, elevations and details as shown on the plans and provided in the contract. The design life of the wall and all wall components shall be 75 years.

B Materials

B.1 Proprietary Modular Block Gravity Wall Systems

The department specifies approved modular block gravity wall products on the department's approved products list.

Proprietary wall systems may be used for this work, but must conform to the requirements of this specification and be pre-approved for use by the departments' Bureau of Structures, Structures Development Section. The name of the companies supplying pre-approved material shall be furnished within 25 days after the award of contract. The department maintains a list of pre-approved systems of retaining walls. To be eligible for use on this project, a system must have been pre-approved and added to that list prior to the bid opening date.

Applications for pre-approval may be submitted at any time. Applications must be prepared in accordance to the requirements of chapter 14 of the department's Bridge manual. Information and assistance with the pre-approval process can be obtained by contacting the Structures Development Section in Room 601 of the Hill Farms State Transportation Building in Madison or by calling (608) 266-8494.

B.2 Design Requirements

It is the responsibility of the contractor to supply a design and supporting documentation as required by this special provision for review by the department to show that the proposed wall design is in compliance with the design specifications. The following shall be submitted to the engineer for review and acceptance no later than 21 days before wall construction will begin.

The design/shop plans shall be prepared on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the project identification number and structure number. Design calculations and notes shall be on 8½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All plans and calculations shall be signed, sealed, and dated by a professional engineer licensed in the State of Wisconsin. Four copies of the shop drawings and two copies of the design calculations and supporting materials shall be submitted.

The design of the Modular Block Gravity Wall shall be in conformance to the latest edition of the AASHTO Standard Specifications for Highway Bridges including interim specifications, the standard specifications, and standard engineering design procedures as determined by the department. The design must include analyses that clearly show the factors of safety for overturning, sliding, and soil bearing stress. The width of the modular block from front face to back face of the wall shall be given in the design computations and shown on the wall shop drawings.

The minimum embedment to the bottom of the modular block shall be 1 foot 6 inches, or as specified in the plan.

B.3 Wall System Components

Materials furnished under this contract shall conform to the requirements hereinafter provided.

B.3.1 Backfill

Wall Backfill, Type A, shall comply with the requirements for coarse aggregate No. 1 as given in standard spec 501.2.5.4. All backfill placed within a zone from the base of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

A layer of Geotextile Fabric Type "DF" (Schedule B) shall be placed vertically between the retained soil and the Type A backfill. The geotextile fabric shall extend from the top of the leveling pad to 6 inches below the surface of the retained soil. The geotextile shall then wrap across the top of the Type A backfill to the back of block wall facing.

B.3.2 Wall Facing

Provide wall facing units that consist of precast modular concrete blocks. All units shall incorporate a mechanism or devices that will develop a mechanical connection between vertical block layers. Units that are cracked, chipped or have other imperfections in accordance to ASTM C1372 or excessive efflorescence shall not be used within the wall. A single block type and style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan, or chosen by the engineer.

The top course of facing units shall be a solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material. A formed cast-in-place concrete cap may also be used to finish the wall. A cap of this type shall be designed to have texture, color, and an appearance that complements the remainder of the wall. The vertical dimension of the cap shall not be less than 3½ inches. Expansion joints shall be placed in the cap to correspond with each 24-inch change in vertical wall height or at a maximum spacing of 10 feet. Concrete for all cast-in-place caps shall be Grade A and shall conform to the requirements of standard spec 501.3.

Block dimensions may vary no more than ±1/8 inch from the standard values published by the manufacturer, in accordance to ASTM C1372. Blocks must have a minimum depth (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. Also the minimum allowed thickness of any other portion of the block is 2 inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

Cementitious materials and aggregates for modular blocks shall conform to the requirements of ASTM C1372 section 4.1 and 4.2. Modular blocks shall meet the following requirements:

Test	Method	Requirement
Compressive Strength (psi)	ASTM C140	5000 min.
Water Absorption (%)	ASTM C140	6 max.
Freeze-Thaw Loss (%)	ASTM	
40 cycles, 5 of 5 samples	C1262[(1)]	1.0 max.[(2)]
50 cycles, 4 of 5 samples		1.5 max.[(2)]

(1) Test shall be run using a 3% saline solution.

(2) Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable

All blocks shall be certified as to strength, absorption, and freeze-thaw requirements unless, due to contract changes after letting, certified blocks are not available when required. At the time of delivery of the certified blocks, furnish the engineer a certified test report from a department-approved independent testing laboratory for each lot of modular blocks. The certified test report shall clearly identify the firm conducted the sampling and testing, the type of block, the date sampled, name of the person conducting the sampling, the represented lot, the number of blocks in the lot, and the specific test results for each of the stated requirements of this specification. A lot shall not exceed 5000 blocks. The certified test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting certified test reports will be rejected and shall be removed from the project at the contractor's expense.

A department-approved independent testing laboratory shall control and conduct all modular block sampling and testing for certification. Prior to sampling, the manufacturer's representative shall identify all pallets of modular blocks contained in each lot. All pallets of blocks within the lot shall be numbered and marked to facilitate random sample selection. The representative of the independent testing laboratory shall identify five pallets of blocks by random numbers and shall then select one block from each of these pallets. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory. All pallets of blocks within a lot shall be strapped or wrapped to secure the contents and tagged or marked for identification. The engineer will reject any pallet of blocks delivered to the project without intact security measures. The contractor shall remove all rejected blocks from the project at no expense to the department.

The department may conduct testing of certified or non-certified modular blocks lots delivered to the project. The department will not do freeze-thaw testing on blocks less than 45 days old. If a random sample of five blocks of any lot tested by the department fails to meet any of the requirements of this specification (nonconforming), the contractor shall remove from the project site all blocks from the failed lot that have not been installed in the finished work, at no cost to the department, unless the engineer allows otherwise. Nonconforming blocks installed in the finished work will be considered approved by the department as stated in standard spec 106.5(2) and any adjustment to the contract price will not exceed the price of the blocks charged by the supplier.

B.3.3 Leveling Pad

For all walls over 5 feet tall measured from the top of the leveling pad to the top of the wall, the wall leveling pad shall consist of a poured concrete masonry pad made from Grade A concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for class II concrete as specified in standard spec 716. The depth of the leveling pad shall be as shown on the plans or 6-inches minimum. The leveling pad shall be as wide as the blocks plus 6-inches. Six inches of leveling pad shall extend beyond the front face of the blocks. The bottom of the blocks shall be horizontal and 100% of the block surface shall bear on the leveling pad. A concrete leveling pad shall be used

for the entire length of the wall. All walls with a Structure Number assigned (such as R-XX-XXX) shall be built using the concrete leveling pad given above. The leveling pad shall step to follow the general slope of the ground line. The leveling pads steps shall keep the bottom of the wall within one block's thickness of the minimum embedment, i.e. minimum embedment plus up to the thickness of one block. Additional embedment may be detailed but will not be measured for payment.

On walls less than or equal to 5 feet in height without a wall number assigned, a compacted leveling pad made from base aggregate dense 1¼ inch as given in standard spec 305 may be used. The depth of the aggregate leveling pad shall be as shown on the plans or 12-inches minimum. The aggregate leveling pad shall be as wide as the blocks plus 12 inches with 12 inches of pad extending beyond the front face of the wall.

C Construction

C.1 General

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

Place materials in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth. Backfilling shall closely follow erection of each course of wall facing units.

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

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

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

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

C.2 Geotechnical Information

Geotechnical data to be used in the design of the wall is given on the wall plan. The allowable soil bearing capacity is given on the plan. After completion of excavation, the department's Regional Soils Engineer will inspect the site and determine if the

foundation is adequate for the intended loads. Allow the region's Soils Engineer two working days to perform the inspection.

D Measurement
The department will measure Wall Modular Block Gravity in area by the square foot of face on a vertical plane between the top of the leveling pad and a line indicating the top of wall including wall cap or copings as required and shown on the plans. Unless directed by the engineer, wall area constructed above or below these limits will not be measured for payment.

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

ITEM NUMBER	DESCRIPTION	UNIT
532.0200.S	Wall Modular Block Gravity	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of surplus materials; supplying all necessary wall components to produce a functional system including cap and copings; constructing the retaining system; providing backfill, backfilling, and compacting the backfill; and furnishing and installing geotextile fabric. Parapets, railings, and other items above the wall cap or coping will be paid for separately.

Any required topsoil, fertilizer, seeding or sodding and mulch will be paid for at the contract unit price of topsoil, fertilizer, seeding or sodding and mulch, respectively.
532-030 (20120615)

26. Cover Plates Temporary, Item 611.8120.S.

A Description
This special provision describes furnishing and installing a steel plate to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

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

C (Vacant)

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

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	Each

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

27. 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, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
611.9800.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)

28. Seeding Temporary.

Supplement standard spec 630.3.3 as follows:

Apply Seeding Temporary separately from the application of other seed mixtures to ensure uniform application rates due to the varying seed sizes.
(NCR-02142012)

29. Electrical Service Meter Breaker Pedestal, HAWK STA 457+34, Item 656.0200.01.

Append standard spec 656.3.4 with the following:

The contractor will be responsible for requesting the installation or relocation of the traffic signal electrical service from the power utility. New service installations shall be 120V/240V 100A service.

Electrical utility company service installation costs will be paid by the contractor. Arrange for the electrical service to be established in the maintaining authority's name.

Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electrical utility company.

Append standard spec 656.5(3) with the following:

Payment is full compensation for grading the service trench; replacing topsoil; and for fertilizing, seeding, and mulching to restore the disturbed area of the service trench.

30. Concrete Masonry Curb, Item SPV.0035.01.

Construct the concrete masonry curb in accordance to standard spec 504 and in accordance to the plan details.

31. Concrete Masonry Special, Item SPV.0035.02.

Description
This special provision describes the concrete masonry construction of the sediment device in accordance to the requirements pertaining to culverts in standard spec 504 and as hereinafter provided.

Materials
Provide materials as specified in the plans and details and standard spec 504.

Construction
Construct the sediment device as specified in the plans and details and in accordance to standard spec 504.

Measurement
The department will measure Concrete Masonry Special by the cubic yard acceptably completed. The department will not measure work or materials for forms, falsework, or cofferdams unless specified otherwise. The department will not measure pumping, bracing, or other incidentals necessary to complete the work.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.02	Concrete Masonry Special	CY

Payment is full compensation for furnishing all materials, forms, falsework, placing, finishing, curing, protecting, and heating.

32. Portable Changeable Message Sign (PCMS) Cellular Communications, SPV.0045.01.

A Description
This special provision describes cellular communications requirements for use with PCMS. Cellular communication allows the department to control PCMS during incidents or other emergencies through Trans Suite software. The department will notify contractor of message changes.

B Materials
Provide a cellular modem and antenna that enables the department to communicate and control PCMS conforming to standard spec 643.2.7.

B.1 Cellular Modem and Antenna
Furnish an EV-DO Cellular modem registered to a 3G Cellular carrier. The cellular modem must include 1 or more external antennas, 1 or more 10/100 Ethernet ports, and 1 or more db9 Serial RS-232 interfaces. The device must be able to handle -30° C to +75° C and powered by a 12VDC power supply. The cellular modem must have a built-in secure router with NAT, port forwarding and IP pass-through capabilities.

Provide management IP and passwords for the cellular modem to the department.

Access includes IP address, serial port setting, and password(s). Antenna cable shall be continuous without splices. Mount the antenna at the highest practical location on the PCMS.

C Construction
Conform to standard spec 643.3.7. Install cellular modem in a lockable, weatherproof compartment in the PCMS trailer.

A minimum of 14 days prior to deployment, demonstrate to the department that the cellular modem is capable of communications with Trans Suite software.

If remote communications are interrupted or temporarily unavailable, contractor will be notified by the department to change the message.

D Measurement
The department will measure Portable Changeable Message Sign (PCMS) Cellular Communications by the day acceptably completed, measured as the number of calendar days each cellular modem for PCMS is available for exclusive use under the contract. The department will deduct one day for each calendar day the sign communications are required but out of service for more than 2 hours.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	Portable Changeable Message Sign (PCMS) Cellular Communications	DAY

Payment is full compensation for providing, operating and maintaining a cellular modem and antenna, and for making message changes if cellular communications are interrupted or temporarily unavailable.

33. Salvage Hydrant, Item SPV.0060.01.

A Description
This work shall consist of Salvage Hydrants as shown on the plans and as herein provided.

B (Vacant)

C Construction
Remove hydrants in one piece at the connection to the hydrant lead. Cap or plug hydrant lead as shown on the plans. Transport and stockpile the salvaged hydrants at Lakeland Sanitary District No. 1, 8680 Morgan Road, Minocqua.

D Measurement
The department will measure Salvage Hydrant as each individual Salvage Hydrant acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Salvage Hydrant	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, and for furnishing all labor, tools equipment and incidentals necessary to complete the work. The department will pay capping/plugging hydrant leads separately.

34. Remove Watermain Valve Box, Item SPV.0060.02.

A Description
This work shall consist of Removing Watermain Valve Boxes as shown on the plans and as herein provided. Watermain valve boxes include 5-1/4" shaft valve boxes and 1-1/2" shaft curb stop boxes.

B (Vacant)

C Construction
Remove watermain valve box to five feet below finish grade. Dispose of removed valve boxes.

D Measurement
The department will measure Remove Watermain Valve Boxes as each individual Remove Watermain Valve Box, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Remove Watermain Valve Box	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring and disposal, and for furnishing all labor, tools equipment and incidentals necessary to complete the work.

35. Plug Watermain Abandoned in Place, Item SPV.0060.03., Plug Forcemain Abandoned in Place, Item SPV.0060.04.

A Description
This work shall consist of inserting a 24 inch long concrete plug into the open end of the pipeline to be abandoned in place as shown on the plans.

B (Vacant)

C Construction
Plug for pipelines to be abandoned in place shall be as shown on the plans and as herein provided.

D Measurement
The department will measure Plug Watermain Abandoned in Place, Plug Forcemain Abandoned in Place, and Plug Sanitary Sewer Abandoned in Place, as each individual plug, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Plug Watermain Abandoned in Place	Each
SPV.0060.04	Plug Forcemain Abandoned in Place	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing the plug, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work, regardless of pipe size.

36. Cap Watermain To Remain in Service, Item SPV.0060.05.

A Description

This work shall consist of furnishing or installing a pipeline cap manufactured of materials specifically intended for use as a pipeline cap on the open end of the pipeline to remain in service as shown on the plans.

B (Vacant)

C Construction

Cap on pipelines to remain in service shall be as shown on the plans and as herein provided. Install thrust block on capped pipelines.

D Measurement

The department will measure Cap Watermain to Remain in Service as each individual cap acceptably completed, regardless of size.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Cap Watermain to Remain in Service	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing the cap, and for all labor, tools, equipment and incidentals necessary to complete the work, regardless of pipe size. The installation of thrust blocks are considered an incidental cost to the cap work.

37. Remove Sanitary Manhole, Item SPV.0060.06.

A Description

This work shall consist of Removing Sanitary Manhole.

B (Vacant)

C Construction
Remove entire manhole structure. Fill excavation with Class B bedding materials. Salvage the casting for the Owner and transport and stock pile the salvaged casting to Lakeland Sanitary District No. 1, 8680 Morgan Road, Minocqua. Dispose the removed manhole.

D Measurement
The department will measure Remove Sanitary Manhole as each individual removed manhole, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Remove Sanitary Manhole	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work, regardless of manhole size. The department will pay plugging sanitary sewers at the manhole separately.

Class B bedding materials required for filling the manhole is incidental to the work.

38. Adjust Watermain Valve Box, Item SPV.0060.07.

A Description
Adjust existing watermain valve box to the required elevation. Watermain valve boxes include 5-1/4" shaft valve boxes and 1-1/2" shaft curb stop boxes.

B (Vacant)

C Construction
Excavate around the existing watermain valve box as necessary and rotate the valve box assembly to position top at the required elevation. Furnish and install valve box extensions as necessary.

D Measurement
The department will measure Adjust Watermain Valve Box as each adjustment, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Adjust Watermain Valve Box	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

39. Adjust Sanitary Manhole Casting, Item SPV.0060.08.

A Description
Adjust existing sanitary manhole frame to the required elevation (less than one foot vertical adjustment) furnishing and installing precast concrete adjustment rings.

B (Vacant)

C Construction
Remove the existing frame and existing adjustment rings (if necessary) and reinstall at required elevation. Support the frame on a collar of precast concrete adjustment ring(s) and mortar.

D Measurement
The department will measure Adjust Sanitary Manhole Casting as each individual Adjust Sanitary Manhole acceptably completed, regardless of frame size.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Adjust Sanitary Manhole Casting	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing precast concrete adjustment rings and for furnishing all labor, tools, equipment and incidentals to complete the work. Reinstallation of existing sanitary manhole castings on the adjustment rings is an incidental cost to the manhole casting adjustment.

40. Reconstruct Sanitary Manhole, Item SPV.0060.09.

A Description
Reconstruct existing sanitary manholes when top of casting must be adjusted by more than one vertical foot to meet the required elevation, furnish and install manhole materials.

B Materials
Use 48 inch Type A reinforced concrete precast manhole wall sections, ASTM C-478.

C Construction
Remove the existing casting, adjustment rings and cone section. Install concrete precast manhole wall sections. Reinstall cone section, adjustment rings and casting to the required elevation.

D Measurement
The department will measure Reconstruct Sanitary Manhole as each individual Reconstruct Sanitary Manhole, acceptably completed, regardless of vertical height adjustment.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Reconstruct Sanitary Manhole	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing materials to reconstruct sanitary manholes and for all labor, tools, equipment and incidental necessary to complete the work. Removal and reinstallation of existing sanitary manhole castings and adjustment rings is an incidental cost to the manhole reconstruction.

41. Sanitary Manhole Casting, Item SPV.0060.10. Sanitary Manhole, Item SPV.0060.11.

A Description
This work shall consist of furnishing and installing precast concrete sanitary manholes and sanitary manhole castings as shown on the plans and as hereinafter provided.

B Materials
B.1. Cone: Reinforced flat tops and flat slab reducing sections ASTM C-478, with adequate reinforcement to support the dead weight load and highway live loadings.

B.1.a) For manholes in unpaved areas, provide two 3/4 inch threaded anchor bolts embedded in the top of the cone section.

B.1.b) Cast the 3/4 inch bolts the cone section during fabrication by or installed in the field utilizing expansion bolts.

B.1.c) Bolts: Type 303 or 304 stainless steel. McCullough Industries, Hilti or equal.

B.1.d) Nuts and washers: Type 18-8 stainless steel.

B.2. Barrel section: 48 or 60 inch (as shown on the Drawings), Type A reinforced concrete, ASTM C-478.

B.3. Precast base section: Complete with integral, monolithic two foot eight inch (minimum) barrel section, manhole wall/pipe junction waterstops and grouted bench.

B.4. Where a new manhole is constructed over an existing sewer, or where used as a valve manhole or storm sewer manhole, the precast base section may be separate from the precast barrel section (i.e. integral monolithic construction is waived).

B.5. Provide an adequate opening in the grouted bench for pipe insertion into manhole base section.

B.6. Opening thickness: 2 inches minimum, extending the full length of the manhole.

B.7. Final grout to provide a smooth transition across the manhole flow line. Grouted bench is not required for valve manholes.

B.8. Waterstops: PSX Boot manufactured by Press Seal Gasket Corporation, or approved equal.

B.9. Water stops are not required for storm sewer pipe.

B.10. Base Section: Reinforced concrete ASTM C-478.

B.10.a) In the event that the location of the invert of a sewer is changed in the field or a new manhole is constructed over an existing sewer, such that the integral waterstops cannot be utilized, other waterstops shall be furnished and installed at the junction of the sewer pipe and the manhole wall.

B.10.b) Waterstops: Armco waterstop gaskets and clamp, Fernco concrete manhole adaptor or equal.

B.11. Use rubber gaskets or a mastic sealant at the manhole wall section joints.

B.11.a) Gaskets: AASHO Designation M-198 and ASTM C-443.

B.11.b) Mastic sealant shall be "Kent Seal", or equal.

B.12. Adjusting rings, 2 and 4 inches high, precast concrete with two strands reinforcement, set in a mastic sealant.

B.12.a) Place mortar around the outside of the joints.

B.12.b) Adjustment rings for manholes in unpaved areas require two ¾-inch diameter holes for the insertion of the ½ inch threaded anchor rods.

B.13. Manhole steps: Copolymer polypropylene, meeting the requirements of ASTM Designation 2146 Type II Grade 49108, reinforced with a deformed 3/8 inch steel reinforcing bar which conforms to ASTM A-615 Grade 60.

B.13.a) Steps by M.A. Industries, Inc., Kelley and Dividend Drive, Peachtree City, Georgia 30269, Plastic Step No. PS-1, or equal.

B.14. Sealant and waterproofing Thoro-seal foundation coating, as manufactured by Standard Drywall Products, Inc., West Chemical Company or Xypex Crystalline Waterproofing Products as manufactured by Xypex Chemical Corporation, or equal.

B.15. Manhole frames and covers: Heavy duty castings with machined bearing surfaces, self-sealing lids.

B.15.a) Neenah Foundry Company, Edition 12 and R-1550 with Type C lid for standard installations, R-1556-A with Type C Lid for shallow manhole installations, or approved equal.

B.15.b) Lids: Two concealed pick holes.

B.15.c) Off pavement manhole location: Pprovide two ¾-inch holes for bolting casting to cone/adjustment rings.

B.16. Mortar used at manhole joints or rings one part Portland Cement, Type I, conforming to ASTM Specification C-91, to two parts of clean sand and water.

C Construction

C.1. General

C.1.a) Manholes are to be constructed as shown on the Drawings. Unless approved by the engineer, all manholes to have monolithic wall section base construction.

C.1.b) Provide clearance for pipe positioning through the manhole wall and precast bench.

C.1.c) Constructed the manhole bench utilizing ballast concrete with final bench grout.

C.1.d) Smooth and shaped the manhole flowline as shown on the Drawings.

C.1.e) Position an approved manhole waterstop with the wall of the manhole to be attached to the pipe, according to the manufacturer's instructions, prior to pouring a concrete base, and for pre-cast bases also.

C.1.f) Keep concrete blocks or bricks used to support the pipe outside of these waterstops and not within the manhole perimeter.

C.1.g) Properly work the concrete to ensure maximum contact with these waterstops.

C.1.h) Where future connections are planned, install manhole stubs sealed with an approved plug.

C.1.i) Build up manhole so that the cover, when placed, will be at the required grade.

C.1.j) Provide a minimum of two inches and a maximum of twelve inches of concrete adjusting rings at the top of the manhole to permit future adjustment of the frame and cover.

C.1.k) Groove concrete rings, where necessary to receive a manhole step.

C.1.l) Contractors are cautioned to observe this requirement for adjusting rings when ordering the manholes.

C.1.m) To the extent possible, the engineer has determined the final manhole elevation, as shown on the Plans.

C.1.n) Where the sewers are hole base has been completed.

C.1.p) Install the top of the manhole casting flush with the finish grade. In sloping grade areas, match the existing slope or modify the existing grade to provide a smooth transition to the manhole.

C.1.q) Where the location of the invert of a sewer is changed in the field or a connection is made to an existing manhole, core drill new opening into the manhole wall. Core opening large enough to permit water stop to be installed.

C.2. Preparation of Subgrade

C.2.a) Maintain the bottom of the trench in a stable condition, and free of water, during the time required to install the manhole.

C.2.b) Limit the excavation to the size required for the manhole to be constructed. Over excavate the trench bottom to a depth of 4 inches below the manhole bottom, clear the loose soil.

C.2.c) Bed the manhole base section with 4 inches of crushed aggregate, in order to assure that adequate and uniform support is provided under the manhole and to avoid differential settlement.

The gradation of the crushed aggregate shall be as follows:

Sieve Size and Number	**Percentage Passing By Weight**
½ inch	100
3/8 inch	90 – 100
No. 8	0 – 15
No. 30	0 - 3

C.3. Precast Concrete Manholes and Wetwells

C.3.a) Placed the base section in such a manner that (a) the invert of the sleeve or gasket is at the proper elevation, (b) the center of the manhole is in the proper location, and (c) the base section is plumb and level.

C.3.b) Since the pipe will enter the manhole above the base, support the pipe with bedding material, extended from beneath the base section, as detailed in the Plans.

C.3.c) If a precast base slab, without monolithic cast wall section is utilized, place it in such a manner that the top of the base section is below the invert of the pipe, to permit the proper installation of the pipe waterstop.

C.3.d) Constructed the manhole floor using ballast concrete to be placed up to the springline of the pipe and sloped up to the manhole walls at three inches/foot.

C.3.e) Shape and smooth, the manhole flow line, and in accordance to the Plans.

C.3.f) After the first manhole wall section is installed, paint and seal the outer joint between the base and the manhole walls with Thoroseal Foundation Coating, as manufactured by Standard Dry Wall Products, Inc., or Xypex Crystalline Waterproofing Products as manufactured by Xypex Chemical Corporation, or equal to provide a watertight joint.

C.3.g) Make the manhole section joints watertight by using rubber gaskets or mastic sealant.

C.3.h) Mortar may also be placed over the exterior joint to ensure its watertightness.

C.3.i) Manholes must be watertight.

C.4. Other Manholes and Base Sections

C.4.a) Concrete block, reinforced concrete, or poured-in-place manholes may be substituted for the above described manholes when

C.4.a)(1) The contractor submits a satisfactory design for such substitute manholes.

C.4.a)(2) Written approval is obtained.

C.5. Drop Manholes

C.5.a) Provide a drop pipe as shown on the Plans for a sewer entering a manhole at an invert elevation of 24 inches or more above the springline of the exiting sewer.

C.5.b) Where the difference in elevation between incoming sewer and the exiting sewer invert is less than 24 inches, fillet the transition to prevent solids deposition.

C.5.c) Where a precast manhole with a drop connection is constructed, the footing for the portion of the manhole under the drop may be attached to the monolithic base section during a separate concrete pour.

C.5.d) A minimum of four one-half-inch reinforcing rods shall be placed as dowels into the footing from the manhole base section.

C.5.e) Extend these rods as the vertical part of the drop is constructed either of masonry or monolithic concrete.

C.5.f) In addition, tie the drop into each joint of the precast manhole with a minimum one-quarter inch rod to prevent any separation of the drop from the precast manhole.

C.5.g) Drill additional horizontal ties from the envelopes of the outside drop drill into the wall of the precast manhole as directed.

C.5.h) Refer to detail on the drawings.

C.6. Adjusting Rings

C.6.a) Place a minimum of one two-inch adjusting ring and a maximum of six two inch adjusting rings on the cone section of the manhole.

C.6.b) Place a continuous bead of mastic sealant around the top of the cone section and between all adjusting rings, to ensure water tightness.

C.6.c) Place mortar around the outside of the joints.

C.7. Manhole Frames and Covers

C.7.a) Place a continuous bead of mastic sealant around the entire circumference of the top most adjusting ring.

C.7.b) Centered the manhole frame into place, and pressed firmly into the mastic to assure an even distribution of the sealant.

C.7.c) Secured the manhole frame to the manhole via the two anchor bolts in the cone section.

D Measurement

The department will measure Sanitary Manhole Castings as each individual sanitary manhole casting, acceptably completed. The department will measure Sanitary Manholes as each sanitary manhole, 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.0060.10	Sanitary Manhole Casting	Each
SPV.0060.11	Sanitary Manhole	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing all materials for the complete manhole installation and for furnishing all labor, tools, equipment and incidentals as necessary to complete the work.

42. Connection to Existing Sanitary Manhole, Item SPV.0060.12.

A Description
Connection to existing sanitary manhole shall be made using core drill and concrete hammering equipment.

B- Materials
Use Armco waterstop gaskets and clamp, Fernco concrete manhole adaptor or equal at the pipe/manhole wall junction.

C- Construction
Core drill opening in manhole wall for sewer pipe. Hammer out existing bench to receive new pipe flow line. Install pipe waterstop and patch manhole wall and bench with concrete grout.

D- Measurement
Connection to sanitary manholes as each connection, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Connection to Existing Sanitary Manhole	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing materials to connect to sanitary manholes and for furnishing all labor, tools, equipment and incidental necessary to complete the work.

43. Air Release Manhole, Item SPV.0060.13.

A Description
This work shall consist of an air release manhole containing an air release valve and accessories as shown on the plans and as herein provided.

B Materials

B.1 Manhole materials shall be as provided in Sanitary Manhole Casting Item SPV.0060.10 and Sanitary Manhole Item SPV.0060.11.

B.2 Valve: Short style sewage air and vacuum valve rated for 150 psi working pressure, Val-Matic Model 301S BWA or equal.

B.2.a 2 inch inlet plug valve, 150 psi rated.

B.2.b 1 inch PVC Schedule 80 outlet discharge pipe.

B.2.c ½ inch plug valve and piping with quick disconnect coupling, 150 psi rated.

B.2.d 2 inch drain plug valve, 150 psi rated.

B.2.e 16 feet of back-flushing hose with quick disconnect couplings.

C Construction

C.1. Construct manholes as provided in Sanitary Manhole Item SPV.0060.11 and as shown on the Drawings.

D Measurement

The department will measure Air Release Manholes as each individual air release manhole, 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.0060.13	Air Release Manhole	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing all materials for the complete manhole installation and for furnishing all labor, tools, equipment and incidentals as necessary to complete the work.

44. Hydrant, Item SPV.0060.14.

A Description

This work consist of furnishing and installing hydrants, furnishing and installing electrical continuity connections, furnishing and installing drainage stone for hydrants and furnishing and installing thrust blocking, in the locations as shown on the plan and as directed by the engineer.

B Materials
Hydrants shall be as follows:

B.1. AWWA Standard C-502 and the following specifications.

B.2. Traffic model, consisting of a safety barrel flange and a safety sleeve stem coupling, each designed to break away without water loss or damage to other parts of the hydrant.

B.3. Hydrant design will permit rotation of the nozzle section to position the nozzles in any direction.

B.4. The nozzle placement is not be restricted by bolt hole placements.

B.5. The center line of the nozzle to be 16 inches higher than the bury line.

B.6. Hydrant barrel, traffic flange to hydrant bottom: one or two piece of ductile or cast iron materials.

B.7. Hydrant barrel length: 7.5 feet from the bury line to the bottom of a six inch ductile iron hydrant lead.

B.8. Compression type hydrant, with the main valve closing with line pressure.

B.9. 150 psi working pressure.

B.10. The main valve opening: 5-1/4 inches in diameter.

B.11. The main valve and valve seat to be removable through the upper barrel from above grade without disassembly at the ground line flanges.

B.12. Bronze valve seat mated with a bronze seat ring.

B.13. 1-1/2 inch pentagon operating nut, opening left (counter clockwise).

B.14. Lubrication of the stem threads by removal of a screw located in the operating nut or permanent reservoir.

B.15. Stuffing box with "O" rings for seals.

B.16. Two 2-1/2 inch nozzles and one 4-1/2 inch pumper nozzle, all with National Standard Fire Hose Thread.

B.17. 1-1/2 inch pentagon lugs caps attached to the nozzle section with chains.

B.18. The inlet connection: Six inch mechanical joint complete with accessories including gland, gaskets, nuts and bolts.

B.19. Self-draining and furnished with a positive acting drain valve.

B.20. All working parts of the drain valve shall be bronze.

B.21. Waterous Pacer WB-67 with 16 inch break off section.

C Construction
Excavate and install hydrants in accordance to the details on the plans. Support hydrant on a concrete block.

D Measurement
The department will measure hydrant as each individual hydrant 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	Hydrant	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing hydrants, drainage stone, thrust blocking and support block, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

45. Watermain Gate Valve and Box 6-Inch, Item SPV.0060.15., Watermain Gate Valve and Box 8-Inch, Item SPV.0060.16., Watermain Gate Valve and Box 10-Inch, Item SPV.0060.17., Forcemain Plug Valve and Box 6-Inch, Item SPV.0060.18.

A Description
This work shall consist of furnishing and installing gate valves and valve boxes and plug valves and valve boxes at the locations as shown on the plans and as directed by the engineer.

B Materials
B.1. Gate Valves

B.1.a) Valves 3 to 20 inch diameter resilient seated, fully encapsulated single wedge full-port gate valves with non-rising bronze stems and double synthetic rubber O-ring seals.

B.1.b) Valve open counterclockwise. Valves designed for 200 psi working pressure with zero leakage, from both directions.

B.1.c) Valve have push-on or mechanical joints compatible with the pipe selected for use.

B.1.d) Valves: AWWA C-515 specifications.

B.1.e) Valve operator standard two inch square AWWA operating nut.

B.1.f) Provide electrical continuity across the valve joints for ductile iron pipe an approved conductor rated for a minimum 400 amps.

B.1.g) Where valve body is epoxy coated, provide electrical continuity from pipe end to pipe end by connection across the valve.

B.1.h) Electrical continuity may be provided via the Cadwell Shot method.

B.2. Plug Valves

B.2.a) Non-lubricated, eccentric type with resilient face plug, cast iron body, neoprene plug facing.

B.2.b) Port areas: 85% of pipe area

B.2.c) Provide shaft seals conforming to AWWA C-504.

B.2.d) 175 psi working pressure rating.

B.2.e.) Provide buried service gear operators packed with grease and sealed for submergence to 20 feet of water.

B.3. Valve Boxes

B.3.a) Install valve boxes on all buried valves.

B.3.b) Valve boxes: cast iron, five and one-quarter inch shaft screw type boxes.

B.3.c) Valve box length: 84 inches, adjustable over a range of 78 to 90 inches as referenced from finished grade to top of pipe elevation.

B.3.d) Mark watermain valve box covers "WATER". Mark forcemain valve box covers “SEWER”.

B.3.e) Where indicated on the drawings install valve manholes instead of valve boxes.

B.3.f) Valve box adapters to support the valve box.

B.3.f)(1) Valve box adapters: One-quarter inch steel members, coated with bitumastic paint, with a one-half inch neoprene gasket that shall be installed between the valve and valve box adapter.

B.3.f)(2) Gate valve adapters: as manufactured by Adaptor, Inc., or equal.

C Construction

C.1. Support valve on a concrete block.

C.2. Isolate valve so that no stress or shock is transferred to the valve by the valve box.

C.3. Center and plum the valve box over the operating nut.

C.4. Adjust the box cover flush with the surface of the finished pavement or such other level as may be directed.

C.5. Refer to the detail on the Drawings.

C.6. Install valve box adapters per written instructions from the equipment manufacturer.

D Measurement

The department will measure 6-inch Gate Valve and Box, 8-inch Gate Valve and Box, 10-inch Gate Valve and Box, and 6-inch Plug Valve and box as each individual 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.0060.15	Watermain Gate Valve and Box 6-Inch	Each
SPV.0060.16	Watermain Gate Valve and Box 8-Inch	Each
SPV.0060.17	Watermain Gate Valve and Box 10-Inch	Each
SPV.0060.18	Forcemain Plug Valve and Box 6-Inch	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing gate and plug valves, adjusting valve box height, for furnishing and installing bolts, nuts, gaskets, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

46. Watermain Corporation Stop 1-inch, Item SPV.0060.19., Watermain Curb Stop and Box 1-inch, Item SPV.0060.20., Watermain Service Reducer 1 x ¾ inch, Item SPV.0060.21.

A Description

This work consists of furnishing and installing corporation stops, curb stop and boxes and service reducers at the locations shown on the plans and as directed by the engineer.

B Materials

B.1. Corporation stops, AWWA C-800, capable of withstanding a 150 psi working pressure and be bronze body ball valve corporation stops in sizes ¾" through 2" and/or tapered plug type in sizes 1 ½" and 2".

B.2. Provide stops with a compression or pack joint connection for Type "K" copper.

B.3. Corporation stops shall be tapped into PVC watermain using tapping saddles.

B.4. Tapping saddles: Ford FS202, Rockwell 317, Romac Style 202S or Mueller H13000.

B.5. Corporation stops shall be Ford FB1000 or Mueller H-15013.

B.6. Curb stops, AWWA C-800, capable of withstanding a 150 psi working pressure and be bronze body ball valve curb stops in sizes ¾" through 2" and/or tapered plug type in sizes ¾" and 1".

B.7. Provide stops with a compression or pack joint connection for Type "K" copper and Minneapolis pattern base connection.

B.8. Curb stops shall be Ford B44M or Mueller H15155 (in 1 inch size only).

B.9. Curb boxes cast iron boxes, 1¼ or 1½ inch diameter upper section.

B.10. Minneapolis pattern base.

B.11. Curb box length adjustable over a range of 84 to 96 inches as referenced from finish grade to top of pipe elevation.

B.12. Service reducers shall be straight three part union type with compressive connections.

C Construction

C.1. Support valve on a concrete block.

C.2. Center and plum the valve box.

C.3. Adjust the box cover flush with the surface of the finished pavement or such other level as may be directed.

C.4. Refer to the detail on the Drawings.

D Measurement

The department will measure watermain corporation stop 1-inch, watermain curb stop and box 1-inch, and watermain service reducer 1 x ¾ inch, as each individual valve and reducer, 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	Watermain Corporation stop 1-inch	Each
SPV.0060.20	Watermain Curb stop and box 1-inch	Each
SPV.0060.21	Watermain Service Reducer 1 x ¾ inch	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing corporation stops with saddle and curb stops and box, adjusting valve box height, for furnishing and installing bolts, nuts, gaskets, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

47. Watermain Coupling 6-Inch, Item SPV.0060.22; Watermain Coupling 8-Inch, Item SPV.0060.23; Watermain Coupling 10-Inch, Item SPV.0060.24; Watermain Bend 11-1/4 Degree 8-Inch, Item SPV.0060.25; Watermain Bend 22-1/2 Degree 10-Inch, Item SPV.0060.26;Watermain Bend 45 Degree 6-Inch, Item SPV.0060.27; Watermain Bend 45 Degree 8-Inch, Item SPV.0060.28; Watermain Bend 45 Degree 10-Inch, Item SPV.0060.29; Watermain Reducer, 10 x 8-Inch, Item SPV.0060.30; Watermain Tee, 8 x 6-Inch, Item SPV.0060.31; Watermain Tee, 8 x 8-Inch, Item SPV.0060.32; Watermain Tee, 10 x 6-Inch, Item SPV.0060.33; Watermain Tee, 10 x 10-Inch, Item SPV.0060.34; Forcemain Coupling 6-Inch, Item SPV.0060.35; Forcemain Bend 45 Degree 6-Inch, Item SPV.0060.50.

A Description

This work shall consist of furnishing and installing watermain and forcemain fittings of various sizes and type with megalug joint restraint in the locations as shown on the plans and as directed by the engineer.

B- Materials

B.1. Watermain and Forcemain fittings.

B.1.a) Utilize mechanical joint fittings.

B.1.b) Materials: Ductile iron, ANSI A 21.10/AWWA C-110 or ANSI A21.53-84/AWWA C-153, and designed structurally to withstand 250 psi working

pressure plus water hammer, coal-tar coated with internal standard cement lining per ANSI A 21.4/AWWA C-104.

B.1.c) Bolts and associated hardware (nuts, washers) to be cold formed, high strength low alloy steel: 1.5-2.5% copper, nickel and chromium (Copper-0.5%, Nickel-0.5%, Chromium-1%).

B.1.d) Joints: ANSI A 21.11/AWWA C-111. For ductile iron pipe locations, provide electrical continuity across joints with an approved conductor rated for a minimum 400 amps. Electrical continuity may be provided via the Cadwell Shot method.

B.1.e) Use Megalug joint restraint at fittings and connecting pipelines.

C Construction

See Sanitary Sewer Lateral 4-Inch, Item SPV.0090.04; Sanitary Sewer 8-Inch, Item SPV.0090.05 construction methods; Sanitary Sewer 12-Inch, Item SPV.0090.06.

D Measurement

The department will measure watermain coupling 6-inch, watermain coupling 8-inch, watermain coupling 10-inch, watermain bend 11-1/4 degree 8-inch, watermain bend 22-1/2 degree 10-inch, watermain bend 45 degree 6-inch, watermain bend 45 degree 8-inch, watermain bend 45 degree 10-inch, watermain reducer 10 x 8-inch, watermain tee 8 x 6-inch, watermain tee 8 x 8-inch, watermain tee 10 x 6-inch, watermain tee 10 x 10-inch, forcemain coupling 6-inch, and forcemain bend 45 degree 6-inch as each individual fitting, 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.0060.22	Watermain Coupling 6-Inch	Each
SPV.0060.23	Watermain Coupling 8-inch	Each
SPV.0060.24	Watermain Coupling 10-inch	Each
SPV.0060.25	Watermain Bend 11-1/4 Degree 8-Inch	Each
SPV.0060.26	Watermain Bend 22-1/2 Degree 10-Inch	Each
SPV.0060.27	Watermain Bend 45 Degree 6-Inch	Each
SPV.0060.28	Watermain Bend 45 Degree 8-Inch	Each
SPV.0060.29	Watermain Bend 45 Degree 10-Inch	Each
SPV.0060.30	Watermain Reducer, 10 x 8-Inch	Each
SPV.0060.31	Watermain Tee, 8 x 6-Inch	Each
SPV.0060.32	Watermain Tee, 8 x 8-Inch	Each
SPV.0060.33	Watermain Tee 10 x 6-Inch,	Each
SPV.0060.34	Watermain Tee 10 x 10-inch	Each
SPV.0060.35	Forcemain Coupling 6-Inch	Each
SPV.0060.50	Forcemain Bend 45 Degree 6-Inch	Each

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing watermain fittings and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work. Megalug joint restraint are an incidental cost to the fitting installation.

48. Park Bench, Item SPV.0060.36.

A Description
This special provision describes furnishing and installing Park Bench as shown on the plans and as hereinafter provided

B Materials
Furnish the following park bench: Wausau Tile, TF5064, Weatherstone B-7 Brick Red or equal as approved by the enginee.

C Construction
(Vacant)

D Measurement
The department will measure Park Bench by each individual park bench, 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.0060.36	Park Bench	Each

Payment is full compensation for furnishing and installing all necessary materials.

49. Planter, Item SPV.0060.37.

A Description
This special provision describes furnishing and installing planter as shown on the plans and as hereinafter provided.

B Materials
Furnish the following planter: Wausau Tile, TF4120, Weatherstone B-7 Brick Red or equal as approved by the engineer.

C Construction
(Vacant)

D Measurement
The department will measure planter by each individual planter, 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.0060.37	Planter	Each

Payment is full compensation for furnishing and installing all necessary materials.

50. Trash Container, Item SPV.0060.38.

A Description
This special provision describes furnishing and installing a trash container as shown on the plans and as hereinafter provided

B Materials
Furnish the following trash container: Wausau Tile, TF1191, Weatherstone B-7 Brick Red or equal as approved by the engineer.

C Construction
(Vacant)

D Measurement
The department will measure Trash Container by each individual trash container, 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.0060.38	Trash Container	Each

Payment is full compensation for furnishing and installing all necessary materials.

51. Railing Steel Gate, Item SPV.0060.39.

A Description
This special provision describes fabricating, galvanizing, painting and installing steel gates in accordance with standard spec 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

B Materials
All materials for steel gates shall be new stock, free from defects impairing strength, durability and appearance. Gates shall be galvanized and receive a two-coat paint system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

B1 Coating System

B1.1 Galvanizing

After fabrication, blast clean steel gates per SSPC-SP6 and galvanize according to ASTM A123. Vent holes shall be drilled in members as required to facilitate galvanizing and drainage. Location and size of vent holes are to be shown on the shop drawings. All burrs at component edges, corners and at holes shall be removed and sharp edges chamfered before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed in accordance to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when painted, will produce unacceptable aesthetic and/or visual qualities, will not be permitted.

B1.2 Two-Coat Paint System

After galvanizing, paint all exterior surfaces of steel gates and inside of rail elements at field erection and expansion joints as hereinafter provided. All galvanized surfaces to be painted shall be cleaned per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface shall then be brush blast cleaned per SSPC-SP16 to create a slight angular surface profile per manufacturer's recommendation for adhesion of the tie coat. Blasting shall not fracture the galvanized finish or remove any dry film thickness. After cleaning, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use a preapproved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats should be of contrasting colors, and come from the same manufacturer.

Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applier. The review shall include a visit to the facility performing the work if requested by the paint manufacturer. Provide written confirmation, from the paint manufacturer to the engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of the engineer.

Manufacturer	Coat	Products	Dry Film Minimum Thickness (mils)	Min. Time[1] Between Coats (hours)
Sherwin Williams 1051 Perimeter Drive Suite 710 Schaumburg, IL 60173 (847) 330-1562	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
	Top	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carboline 350 Hanley Industrial St. Louis, MO 63144 (314) 644-1000	Tie	Rustbond Penetrating Sealer FC	1	36
	Tie	Carboguard 60	4.0 to 6.0	10
	Tie	Carboguard 635	4.0 to 6.0	1
	Top	Carbothane 133 LH(satin)	4	NA
Wasser Corporation 4118 B Place NW Suite B Auburn, WA 98001 (253) 850-2967	Tie	MC-Ferrox B 100	3.0 to 5.0	8
	Top	MC-Luster 100	2.0 to 4.0	NA
PPG Protective and Marine Coatings P.O. Box 192610 Little Rock, AR 72219-2610 (414) 339-5084	Tie	Amercoat 399	3.0 to 5.0	3
	Top	Amercoat 450H	2.0 to 4.0	NA

[1] Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

B2 Gate Hinges

Provide galvanized self-closing hinges and a stop plate as shown in the plan details. Attach gate to railing per hinge manufacturers recommendations.

B3 Shop Drawings

Submit shop drawings showing the details of gate construction. Show the gate height, post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the gate. State the name of the paint manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type

used for all components. Also show the size and location of any vent or drainage holes provided.

C Construction

C1 Delivery, Storage and Handling

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If coating is damaged, contractor shall repair or replace gate assemblies to the approval of the engineer at no additional cost to the owner. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted without the approval of the engineer.

C2 Touch-up and Repair

For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations. If damage is excessive, the gate assembly shall be replaced at no additional cost to the owner. The contractor shall provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

D Measurement

The department will measure Railing Steel Gate by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.39	Railing Steel Gate	Each

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

52. Sanitary Wye 8 x 4-Inch, Item SPV.0060.51.

A Description

This item shall consist of furnishing and installing sanitary wyes in new sewers. This item also includes all fittings necessary to connect the wyes to the new sanitary sewer laterals and to connect new sanitary sewer laterals to existing sanitary sewer laterals.

B Materials

Service laterals shall be connected to the sewer by PVC wye fittings.

C Construction

Install wyes and cleanouts in accordance to Chapter COMM 82 of the Wisconsin Administrative Code (Plumbing Code) and all local plumbing codes and regulations.

D Measurement
The department will measure 8 x 4 inch Sanitary Wye as each individual item acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.51	Sanitary Wye 8 x 4 Inch	Each

Payment is full compensation all excavating, dewatering, sheeting, shoring, furnishing and installing the wye, bedding material, initial backfill and all fittings not otherwise specified, and all labor and equipment necessary to complete the installation in accordance to the plans and specifications.

53. Pedestrian Hybrid Beacon, Item SPV.0060.44.

A Description
This special provision describes the furnishing and installation of a 3-section Pedestrian Hybrid Beacon including signal faces, backplate, and all other necessary items not otherwise itemized.

B Materials
Pedestrian Hybrid Beacons shall be assembled in accordance to standard spec 658 and the project plans.

C Construction
All work shall be in accordance to the standard specifications, these special provisions, and the project plans.

D Measurement
The department will measure Pedestrian Hybrid Beacon as each individual unit, acceptably completed.

E Payment
Measured quantities will be paid at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.44	Pedestrian Hybrid Beacon	Each

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

54. Inlet Type 3M, Item SPV.0060.45.

A Description
This special provision describes inlet type 3M in accordance to the requirements of standard spec 611, the details shown in the plans, and as hereinafter provided.

B Materials
In accordance to the requirements of standard spec 611.

C Construction
Supplement standard spec 611.3.1 to include a 2 foot sump according to plan detail.

D Measurement
The department will measure Inlet Type 3M in accordance to the requirements of standard spec 611.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item in accordance to the requirements of standard spec 611.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.45	Inlet Type 3M	Each

55. Catch Basin Type 5M-8, Item SPV.0060.46.

A Description
This special provision describes Catch Basin Type 5M-8 in accordance to the requirements of standard spec 611, the details shown in the plans, and as hereinafter provided.

B Materials
In accordance to the requirements of standard spec 611.

C Construction
Supplement standard spec 611.3.1 to include 8-foot diameter structure with a 2 foot sump according to plan detail.

D Measurement
The department will measure Catch Basin Type 5M-8 in accordance to the requirements of standard spec 611.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item in accordance to the requirements of standard spec 611.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.46	Catch Basin Type 5M-8	Each

56. Catch Basin Type 5M-10, Item SPV.0060.47.

A Description
This special provision describes Catch Basin Type 5M-10 in accordance to the requirements of standard spec 611, the details shown in the plans, and as hereinafter provided.

B Materials
In accordance to the requirements of standard spec 611.

C Construction
Supplement standard spec 611.3.1 to include 10-foot diameter structure with a 2 foot sump according to plan detail.

D Measurement
The department will measure Catch Basin Type 5M-10 in accordance to the requirements of standard spec 611.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item in accordance to the requirements of standard spec 611.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.47	Catch Basin Type 5M-10	Each

57. Inlet Type 8M, Item SPV.0060.48.

A Description
This special provision describes Inlet Type 8M in accordance to the requirements of standard spec 611, the details shown in the plans, and as hereinafter provided.

B Materials
In accordance to the requirements of standard spec 611.

C Construction
Supplement standard spec 611.3.1 to include a 2 foot sump according to plan detail.

D Measurement
The department will measure Inlet Type 8M in accordance to the requirements of standard spec 611.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item in accordance to the requirements of standard spec 611.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.48	Inlet Type 8M	Each

58. Temporary Water Passage, Item SPV.0060.49.

A Description
This special provision describes building a temporary water passage in accordance to the plan, the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction
Excavate to the size and depth specified in the plans, and backfill with washed aggregate conforming to the requirements specified in standard spec 501.2.5.4.4 for Size No. 1. Install the pipe under drain in accordance to the plan, and in accordance to the requirements specified in standard spec 612.2. The 4-inch diameter hole will be precast or constructed using a method acceptable to the engineer.

Prior to the placement of HMA pavement, remove the washed aggregate to a depth of 1.5 feet below the gutter flange elevation, and replace and compact with base aggregate dense. Compaction efforts will meet requirements specified in standard spec 305.3.2. Mortar the 4-inch diameter hole.

D Measurement
The department will measure Temporary Water Passage by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.49	Temporary Water Passage	Each

Payment is full compensation for performing the excavation; furnishing and installing the washed aggregate; constructing the 4-inch diameter hole; installing the 4-inch pipe under drain; removing and disposing of the washed aggregate and pipe under drain; and for mortaring the 4-inch diameter hole.

59. Bar Steel Reinforcement HS Coated Railing, Item SPV.0085.01.

Furnish and place the bar steel reinforcement HS coated railing in accordance to standard spec 505 and in accordance to the plan details.

60. Bar Steel Reinforcement HS Coated Special, Item SPV.0085.02.

A Description
This special provision describes the furnishing and placing of the bar steel reinforcement for the sediment device in accordance to the requirements pertaining to culverts in standard spec 505 and as hereinafter provided.

B Materials
Provide materials as specified in the plans and details and standard spec 505.

C Construction
Construct the bar steel as specified in the plans and details and in accordance to Section 505 of the standard specifications.

D Measurement
The department will measure Bar Steel Reinforcement HS Coated Special by the pound acceptably completed in accordance to the requirements in standard spec 505.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.02	Bar Steel Reinforcement HS Coated Special	LB

Payment is full compensation for providing, transporting, and placing all reinforcement including supports. Where the plan specifies bar couplers, the department will pay for the length of the bars as detailed with no deduction or increase for the installation of the coupler. Payment is also full compensation for coating, including epoxy coated metal chair supports.

61. Remove Watermain, Item SPV.0090.01, Remove Asbestos Cement Sanitary Sewer, Item SPV.0090.02, Remove Asbestos Cement Forcemain, Item SPV.0090.03.

A Description
This work shall consist of Removing Watermain, Removing Asbestos Cement Sanitary Sewer and Removing Asbestos Cement Forcemain as shown on the plans and as herein provided.

B (Vacant)

C Construction
C.1. See Abatement of Asbestos Containing Material (Structure) Sanitary Sewer and Forcemain Pipe, Item 203.0210.S.

C.2. Remove pipe, fittings and appurtenances and plug ends as shown on the plans and as directed by the Owner or engineer. Dispose the removed pipe.

D Measurement
The department will measure Remove Watermain, Remove Asbestos Cement Sanitary Sewers and Remove Asbestos Cement Forcemain by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Remove Watermain	L.F.
SPV.0090.02	Remove Asbestos Cement Sanitary Sewer	L.F.
SPV.0090.03	Remove Asbestos Cement Forcemain	L.F.

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring and disposal, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work. The department will pay plugging water main and sanitary sewer pipe ends separately.

62. Sanitary Sewer Lateral 4-Inch, Item SPV.0090.04; Sanitary Sewer 8-Inch, Item SPV.0090.05.

A Description

This work shall consist of excavating required trenches, furnishing and installing 4 inch sanitary sewer laterals, tracer wires, 8-inch sanitary sewer pipes, and backfilling trenches all in accordance to the requirements of the plans, specifications and contract.

B Materials

B.1. Polyvinyl Chloride (PVC)

B.1.a) PVC sanitary sewer lateral pipe: ASTM D-3034, PSM SDR 35.

B.1.b) PVC sewer pipe: ASTM D-3034, PSM SDR 35

B.1.c) PVC pipe materials: Class 12454-B, 12454-C or 13364-B as defined in ASTM D-1784.

B.1.d) Produced by a continuous extrusion process, employing a prime grade of unplasticized polyvinyl chloride.

B.1.e) Use a grade highly resistant to hydrogen sulfide, sulfuric acid, gasoline, oil, detergents and other chemicals commonly found in sewage and industrial wastes.

B.1.f) Self-extinguishing flammability.

B.1.g) The minimum wall thickness in accordance to the respective ASTM governing the specific pipe manufacturer.

B.1.h) Maximum deflection of the installed PVC pipe, five percent.

B.1.i) Furnish mandrel for testing.

B.2. Connection to Sewer

B.2.a) Service laterals: connect by PVC wye fittings.

B.2.b) Use same material as the mainline sewer for wye and fittings.

B.2.c) Sewer laterals shall be installed with tracer wire.

B.3 Tracer Wire

B.3.a) Tracer Wire shall be 12 gauge TW or THHN solid copper wire with 30 mil polyethylene coating, green color .

B.3.b) Tracer wire joints shall be wrapped splices with solder or cadweld bonding of the copper wire, split bolt connections, compression connections (wire nuts not permitted). All exposed areas should be wrapped to provide a watertight joint.

B.3.c) Use Valco tracer wire access box at tracer wire terminations. Include five foot length of 2 inch diameter schedule 40 PVC pipe box extension.

C Construction

C.1. Excavation

C.1.a) General

C.1.a)(1) Unless otherwise specified, install ductile iron pipe, in accordance to AWWA C-600 and "A Guide for the Installation of Ductile Iron Pipe" as published by the Ductile Iron Pipe Research Association.

C.1.a)(2) Unless otherwise specified, install polyvinyl chloride pipe in accordance to the "Recommended Construction Practices for PVC Pipe", Handbook of PVC Pipe as published by UNI-Bell PVC Pipe Association.

C.1.b) Open Trench

C.1.b)(1) Maximum of 100 feet of trench opened in advance of pipe laying.

C.1.b)(2) Maximum of 200 feet of trench left open behind pipe laying.

C.1.c) Trench Width

C.1.c)(1) Trench width not to exceed 24 inches more than the outside pipe diameter at the top of the pipe.

C.1.c)(2) Trench slope above the pipe as required for safety.

C.1.c)(3) Pipe class must be sufficient for the conditions of the trench width and depth required.

C.1.d) Trench Shoring

C.1.d)(1) General

C.1.d)(1).a. Trench shoring or bracing in order to protect personnel, structures and utilities as well as to maintain the construction limits is encouraged.

C.1.d)(2) Trench Shoring or Bracing

C.1.d)(2).a. If trench shoring or bracing is required, furnish and install in accordance to the regulations of the Wisconsin Department of Industry, Labor and Human Relations.

C.1.d)(2).a.1) Prior to placing the sheeting or shoring, submit complete plans, and description of, proposed shoring system.

C.1.d)(2).a.2) Review of proposed the shoring system only with respect to the basic principles and methods.

C.1.d)(2)a.3) The engineer assumes no liability for the performance nor safety of the sheeting or shoring system.

C.1.d(3) Trench Box or Shield

C.1.d(3).a. A portable trench box or sliding trench shield may be used.

C.1.d(3).b. Used of either device as approved by the Wisconsin Department of Industry, Labor and Human Relations.

C.1.d(3).c. Use of the box or shield does not relieve the contractor of liability for damage to persons or property occurring from or on the work of constructing the pipelines or appurtenances occasioned by negligence or otherwise, growing out of a failure on the part of the contractor to leave in place in the trench sufficient sheeting or bracing to prevent the caving or moving of the ground, or disturbance of the completed work or any of the nearby surface or subsurface structures.

C.1.d(3).d. The bottom of the box or shield to be 12 to 24 inches above the bottom of the pipeline.

C.1.d(3).e. Take care when the trench box or shield is moved ahead so as not to pull the already jointed pipe apart or to leave voids around the pipe wall.

C.1.d.(3).f. An acceptable method of rechecking line, depth of pipe and horizontal location of the pipe after the box or shield has been moved ahead is required.

C.1.d(3).g. Reset disturbed pipe at the proper line and depth.

C.1.d(3).h. The width of the trench shield or box, equal to pipe O.D. plus, 12 inches.

C.1.d(3).i. Backfill voids between the trench box or shield and the undisturbed trench wall within the pipe zone (i.e. bottom of trench to top of cover material) with suitable material, immediately after the box or shield is positioned.

C.2. Line and Grade

C.2.a) Watermains and Forcemains

C.2.a)(1) Lay watermains with eight feet of earth cover between the top of the pipe and the finished surface elevation unless shown different on the plans.

C.2.a)(2) This requirement will not be relaxed because of difficult excavation. Lay six inch hydrant lead and water service laterals with a minimum of 8 feet of cover exists over the entire length of the pipeline, including the horizontal "gooseneck" in the service lateral.

C.2.a)(3) Lay forcemains with eight feet of earth cover between the top of the pipe and the finished surface elevation unless shown different on the plans.

C.2.a)(4) Lay forcemain at a level, continuously increasing grade or continuously decreasing grade to prevent "hills and valleys" in the pipeline profile, unless otherwise shown on the Drawings.

C.2.a)(5) This requirement will not be relaxed because of difficult excavation.

C.2.b) Sewers

C.2.b)(1) Laser Beam

C.2.b)(1).a. A Laser Beam-Aligner System, or equal, to maintain grade and alignment is recommended.

C.2.b)(1).b. A qualified operator is required handle the equipment during the course of construction.

C.2.b)(1).c. When "in the pipe" method is used, check the line and grade of the first 50 feet of pipe out of the manhole and additional points at which offset stakes have been placed.

C.2.b)(1).d. If bending of the beams due to air temperature variations becomes apparent with "in the pipe" units, provide a fan to circulate the air.

C.2.b)(1).e. Pulsating or vibrating of the beam by the air vocisity is not allowed.

C.2.b)(1).f. Verify the beam alignment at least once for every 100 feet of installed pipeline.

C.2.b)(1).g. More frequent checks of the beam may be ordered when warranted by job conditions.

C.3. Laying of Pipelines

C.3.a) Sewer

C.3.a)(1) Sewers are to be laid true to line and grade with bells upgrade.

C.3.a)(2) Lay pipe sections so the sewer will have a smooth and uniform invert.

C.3.a)(3) Changes in line or grade will be made only at manholes.

C.3.a)(4) Keep pipe so that jointing connectors and compounds will properly fit and adhere.

C.3.a)(5) Inspect each pipe for defects before lowering it into the trench. Keep the interior of the pipe sewer free from dirt, cement or superfluous material of every description as the work progresses.

C.3.a)(6) Protect the exposed end of the pipe to prevent earth or other substances from entering the pipe when installation is in progress.

C.3.a)(7) When pipe installation is not in progress, a watertight plug on the open pipe end is required.

C.3.a)(8) Provide watertight plug during the noon hour as well as overnight.

C.3.a)(9) The trench is to be dry prior to removal of the plug.

C.3.a)(10) Ensure the interior of the sewer is free of dirt, cement, etc., when pipe installation is complete.

C.3.a)(11) No extra payment will be made for flushing or balling of the sewer if required.

C.3.a)(12) Flushing and balling water and debris, removed from the sewer will not cause erosion or flooding and will not endanger public health, property, nor any portion of the work under construction or completed, and dispose of water and debris in a manner that

will cause no inconvenience to the Owner, engineer or others engaged on work about the site.

C.3.b) Watermains and Forcemains

C.3.b)(1) Handling Material Into Trench

C.3.b)(1).a. All pipe, fittings, valves, and hydrants will be carefully lowered into the trench piece-by-piece by means of a derrick, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to the materials or their protective coatings.

C.3.b)(2) Inspection

C.3.b)(2).a. Inspect iron pipe and fittings for defects while suspended above grade, ring with a light hammer to detect cracks.

C.3.b)(3) Cleaning Pipe and Fittings

C.3.b)(3).a. Remove all lumps, blisters, and excess coating from the bell and spigot end of each pipe, valve, and fitting wire basin and wire clean. Clean the outside of the spigot and the inside of the bell of oil, grease, and other dirt before the pipe is laid.

C.3.b)(4) Cutting Pipe

C.3.b)(4).a. Cutting to be done with an approved mechanical cutter in a neat and workmanlike manner without damage to the pipe.

C.3.b)(4).b. Taper the cut end of the pipe by grinding or filing to match the factory finish beveled end. Remove any sharp or rough edge.

C.3.b)(5) Laying Pipe

C.3.b)(5).a. The spigot end is to be centered in the bell, the pipe forced home and brought to correct line and grade.

C.3.b)(5).b. Secured the pipe in place with approved backfill material tamped around it except at the bells.

C.3.b)(5).c. Remove and replace pipe and fittings not allowing a sufficient and uniform space for joints.

C.3.b)(5).d. Prevent dirt from entering the joint space.

C.3.b)(5).e. When pipe laying is not in progress, a water tight plug will close the open ends of the pipe and during the noon hour as well as overnight.

C.3.b)(5).f. Watertight plug: a mechanical joint male plug or female cap fitting with gaskets.

C.3.b)(5).g. The trench is to be dry prior to removal of the plug.

C.3.b)(6) Direction of Bell Ends

C.3.b)(6).a. Lay pipe with the bell facing in the direction of laying.

C.3.b)(7) Permissible Deflection of Joints

C.3.b)(7).a. If necessary to deflect pipe from a straight line, either vertical or horizontal, the amount of the deflection allowed will not exceed that required for satisfactory jointing, as indicated by the pipe manufacturer.

C.3.b)(8) Number of Joints

C.3.b)(8).a. The allowable leakage, as defined in the Performance Tests section herein, is based on the number of joints in the length of the pipeline tested.

C.3.b)(8).b. Record the number of joints in the length of pipeline laid.

C.3.b)(9) Polyethylene Encasement

C.3.b)(9).a. AWWA C-105, Method A or B.

C.3.b)(9).b. In areas where polyethylene encasement is required, all fittings, valves, valve boxes, hydrant leads, hydrant barrels, tapping saddles, corporation stops, service laterals, curb stops/boxes and all other appurtenances are also to be wrapped with polyethylene.

C.3.b)(9).c. Wrap valves to the top of the bonnet, the wrap should not interfere with the operating nut.

C.4. Bedding and Initial Backfilling

C.4.a) General

C.4.a)(1) Add moisture on dry material as necessary, to achieve proper compaction of bedding and/or initial backfill material.

C.4.a)(2) Frozen materials will not be used, as bedding or initial backfill. Bedding material will not be placed upon frozen ground.

C.4.a)(3) Walking or working on the completed pipeline, except as necessary for tamping of backfilling, is prohibited until the trench has been backfilled to a height of one foot above the top of the pipe.

C.4.a)(4) Back filling of the trench is to be carried on simultaneously on both sides of the pipe to eliminate injurious side pressures.

C.4.b) Stable Trench Bottom

C.4.b)(1) Where the bottom of the trench can be maintained in a stable condition, and free of water, during the time required to install the pipe, the pipeline and/or service lateral may be bedded and be initially backfilled as specified in the following sections.

C.4.b)(1).a. Grade is defined as the elevation of the invert of the pipe.

C.4.c) Bedding and Initial Backfill

C.4.c)(1) Class "B" Bedding and Initial Backfill

C.4.c)(1).a. Bedding

C.4.c)(1)a.1) Over excavate the trench bottom, throughout its length to a depth of at least six inches below the bottom of the pipe, clear of loose soil, and bring back to grade with a cushion of sand, gravel, crushed stone or other approved material.

C.4.c)(1)a.2) The bedding material as follows:

Sieve Size or Number	**Percentage Passing by Weight**
¾ Inch	100
No. 40	15 - 35
No. 200	2 - 10

C.4.c)(1)a.3) Where the existing soil at the pipe invert elevation is of the specified size for bedding material, over-excavation is not required.

C.4.c)(1)a.4) Excavate the trench so the pipe invert is at grade and a uniform and continuous bearing and support for the pipe is provided on solid undisturbed ground.

C.4.c)(1)a.5) Compact and shape bedding material to the lower quadrant of the pipe (i.e. haunches), to provide a continuous and uniform bearing and support for the pipe at every point between bell holes.

C.4.c)(1)a.6) Shape bedding to accommodate pipe bells or couplings.

C.4.c)(1)a.7) No planking or blocks shall be used to support the pipe.

C.4.c)(1)a.8) Compaction of the bedding material to 90% of the maximum dry density ASTM D 1557 (Modified Proctor).

C.4.c)(1)a.9) The density of the compacted material, in-place, shall be determined in accordance to the latest revision of the Method of Test for Density of Soil-in-Place, ASTM D1556 (sand cone), D2167 (balloon) or D2922 (nuclear density meter).

C.4.c)(1)a.10) Field density tests will be conducted in-place by the engineer or his authorized representative to determine that this compacted density is achieved. The required compaction density shall be attained for each layer before any material for a succeeding layer is placed thereon.

C.4.c)(1)a.11) Placed bedding material to the spring line of the pipe and compacted. Percent compaction and density of the material to be determined as previously specified.

C.4.c)(1)a.12) During the initial stage of placing this material, assure that sufficient bedding material has been worked under the haunch of the pipe to provide adequate side support.

C.4.c)(1)a.13) Prevent movement of the pipe during the placement and compaction of the material beneath the pipe haunch.

C.4.c)(1).b. Initial Backfill

C.4.c)(1).b.1) After the bedding material has been placed and compacted, place the initial backfill material around and over the pipe. Initial backfill material may be sand, gravel, crushed stone, or other material approved by the engineer.

C.4.c)(1).b.2) Initial backfill material as follows.

Sieve Size Or Number	**Percentage Passing by Weight**
1 Inch	100
3/4 Inch	85 - 100
No. 40	15 - 35
No. 200	2 - 10

C.4.c)(1).b.3) Place the initial backfill material in uniform layers not exceeding six inches in depth after compaction.

C.4.c)(1).b.4) Place initial backfill material in the trench for its full width on each side of the pipe, fittings and appurtenances simultaneously.

C.4.c)(1).b.5) Compact each layer prior to placing the next layer.

C.4.c)(1).b.6) Meet the requirements for compaction and density determination of the compacted material as specified in the Bedding section.

C.4.c)(1).b.7) It is neither necessary nor desirable to compact the initial backfill directly over the pipe.

C.4.c)(1).b.8) Compacted the side fill out to the undisturbed trench walls.

C.4.c)(1).b.9) Place the initial backfill material to a height of 12 inches, after compaction, above the top of the pipe.

C.4.c)(1).b.10) Compaction up to, but not directly over the pipe.

C.4.c)(1).b.11) After the initial backfill material has been placed and compacted, backfilling operations may be begun.

C.4.c)(1).c. Materials

C.4.c)(1).c.1) When approved by the engineer existing in-place soils, suitable material taken from the excavation, on other excavations and/or clean granular on-site material, may be utilized as bedding and/or initial backfill material.

C.4.c)(1).c.2) Submit samples of proposed material(s) to be use as bedding and/or initial backfill to the engineer prior to the bid opening for approval.

C.5. Backfilling

C.5.a) After the pipe has been bedded and initially backfilled, perform mechanical backfilling operations.

C.5.b) Use material taken from the trench excavation as backfill, unless the engineer deems such material unsuitable and orders its disposal.

C.5.c) Carefully deposited, spread and leveled the materials in layers, layers not to exceed 18 inches in loose thickness.

C.5.d) A vibratory compactor will be on the job site, in operating condition, before starting the backfilling operations.

C.5.e) Compact each layer, prior to placing the next layer, utilizing suitable mechanical compacting equipment.

C.5.f) Meet percent compaction of the material in place as follows:

C.5.f)(1) Non-plastic soils – 90% of the maximum dry density ASTM 1557 Modified Proctor.

C.5.f)(2) Plastic soils – 95% of the maximum dry density – ASTM D698, Standard Proctor.

C.5.f)(3) Compact the upper three feet of trenches beneath road pavements or within County Trunk Highway, State Trunk Highway or Federal Highway rights-of-way to 95% of maximum dry density (ASTM D 1557) for non-plastic soils (sands and silts with a plastic index less than 4) and to 100% maximum dry density (ASTM D 698 - Standard Proctor) for plastic soils (clays, clayey silts and sands with a plastic index equal to or greater than 4).

C.5.g) Exclude stones, rocks or cobbles greater than 3 inches in diameter, boulders, bituminous pavement, timber, organic materials, excavated material which is frozen, or any other unsuitable material, from the backfill.

C.5.h) Materials disposal is an incidental cost to the pipeline construction.

C.5.i) In the event excavations have been sheeted or shored, conform the backfill to the requirements hereinbefore set forth. Carefully draw and remove the sheeting and braces in a manner which will not disturb the completed work.

C.5.j) Refill all openings left by pulling sheeting with approved backfill material and properly compacted.

C.5.k) Refill settlement of all backfilled areas until final acceptance of the work and the expiration of the warranty period.

C.5.l) Refill settlement of backfill material under gravel, granite, bituminous, or other surface material, with like surface material.

C.6. Installation of Carrier Pipes in Casings

C.6.a) Carrier pipes installed in casings must be supported in such a way that the beam strength of the pipe will not be exceeded as a result of either loads from the combined weight of pipe and contents completely full or buoyant forces with pipe completely empty.

C.6.b) Provided pipe supports at the crown and bottom.

C.6.c) If two pipelines are installed in a single casing, the contractor shall submit for the engineer's review details of the proposed method of supporting the pipelines.

C.6.d) Where watermains and other pipelines are installed in one casing, install the watermain above the other pipeline.

C.6.e) Fill the casing pipe with sand or pea gravel where indicated on the drawings.

C.7. Tracer Wire

C.7.a) Tracer Wire shall be 12 gauge AWG solid copper wire with 30 mil polyethylene coating, green color.

C.7.b) Tracer wire joints shall be wrapped splices with solder or cadweld bonding of the copper wire, split bolt connections or compression connections (wire nuts not permitted). All exposed areas should be wrapped to provide a watertight joint.

C.7.c) Tape the tracer wire to the top of the utility pipeline every 10 feet.

C.7.d) Use Valco tracer wire access box at tracer wire terminations. Provide tracer wire access points utilizing Valco tracer wire access boxes at least every 300 feet. Include five foot length of 2 inch diameter schedule 40 PVC pipe box extension. Extend tracer wire into box and connect to the stainless steel terminal bolts. Install wire with six inches of slack in the access box.

C.8. Sewer Laterals and Water Services

C.8.a) General

C.8.a)(1) Install sewer laterals and water services in accordance to Chapter COMM 82 of the Wisconsin Administrative Code (Plumbing Code) and all local plumbing codes and regulations.

C.8.a)(2) Place sewer and water service laterals in a common trench and installed concurrently. If not installed concurrently, a minimum 8 foot horizontal separation must be maintained between the sewer and water services.

C.8.a)(3) Raise the end of sewer laterals to one foot above the apparent ground water table.

C.9. Performance Test

C.9.a) General

C.9.a)(1) No performance testing will be done tests until the sanitary sewer, storm sewer and service laterals have been installed, backfilled and CLEANED.

C.9.a)(2) Remove and replace any cracked or defective pipes, fittings or joints discovered as a consequence of the performance testing with sound material, until the results of the performance tests are satisfactory.

C.9.a)(3) Performance tests will be made on all sections of the system.

C.9.a)(4) Supply all labor and materials necessary to install devices or otherwise prepare for the performance of the tests.

C.9.a)(5) Leakage tests shall consist of an air test and/or an infiltration test as follows:

C.9.a)(5).a. Perform air test on all sanitary sewers and service laterals.

C.9.a)(5).b. An infiltration test will be performed, in addition to the air test, on all sanitary sewers where groundwater level is above sewer pipe invert.

C,8,a)(6) Perform an alignment test on all sewers. Perform a deflection test on all PVC sewers.

C.9.a)(7) A section of sanitary sewer acceptable if its satisfactorily passes:

C.9.a)(7).a. The deflection test.

C.9.a)(7).b. The low pressure air test and infiltration test.

C.9.a)(7).c. The alignment test.

C.9.b) Deflection Test for PVC Pipe

C.9.b)(1) PVC sewers will be tested for deflection.

C.9.b)(2) Devices used consist of rigid ball or mandrel.

C.9.b)(3) Any length of pipe which indicates a deflection of more than five percent will be and replaced.

C.9.b)(4) Attempts to reshape in place will not be allowed.

C.9.b)(5) Perform deflection tests after backfilling is completed but prior to conducting other performance tests.

C.9.b)(6) For acceptance, the device must pass through the entire section between manholes in one pass when pulled by hand, without the use of excessive force.

C.9.b)(7) Maximum deflection of the installed pipe: Five percent of the "base i.d.".

C.9.b)(8) "Base I.D." is the minimum pipe I.D. calculated by subtracting the square root of the sum of the squared standard manufacturing tolerances (tolerance package) from the average I.D.

C.9.b)(9) The "Base I.D." shall be calculated by the following formula:

Base I.D. = Avg. I.D. - $(A^2 + 2B^2 + C^2)^{½}$

Where: Avg. I.D. = Avg. O.D. - 2t -2(0.06)t

With: Avg. O.D. = Average outside diameter as per ASTM D3034

t = minimum wall thickness as per ASTM D3034

0.06 = customary wall thickness tolerance of 6%

A = O.D. tolerance average as per ASTM D3034

B = Customary excess wall thickness tolerance of 6% of the minimum wall thickness = 0.06t

C = out of roundness tolerance as per ASTM D3034, Table XI.I or other values supplied by the manufacturer and approved by the engineer.

C.10.c) Low Pressure Air Test

C.10.c)(1) General

C.10.c)(1).a. Test all sewers tested using the low pressure air test.

C.10.c)(1).b. Furnish the equipment for the low pressure air test, and perform the test under the observation of the engineer.

C.10.c)(1).c. Test sewer between adjacent manholes in accordance to Uni-Bell Plastic Pipe Association UNI-B-6-82, "Recommended Practice for Low Pressure Air Testing of Installed Sewer Pipe".

C.10.c)(1).d. In all cases, ignore the length of laterals.

C.10.c)(2) Low Pressure Air Test Procedure

C.10.c)(2).a. Isolate the section of sewer line to be tested by means of inflatable stoppers or other suitable test plugs.

C.10.c)(2).b. One of the plugs will have an inlet tap, or other provision for connecting a hose to a portable air control source.

C.10.c)(2).c. If the test section is below the groundwater level, determine the height of the groundwater above the spring line of the pipe at each end of the test section and compute the average.

C.10c)(2).d. For every foot of ground water above the pipe spring line, increase the gage test pressures by 0.43 pounds per square inch.

C.10.c)(2).e. Connect the air hose to the inlet tap and a portable air control source.

C.10.c)(2).f. The air equipment shall consist of necessary valves and pressure gages to control the rate at which air flows into the test section and to enable monitoring of the air pressure within the test section.

C.10.c)(2).g. Equip the testing apparatus with a pressure relief device to prevent the possibility of loading the test section with the full capacity of the compressor.

C.10.c)(2).h. Add air slowly to the test section until the pressure inside the pipe is raised to 4.0 psig greater than the average back pressure of any groundwater that may be over the pipe.

C.10.c)(2).i. After a pressure of 4.0 psig is obtained, regulate the air supply so that the pressure is maintained between 3.5 and 4.0 psig (above the average groundwater back pressure) for a period of two minutes. This allows the air temperature to stabilize in equilibrium with the temperature of the pipe walls.

C.10.c)(2).j. The pressure will normally drop slightly until temperature equilibrium is obtained.

C.10.c)(2).k. During this period all plugs should be checked with a soap solution to detect any plug leakage.

C.10.c)(2).l. Determine the rate of air loss by the time-pressure drop method.

C.10.c)(2).m. After the two minute air stabilization period, disconnect the air supply shall and the test pressure allowed to decrease to 3.5 psig (greater than the average groundwater back pressure).

C.10.c)(2).n. The time required for the test pressure to drop from 3.5 to 2.5 psig is determined by means of a stopwatch and this time interval is then compared to the required time in the Air Test Time table (see Plan Detail Sheets) to determine if the rate of air loss is within the allowable time limit. If the time is equal to or greater than the times indicated in the table, the pipe line is acceptable.

C.10.c)(2).o. The test may be discontinued once the prescribed time has elapsed, even though the 1.0 psig drop has not occurred.

C.10.c)(2).p. If the time is less than the times indicated in the table, the the sewer as required and retest.

C.10.c)(2).q. Upon completion of the test, the bleeder valve is opened and all air is allowed to escape.

C.10.c)(2).r. Do not remove plugs until all air pressure in the test section has been released.

C.10.c)(2).s. During this time allow no one in the trench or manhole while the pipe is being decompressed.

C.11.c)(3) Infiltration

C.11.c)(3).a. In areas with existing ground water, conduct an infiltration test. Conduct the infiltration tests using a 60 degree V-notch weir.

C.11.c)(3).b. The flow rate of water measured from the sewer section being tested may not exceed a rate of 50 gallons per inch of pipe diameter per mile per day, for the sewer section being tested, ignoring the length of service laterals and manholes.

C.11.c)(3).c. Have the manufacturer or independent testing laboratory calibrate the V-notch weir.

C.11.c)(4) Alignment

C.11.c)(4).a. Tests for pipe alignment.

C.11.c)(4).b. Look through the pipe, from one manhole, at the light of a large flashlight or spotlight positioned in the next manhole.

C.11.c)(4).c. Repair or remove any sewer segment wherein a "3/4 moon" or more is not visible.

C.11.c)(5) Continuity Test

C.11.c)(5).a. Perform tracer wire continuity testing utilizing a standard 5 watt generator to provide an AC current restricted to 33 kHz or less.

C.11.c)(6) Presentation of Test Results

C.11.c).(6).a. At the conclusion of the Performance Tests, furnish the owner with a written report of the results of the tests.

C.11.c).(6).b. Such a report shall identify the specific type and length of pipe tested, the pressures, the duration of the test, the amount of leakage, etc.

C.11.c).(6).c. The report will be signed by the contractor and the engineer or their authorized representatives.

D Measurement
The department will measure Sanitary Sewer Lateral (Inch) by the linear foot acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Sanitary Sewer Lateral 4-Inch	L.F.
SPV.0090.05	Sanitary Sewer 8-Inch	L.F.

Payment is full compensation for furnishing all excavating, backfilling, dewatering, sheeting, shoring, furnishing and installing sanitary sewer lateral and sanitary sewers, tracer wire, bedding materials, initial backfill, all test procedures, all fittings not otherwise specified, and for furnishing all labor and equipment necessary to complete the installation in accordance to the plans and specifications. Fittings to connect to the wye, are an incidental cost to the sewer lateral installation.

63. Water Service 1-Inch, Item SPV.0090.07; Watermain 6-Inch, Item SPV.0090.08; Watermain 8-Inch, Item SPV.0090.09; Watermain 10-Inch, Item SPV.0090.10; Forcemain 6-Inch, Item SPV.0090.12; Watermain Directional Bore 10-Inch, Item SPV.0060.40; Forcemain Directional Bore 6-Inch, Item SPV.0060.41.

A Description
This work shall consist of excavating required trenches, augering water services, directional boring, furnishing and installing watermains and water services and backfilling the trenches, as shown on the plans and contract as hereinafter provided.

B Material

B.1. General. Watermains and sanitary forcemains installed in trenches shall be ductile iron with push on and restrained joints. Use concrete thrust blocks, Megalug joints, or restrained joints at fittings as indicated on the plans. Watermains and forcemains installed as directional bored pipelines shall be polyethylene pipe with butt fused joints.

B.2. Ductile Iron (DI) Pipe.

B.2.a) Ductile iron pipe shall conform to ANSI A 21.51/AWWA C-151 and shall be coal tar coated and shall have an internal standard thickness cement lining in accordance to ANSI A 21.4/AWWA C-104.

B.2.b) Ductile iron pipe shall be thickness Class 50.

B.3. Polyethylene (PE)

B.3.a) Meet requirements of AWWA C906.

B.3.b) PE pipe materials and fittings: Type III, Class C, Category 5, Grade P-34 (pipe designation PE 3406 or PE 3408) pipe materials as defined in ASTM D-1248 and ASTM F-714 and other ASTM Standards referenced therein.

B.3.c) Cell classification limits: meet minimum requirements as follows: 324433C, D or E (for PE 3408) as defined in ASTM D-3350.

B.3.d) Clean polyethylene compound reclaimed from the manufacturer's own pipe production may be re-extruded into pipe, blended with new compound of the same cell classification.

B.3.e) Pipe containing the reclaimed material must meet all the material and product requirements of this specification.

B.3.f) P.E. pipe: DR 11, 160 psi, pressure class (ductile iron sizing system) 1600 psi hydrostatic design basis, 800 psi hydrostatic design stress.

B.3.g) Installed in conformance with ASTM D2774 or better.

B.3.h) Provide fittings as required to accommodate changes in grade.

B.3.i) Manufacture pipe and fittings from identical material.

B.3.j) Certify that samples of the production pipe have been tested in accordance to ASTM D-2837 and validated in accordance to Plastic Pipe Institute standards TR-3 and TR-4.

B.4. Copper Pipe

B.4.a) Use ASTM B-88 AWWA C-800 ANSI/NSF 61, Type K soft annealed seamless copper tubing. At each service, provide pipe as a single run of pipe without intermediate couplings.

B.5. Ductile Iron Pipe Joints.
B.5.a) Joints for ductile iron pipe shall meet ANSI A 21.11/AWWA C-111, and shall be push on type with rubber gaskets. Use mechanical joint at fittings.

B.5.b) At fittings, also restrain pipeline joints for the following length from fittings:

	Restrained Length (feet)		
Pipe Size (In)	45° Bend	90° Bend	Tee Hydrant or Dead End
6	11	20	14
8	19	34	24
10	28	51	36
12	39	73	51
14	53	98	69

B.5.c) Joints for ductile iron watermain and sanitary forcemain pipe shall be provided with a conductivity connector to provide electrical continuity across the joint. Conductivity connector shall be rated for 600 amps. Conductivity connector may be a gasket containing copper clips or a cable connector.

B.5.d) Assemble joints per AWWA C 600'

B.6 Polyethylene Pipe Joint

B.6.a) Joints and fittings: by the "butt fusion or socket fusion" methods in accordance to the manufacturer's recommendations and ASTM D 2657.

B.6.b) Joint strength must be equal to that of adjacent pipe as demonstrated by tensile test.

B.6.c) Results of tensile impact testing of joints should indicate a ductile rather than a brittle fracture.

B.6.d) External appearance of fusion bead should be smooth without significant juncture groove.

B.6.e) Threaded or solvent-cement joints and connections are not permitted.

B.6.f) All jointing must be done by properly trained personnel.

B.6.g) Provide a representative of the pipe manufacturer on the site during the entire jointing process to assure proper jointing techniques are being utilized or provide a certificate from the pipe manufacturer that the jointing personnel have adequate knowledge and ability to properly join PE pipe.

B.6.h) Use ductile iron mechanical joint sleeve to transition from PE to DI pipe. Use HDPE MJ adapter kit on PE side and Megalug MJ on DI pipe. Install pipe stiffeners on ID of PE pipe joints.

B.6.i) At each end of the PE pipeline before transition to other pipe materials, install wall anchor restraint intended for encapsulation by poured-concrete. Install pipe stiffeners in ID of PE pipe each side of wall anchor.

B.7 Joints for copper pipe shall be compression fitting type joints.

B.8 Tracer Wire

B.8.a) Tracer Wire shall be 12 gauge AWG solid copper wire with 30 mil polyethylene coating, blue color for watermains, green color for forcemains.

B.8.b) Tracer wire joints shall be wrapped splices with solder or cadweld bonding of the copper wire, split bolt connections or compression connections (wire nuts not permitted). All exposed areas should be wrapped to provide a watertight joint.

B.8.c) Tape the tracer wire to the top of the polyethylene pipeline every 10 feet.

B.6.d) Use Valco tracer wire access box at tracer wire terminations. Provide tracer wire access points utilizing Valco tracer wire access boxes. Include five foot length of 2 inch diameter schedule 40 PVC pipe box extension. Extend tracer wire into box and connect to the stainless steel terminal bolts. Install wire with six inches of slack in the access box.

C Construction

C.1. General. See Sanitary Sewer Lateral 4-Inch, Item SPV.0090.04; Sanitary Sewer 8-Inch, Item SPV.0090.05; Sanitary Sewer 12-Inch, Item SPV.0090.06, construction methods.

C.2. Directional Boring.

C.2.a) Use three phase process: pilot hole, reaming and pullback – pipe installation.

C.2.b) Use fluid assisted drilling methods.

1) Use mixture of premium Wyoming bentonite, water and polymer.
2) Maintain borehole integrity.
3) Remove and dispose cuttings.

C.2.c) Use directional control drill head.

C.2.d) Determine bend radius to install pipeline at design grade.

C.2.e) Use pullhead or pulley eye and swivel to pull back pipeline.

C.2.f) Contain the drilling – circulation fluid and properly dispose. Use pit or trench at drill rig. Submit drilling fluid disposal plan before stat of drilling. Maintain ready access to pumps, vacuum trucks, floating baffles, and hole caps to contain blowouts and minimize damage to the environment from the blowout.

C.2.g) Maintain daily drill log. List date, time, location, soil conditions, depth and horizontal location, and angle and rate of penetration. Turn over logs to engineer.

C.2.h) Re-drill hole at no additional cost to the owner that is not in condition to carry the pipelines as designed.

C.3. Peformance Tests.

C.3.a) Hydrostatic Pressure Test

C.3.a)(1) After pipe and appurtenances have been constructed, perform a hydrostatic pressure test.

C.3.a)(1).a. Necessary equipment include: Test plugs, reaction blocking, hoses, pressure gauges, measuring devices, and hand pumps, to perform the work required in connection with the tests.

C.3.a)(2) Slowly fill each test section with water, care being taken to expel all air from the pipes.

C.3.a)(3) Tap the pipe, if necessary, at high points to vent the air.

C.3.a)(4) Maintained at 150 P.S.I. for at least one hour.

C.3.a)(5) Tighten leaks found at mechanical joints, until the leaking stops.

C.3.a)(5).a. Remove and replace any cracked or defective pipes, fittings, valves or joints discovered as a consequence of the pressure test with sound material, and the test shall be repeated until satisfactory.

C.3.a)(5).b Leakage Test

C.1.a)(5).b)(1) After the pipe has been subjected to the above pressure test, a leakage test as described herein shall be performed.

C.3.a)(5).b)(2) If water does not have to be added to the pipeline during the pressure test, to maintain 150 psi, the requirement for the leakage test may be waived.

C.3.a)(5)(b)(2).a. Necessary equipment include: Test plugs, reaction blocking, hoses, pressure gauges, measuring devices and hand pumps, to perform the work required in connection with the tests.

C.3.a)(5).b.(3) The duration of each leakage test is two hours.

C.3.a)(5).b.(4) The main pressure during the test is 150 P.S.I.

C.3.a)(5).b.(5) Leakage is defined as the quantity of water to be supplied into the newly laid pipe, or any valved section thereof necessary to maintain the specified test pressure after the pipe has been filled with water and the air expelled.

C.3.a)(5).b.(6) The engineer will approve. The system of measuring this volume of water prior to commencement of the test.

C.3.a)(5).b.(7) The maximum leakage in gallons per hour is determined by the following equation:

$$L = \frac{SD \times (P)^{1/2}}{133{,}200}$$

L = allowable leakage in gallons per hour

S = length of pipeline tested in feet

D = nominal diameter of the pipe in inches

P = test pressure in psig

*Based on 11.65 gpd per mile of pipe per inch of nominal diameter, at 150 psi.

C.3.a)(5).b.(7).a. The allowable leakage per 1,000 feet of pipeline is as follows:

Pipe Size (in.)	Allowable Leakage (gpd)
4	0.37
6	0.55
8	0.74
10	0.92
12	1.10
14	1.29
18	1.66

C.3.a)(5).b.(7).b. In case the section under test contains joints of various diameters, the allowable leakage will be the sum of the computed leakage for each size of joint.

C.3.a)(5).b.(8) Should the test disclose leakage greater than that permitted, locate and repair the defective pipe until the leakage is within the specified allowance.

C.3.a)(5).c. Continuity Test

C.3.a)(5).c.1 Perform tracer wire continuity testing utilizing a standard 5 watt generator to provide an AC current restricted to 33 kHz or less.

C.3.b) Presentation of Test Results

C.1.b)(1) At the conclusion of the performance tests, the owner or owner's furnish a written report or the results of the tests.

C.3.b)(2) The report will identify the specific type and length of pipe tested, the pressures, the duration of the test, the amount of leakage, etc.

C.3.b)(3) The report will be signed by the contractor.

C.4. Disinfection of Complete Watermains

C.4.a) AWWA C-651 Standard for Disinfecting Watermains.

C.4.b) Clean the main prior to disinfection, except when using the tablet method.

C.4.c) Chlorinate main using one of the following forms of chlorine.

C.4.c)(1) Liquid Chlorine in combination with a solution feed, vacuum operated chlorinator and a booster pump.

C.4.c)(2) Calcium or Sodium Hypochlorite solution injected into the main with a chemical feed pump.

C.4.c)(3) Calcium Hypochlorite tablets, 5 grams each containing approximately 65 percent available chlorine by weight.

C.4.c)(4) Calcium Hypochlorite tablets may not be used on solvent-welded plastic or on screw-joint steel pipe.

C.4.d) Methods of Chlorine Application

C.4.d)(1) Continuous Feed Method

C.4.d(1).a. Flow water from the existing distribution system at a constant, measured rate into the newly-laid pipeline.

C.4.d(1).b. Feed the chlorine dose at a constant, measured rate.

C.4.d(1).c. Proportion the two rates to deliver chlorine concentration at a minimum of 25 mg/l available chlorine. Fill the entire main is with chlorine solution.

C.4.d(1).d. Retain the chlorinated water in the main for at least 24 hours, operate all valves and hydrants in the section treated to disinfect the appurtenances.

C.4.d(1).e. At the end of the 24 hour period, a 10 mg/l free chlorine residual throughout the length of the main is required.

C.4.d(1).f. If the initial disinfection fails to produce a free chlorine residual of 10 mg/l, rechlorinated the main with 25 mg/l available chlorine until a residual of 10 mg/l is obtained.

C.4.d(2) Slug Method

C.4.d(2).a. Flow water from the existing distribution system at a constant, measured rate into the newly laid pipeline.

C.4.d(2).b. Feed the chlorine dose at a constant, measured rate.

C.4.d(2).c. Proportion the two rates so that the chlorine concentration in the water entering the pipeline is maintained at no less than 100 mg/l.

C.4.d(2).d. Apply the chlorine continuously and for a sufficient period to develop a solid column or "slug" or chlorinated water that will, as it passes along the line, expose all interior surfaces to a chlorine concentration of at least 100 mg/l for at least 3 hours.

C.4.d(2).e. As the chlorinated water flows past tees and crosses, operate related valves and hydrants to disinfect appurtenances.

C.4.d.(3) Tablet Method

C.4.d.(3).a. During construction place, 5 gram calcium hypochlorite tablets in each section of pipe.

C.4.d.(3).b. Place one such tablet in each hydrant, hydrant branch and other appurtenance.

C.4.d.(3).c. The number of 5 gram tablets required for each pipe section to provide a dose of 25 mg/l shall be $0.0012\ d^2L$ rounded to the next higher integer, where d is the inside pipe diameter, in inches, and L is the length of the pipe section, in feet.

C.4.d.(3).d. The number of tablets required for various pipe diameters is as follows:

Pipe Diameter (in.)	Number of Tablets 13 Ft. Pipe Length	20 Ft. Pipe Length
4	1	1
6	1	1
8	1	2
10	2	3
12	3	4
16	4	7

C.4.d.(3).e. Attach the tablets with a food-grade adhesive.

C.4.d.(3).f. Tablet adhesive only on the broadside attached to the surface of the pipe.

C.4.d.(3).g. Attach all the tablets inside and at the top of the main, with approximately equal numbers of tablets at each end of a given pipe length.

C.4.d.(3).h. If the tablets are attached before the pipe section is placed in the trench, their position mark their position on the section so it can be readily determined that the pipe is installed with the tablets at the top.

C.4.d.(3).i. When installation has been completed, fill the main at a velocity no greater than 1 foot per second.

C.4.d.(3).j. Take precautions to eliminate air pockets.

C.4.d.(3).k. Chlorinate pipe for at least 24 hours.

C.4.d.(3).l. If the water temperature is less than 41^{o}F, chlorinate the pipe for at least 48 hours.

C.4.d.(3).m. After the applicable retention period, flush the heavily chlorinated water from the main until chlorine concentration in the water leaving the main is no higher than 1 mg/l.

C.4.d.(3).n. Direct discharge from the watermain to the ground or surface waters may not be allowable. A WPDES (Wisconsin Pollutant Discharge Eliminate System) general permit is required for discharges of chlorinated water out of hydrants or watermains.

C.4.d.(3).o. WPDES general permits are available from the DNR area district wastewater engineer.

C.4.e) Following a satisfactorily observed chlorine residual and flushing, two successive sets of samples taken at 24 hour intervals, will be tested for bacteriological analysis.

C.4.e)(1) Furnish a sampling tap consisting of a standard corporation cock installed in the main with a copper tube gooseneck assembly.

C.4.e)(2) After sampling remove the gooseneck assembly and retained for future use.

C.4.e)(3) Obtain one bacteriologically safe water sample from each location prior to the main being placed into service.

C.4.e)f) After disinfection has been completed open all valves and the facilities be placed in operation.

D Measurement
The department will measure Water Service 1-Inch, Watermain 6-Inch, Watermain 8-Inch and Watermain 10-Inch by the linear foot, and Forcemain 6-Inch, acceptably completed. The department will measure Watermain Directional Bore 10-Inch and Forcemain Directional Bore 6-Inch as each individual bore, acceptably completed, including wall anchors, concrete encasement and mechanical joint transition adaptor kit.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.07	Water Service 1-Inch	L.F.
SPV.0090.08	Watermain 6-Inch	L.F.
SPV.0090.09	Watermain 8-Inch	L.F.
SPV.0090.10	Watermain 10-Inch	L.F.
SPV.0090.12	Forcemain 6-Inch	L.F.
SPV.0060.40	Watermain Directional Bore 10-Inch	Each
SPV.0060.41	Forcemain Directional Bore 6-Inch	Each

Payment is full compensation for furnishing all excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing water services, watermains, bedding material, initial backfill, all test procedures, and for furnishing all labor and equipment necessary to complete the installation in accordance to the plans and specifications.

64. Pipeline Sheet Insulation, Item SPV.0090.13.

A Description
This work consists of excavating and installing 4 foot wide sheet insulation over pipelines in the locations shown on the plans and as directed by the engineer.

B Materials
B.1. One inch foam board insulation, two inch total thickness of two layers of board insulation.

B.2. Average density of 2.1#/cu. ft.

B.3. Average compressive strength of 20 psi.

B.4. “K” factor of .185 at 40°F.

B.5. Moisture absorption of 0.02% by volume.

C Construction
Excavate and install insulation board in accordance to manufacturer’s recommendations. Use two layers of one inch thick boards. Offset ends of boards from one layer to the next.

D- Measurement
The department will measure Pipeline Sheet Insulation by the linear foot, acceptably completed.

E- Payment
The department will pay for measured quantities at the contract unit price under the following bid item.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.13	Pipeline Sheet Insulation	L.F.

Payment is full compensation for furnishing all excavation, dewatering, sheeting, shoring, furnishing and installing the sheet insulation, bedding material, backfill and for furnishing all labor, tools, equipment and incidentals to complete the work.

65. Railing Steel Type C2 Galvanized Pedestrian M-43-1, Item SPV.0105.01.

A Description
This special provision describes fabricating, galvanizing, painting and installing railing in accordance with Sections 506, 513 and 517 of the Standard Specifications and the plan details, as directed by the Engineer, and as hereinafter provided.

B Materials
All materials for railing shall be new stock, free from defects impairing strength, durability and appearance. Railing assemblies shall be galvanized and receive a two-coat paint system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

B1 Coating System
B1.1 Galvanizing
After fabrication, blast clean steel railing assemblies per SSPC-SP6 and galvanize according to ASTM A123. Vent holes shall be drilled in members as required to facilitate galvanizing and drainage. Location and size of vent holes are to be shown on the shop drawings. All burrs at component edges, corners and at holes shall be removed and sharp edges chamfered before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed in accordance to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when painted, will produce unacceptable aesthetic and/or visual qualities, will not be permitted.

B1.2 Two-Coat Paint System
After galvanizing, paint all exterior surfaces of steel railing assemblies and inside of rail elements at field erection and expansion joints as hereinafter provided. All galvanized surfaces to be painted shall be cleaned per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface shall then be brush blast cleaned per SSPC-SP16 to create a slight angular surface profile per

manufacturer's recommendation for adhesion of the tie coat. Blasting shall not fracture the galvanized finish or remove any dry film thickness. After cleaning, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use a preapproved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats should be of contrasting colors, and come from the same manufacturer.

Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applier. The review shall include a visit to the facility performing the work if requested by the paint manufacturer. Provide written confirmation, from the paint manufacturer to the engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of the engineer.

Manufacturer	Coat	Products	Dry Film Minimum Thickness (mils)	Min. Time[1] Between Coats (hours)
Sherwin Williams 1051 Perimeter Drive Suite 710 Schaumburg, IL 60173 (847) 330-1562	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
	Top	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carboline 350 Hanley Industrial St. Louis, MO 63144 (314) 644-1000	Tie	Rustbond Penetrating Sealer FC	1	36
	Tie	Carboguard 60	4.0 to 6.0	10
	Tie	Carboguard 635	4.0 to 6.0	1
	Top	Carbothane 133 LH(satin)	4	NA
Wasser Corporation 4118 B Place NW Suite B Auburn, WA 98001 (253) 850-2967	Tie	MC-Ferrox B 100	3.0 to 5.0	8
	Top	MC-Luster 100	2.0 to 4.0	NA
PPG Protective and	Tie	Amercoat 399	3.0 to 5.0	3

Marine Coatings P.O. Box 192610 Little Rock, AR 72219-2610 (414) 339-5084	Top	Amercoat 450H	2.0 to 4.0	NA

[1] Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

B2 Shop Drawings

Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the paint manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

C Construction

C1 Delivery, Storage and Handling

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If coating is damaged, contractor shall repair or replace railing assemblies to the approval of the engineer at no additional cost to the owner. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted without the approval of the engineer.

C2 Touch-up and Repair

For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations. If damage is excessive, the railing assembly shall be replaced at no additional cost to the owner. The contractor shall provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

D Measurement

The department will measure Railing Steel Type C2 Galvanized Pedestrian M-43-1 as a single lump sum unit for each structure where railing is satisfactorily furnished and installed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Railing Steel Type C2 Galvanized Pedestrian M-43-1	LS

Payment is full compensation for fabricating, galvanizing, painting, transporting, and installing the railing, including any touch-up and repairs; and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

66. Excavation For Structures Special Structure M-43-2, Item SPV.0105.02.

A Description
This special provision describes the excavating for the sediment device in accordance to the requirements pertaining to culverts in standard spec 206 and as hereinafter provided.

B Materials
Provide materials as specified in the plans and details and standard spec 206.

C Construction
Perform the excavation as specified in the plans and details and in accordance to standard spec 206.

D Measurement
The department will measure Excavation for Structures Special M-43-2 as a single lump sum unit of work for each structure, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.02	Excavation for Structures Special M-43-2	LS

Payment is full compensation for the materials and items as listed under standard spec 206.5.

67. Water for Seeded Areas, Item SPV.0120.01.

A Description
This special provision describes furnishing, hauling and applying water to seeded areas as directed by the engineer, and as hereinafter provided.

B Materials
Furnish water that is in accordance to the pertinent requirements of standard spec 624.

Use clean water, free of impurities or substances that might injure the seed.

C Construction
Water the seeded area in accordance to standard spec 624 except as hereinafter modified.

If rainfall is not sufficient, keep all seeded areas thoroughly moist by watering or sprinkling to maintain a moist soil condition for the first 30 days after seeding. Apply water in a manner to preclude washing or erosion. Do not leave topsoil un-watered for

more than 3 days during this 30-day period unless the engineer determines that it is excessively wet and does not require watering. The equivalent of one inch of rainfall per week shall be considered the minimum.

D Measurement
The department will measure Water for Seeded Areas by volume in thousand gallon units (MGAL), acceptably completed. The department will determine volume by engineer-approved meters or from tanks of known capacity.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0120.01	Water for Seeded Areas	MGAL

Payment is full compensation for furnishing, hauling, and applying the water.

68. Colored Textured Concrete Terrace 6-Inch, Item SPV.0165.01.

A Description
This special provision describes designing, furnishing materials, and installing patterned colored decorative concrete terrace for all areas detailed on the plans, in accordance to standard spec 602 and as hereinafter provided.

Supplement standard spec 602 with the following:

B Materials
B.1 Proprietary Decorative Concrete Systems
Proprietary decorative concrete systems may be used for this work, but must conform to the requirements of this specification and be pre-approved for use by the department. The name of the companies supplying pre-approved materials and methods shall be furnished within 25 days after the award of contract.

B.2 Design Requirements
Supply a design and supporting documentation as required by this special provision for review by the department to show that the proposed decorative treatment will not damage or reduce strength of the concrete surface and is in compliance with the design specifications. The terrace shall be constructed in accordance to the plan details. The concrete terrace shall have a Running Bond pattern and a Red Flash color. The design will be approved by the city and the department as a requirement of the shop drawing review process. The following shall be submitted to the engineer for review and acceptance no later than 21 days before work will begin.

Prepare the design/shop plans on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the project identification number. Design plans and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin. Supply

four copies of the shop drawings and two copies of the design calculations and supporting materials.

B.3 Decorative Treatment System Components
Materials furnished under this contract shall conform to the requirements hereinafter provided.

Provide materials conforming to all requirements of standard spec 602.2.

Provide coloring that is integral to the concrete and not applied separately to the top surface and form the pattern in conformance with the details shown in the plans while the material is still plastic.

Provide colorant and curing compounds in accordance to the manufacturers' requirements, which are homogeneous throughout the mixture and resistant to fading. Provide colorant conforming to standard specification standard spec 602.2 requirements and of a nature which will not cause harm to the strength of the concrete or increase susceptibility to flaking, chipping or freeze-thaw action.

Provide pattern dimensions that vary no more than ±1/8 inch from the standard values published by the manufacturer, and forms in accordance to the standard spec 602.3.2.2. Decorative Treatment shall conform to plan requirements for color, texture, and patterns.

Pattern must have a minimum depth of ¼-inch. Check grades and correct all areas that vary from tolerance by adding or removing concrete while the material is still plastic.

C Construction
Provide color that is integral to the concrete and not applied separately to the top surface. Construct the decorative treatment in accordance to the manufacturer's instructions and as shown on the plan and as directed by the engineer.

Place patterns in the areas as indicated at the locations and to the dimensions on the plans and as detailed in this specification.

Provide construction methods and equipment conforming to all requirements described in standard spec 602.3.2.3.

Construct decorative portion of the terrace as a separate pour from remainder of the sidewalk and provide construction joints conforming to all requirements described in standard spec 602.3.2.5.

Conduct installation operations consistent to standard spec 602.3.2.6 in such a manner as to prevent damage to the concrete surface. At no expense to the department, correct any such damage as directed by the engineer.

Do not operate tracked or wheeled equipment within 8 feet of the decorative treatment for a period of 7 days. The engineer may order the removal of any large or heavy equipment that may cause damage to the treatment areas.

D Measurement
The department will measure Colored Textured Concrete Terrace 6-Inch in area by the square foot as required and shown on the plans, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Colored Textured Concrete Terrace 6-Inch	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, supplying and installing all necessary materials (including the concrete); supplying all necessary components to produce a patterned colored textured concrete terrace; and constructing decorative system.

69. Geogrid Reinforcement, Item SPV.0180.01.

A Description
This special provision describes furnishing and installing geogrids for subgrade stabilization, base reinforcement, or pavement structure applications in accordance to the plans, standard spec 645, and as hereinafter provided.

B Materials
Provide geogrid that consists of either single or joined multiple layers of a uniform rectangular grid of bonded, formed, or fused polymer tensile strands crossing with a nominal right angle orientation. The polymer shall consist of polyester, polypropylene, polyamide, or polyetheylene. The grid shall maintain dimensional stability during handling, placing, and installation. The geogrid shall be insect, rodent, mildew, and rot resistant. Minimum geogrid width shall be 6.0 feet.

Provide geogrid that complies with the following physical properties:

Test	**Method**	**Value** [(1)]
Tensile Strength at 5% Strain, Both Principal Directions (lb/ft)	ASTM D 4595 [(2)]	450 min.
Flexural Rigidity Both Principal Directions (mg-cm)	ASTM D 1388 [(3)]	150,000 min.
Aperture Area (in^2)	Inside Measurement [(4)]	5.0 max.
Aperture Dimension (in)	Inside Measurement [(4)]	0.5 min.

(1) All numerical values represent minimum/maximum average roll values, i.e. the average minimum test results on any roll in a lot should meet or exceed the minimum specified value.

(2) The tensile strength (T) of a joined multi-layered geogrid shall be computed using the following equation:

$$T = n(f)t$$

where

n = the number of individual layers in the joined multi-layered geogrid,

t = the tensile strength of a single layer of geogrid as determined using testing method ASTM D4595, and

f = reduction factor based on the number of layers comprising the multi-layered system and determined by the equation f=1.00 - [0.04(n - 1)].

(3) Values shall be determined by Option "A" (Cantilever Test) of testing method ASTM D1388 using test specimens that are 36 inches ±0.04 inch long. Test specimen widths for differing geogrids shall be variable and equal to 1 element plus ½ the aperture width on both sides of that element. An element is defined as the minimum number of parallel strands that form a distinguishable repeating pattern.

(4) Aperture Area and Aperture Dimension for joined multi-layer geogrids shall be determined based on measurement of a single layer of the geogrid.

Protect the geogrid from ultraviolet radiation and from damage due to shipping and handling. Keep the geogrid dry until it is installed. The geogrid rolls shall be clearly marked to identify the material contained.

Deliver a sample of the geogrid material to the engineer at least 10 days prior to its incorporation into the work. At the same time, furnish a manufacturer's Certified Report of Test or Analysis that verifies that the geogrid delivered for use on the work meets the above requirements. Samples of geogrid for test purposes will be obtained from the job site for each 10,000 square yards or portions thereof used on the contract.

C Construction

Prior to placement of the geogrid, bring the indicated placement surface to the required lines, grades, and dimensions as shown on the plans. Smooth and shape the surface to eliminate any rocks, clods, roots, or other items that may cause damage to the geogrid during placement or covering.

Place the geogrid on the prepared surface at the locations and to the limits as shown on the plans. After placement, pull the geogrid taut and secure it using pins, clips, staples, or other devices to prevent movement or displacement. Place parallel strips of geogrid with a minimum overlap of 6 inches. Lap butt joints between roll ends a minimum of 12 inches. Fasten all lapped sections together by using ties, straps, clips, or other devices to develop a secure joint that meets the approval of the engineer. No vehicles or construction equipment shall be permitted to operate directly on the geogrid.

Cover small rips, tears, or defects in the geogrid with an additional section of geogrid; secure the additional geogrid in place so that it overlaps the damaged area by at least 3 feet in all directions. Remove and replace geogrid sections with large rips, tears, defects, or other damage at the direction of the engineer. All costs to repair or replace damaged or defective geogrid shall be the responsibility of the contractor.

After placement, cover the geogrid to the indicated depth with the type of material required on the plans or in the special provisions. Placing, spreading, and compacting of this material shall comply with the applicable sections of the standard specifications or special provisions except that the initial lift of material placed on the geogrid must be at least 4 inches. Place, spread, and compact the required backfill material so that the geogrid is not displaced or damaged. The engineer may require changes in equipment and/or operations to prevent such damage or displacement.

D Measurement

The department will measure Geogrid Reinforcement by the square yard of surface area upon which the geogrid has been placed and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Geogrid Reinforcement	SY

Payment is full compensation for furnishing, transporting, and installing the geogrid; and for furnishing and installing all devices and materials necessary to join or secure the geogrid in place.

70. Preparing Topsoil for Lawn Type Turf, Item SPV.0180.02.

A Description

This special provision describes preparing the bed of topsoil or salvaged topsoil, for seeding or sodding, in areas designated by the engineer where a lawn type turf is desired.

B (Vacant)

C Construction

Prepare and finish the subgrade so that rocks, concrete debris, or wood larger than three inches in diameter are not present within 1 foot of the finished surface of the topsoil.

Remove or break down all clods and lumps in the topsoil by using harrows or discs, screening, or other appropriate methods to provide a uniformly textured soil, in which 100 percent of the topsoil passes a 1-inch sieve and at least 90 percent passes a No. 10 sieve.

Remove rocks, twigs, clods, and other foreign material that will not break down, and dress the entire surface to present a uniform appearance.

Shape the topsoil so that the horizontal or sloped surface between any two points ten feet apart does not vary by more than one inch. Roll with a turf type roller to a uniform minimum compacted depth of 4 inches or as the plans show.

Shape and compact the topsoil adjacent to pavements, sidewalks and curbs to 1 inch below the top of the abutting surface. Before seeding, correct locations that vary by more than ¼-inch.

D Measurement

The department will measure Preparing Topsoil for Lawn Type Turf in area by the square yard, 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	Preparing Topsoil for Lawn Type Turf	SY

Payment is full compensation for preparing the subgrade and topsoil bed for sod or seed as described above.

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.

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

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __6__ *(number)* TrANS Graduate(s) be utilized on this contract.

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __3__ *(number)* TrANS Apprentice(s) be utilized on this contract.

3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.

4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.

5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

I. RATIONALE AND SPECIAL NOTE

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

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

II. IMPLEMENTATION

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

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

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

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

IV. *TRANS TRAINING*

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

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

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

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

V. APPRENTICESHIP TRAINING

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

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

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

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

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

ADDITIONAL SPECIAL PROVISION 3
DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1. Description

General

a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.

b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:

   i. Produce accurate and complete quotes.
   ii. Understand highway plans applicable to their work.
   iii. Understand specifications and contract requirements applicable to their work.
   iv. Understand contracting reporting requirements.

c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

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

2. Definitions

a. Interpret these terms, used throughout this additional special provision, as follows:

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

3. DBE Percentage Required at Bid Submission

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

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

4. Department's DBE Evaluation Process

a. Documentation Submittal

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

i. Bidder Meets DBE Goal

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

ii. Bidder Does Not Meet DBE Goal

(1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.

(2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:

a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.

b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

5. Department's Criteria for Good Faith Effort

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

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

b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

c. Prime Contractors should:

i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.

ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A*. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, ***as required by federal rules***. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.

(1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.

(2) SBN is the preferred outreach tool. https://www.bidx.com/wi/main. Other acceptable means include postal mail, email, fax, phone call.

a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.

b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.

(3) Second solicitation should take place within 5 days

a. An email solicitation is highly recommended for this second solicitation

(4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.

(5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.

(6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:

a. Email to all prospective DBE firms in relevant work areas
b. Phone call log to DBE firms who express interest via written response or call.
c. Fax/letter confirmation
d. Copy of the DBE quotes
e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.

i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, ***a discussion with the DBE firm*** regarding its

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

ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.

(1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.

(2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.

i. Provide the following information along with department form DT1202:

(1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.

(2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.

(3) Photocopies or electronic copies of all written solicitations to DBE's.

(4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.

(5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

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

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

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

All questions should be directed to:

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

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

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

Prime Contractor 's Contact Person		DBE Contractor Contact Person	
Phone:		Phone	
Fax:		Fax	
Email:		Email	

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

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

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

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

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

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

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

Primes

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

DBE

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

APPENDIX C
Types of Efforts considered in determining GFE
This list represents concepts being assessed; analysis requires additional steps

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

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

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

I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E
Small Business Network [SBN] Overview

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

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

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

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

ADDITIONAL SPECIAL PROVISION 4

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

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

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

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

The contractor's request for approval should include the written notification to the subcontractor and shall provide sufficient documentation of good cause to assist the engineer in making a timely decision. If the engineer does not grant approval, the contractor shall pay the subcontractor within 10 calendar days of the Department's decision.

All subcontracting agreements made by a contractor shall include the above provisions and shall be binding on all contractors and subcontractors.

The contractor certifies compliance with the requirements of this Additional Special Provision by signing the contract. This clause applies to both DBE and non-DBE subcontractors.

ADDITIONAL SPECIAL PROVISION 6
MODIFICATIONS TO THE STANDARD SPECIFICATIONS

Make the following revisions to the 2013 edition of the standard specifications:

106.3.4.3.1 General

Replace paragraph two with the following effective with the November 2012 letting:

(2) Required sampling and testing methodologies and documentation are specified in CMM chapter 8.

(3) If disputed, approval of materials and components, as well as acceptance of the work incorporating those materials or components, is subject to review under the QMP dispute resolution process.

107.17.3 Railroad Insurance Requirements

Replace the entire text with the following effective with the August 2012 letting:

(1) If required by the special provisions, provide or arrange for a subcontractor to provide railroad protective liability insurance in addition to the types and limits of insurance required in 107.26. Keep railroad protective liability insurance coverage in force until completing all work, under or incidental to the contract, on the railroad right of way or premises of the railroad and until the department has accepted the work as specified in 105.11.2.4.

(2) Provide railroad protective liability insurance coverage written as specified in 23 CFR part 646 subpart A. Provide a separate policy for each railroad owning tracks on the project. Ensure that the railroad protective liability insurance policies provide the following minimum limits of coverage:

1. Coverage A, bodily injury liability and property damage liability; $2 million per occurrence.
2. Coverage B, physical damage to property liability; $2 million per occurrence.
3. An annual aggregate amount of $6 million that shall apply separately to each policy renewal or extension.

(3) Obtain coverage from insurance companies licensed to do business in Wisconsin that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.

(4) Submit the following to each railroad owning tracks on the project as evidence of that railroad's respective coverage:

1. A certificate of insurance for the types and limits of insurance specified in 107.26.
2. The railroad protective liability insurance policy or other acceptable documentation to the railroad company.

(5) Submit the following to the region as evidence of the required coverage:

1. A copy of the letter to the railroad company transmitting the submittal documents specified in 107.17.3(4).
2. A certificate of insurance for the required railroad protective liability coverages.

(6) Do not begin work on the right of way or premises of the railroad company until the region receives the submittals specified in 107.17.3(5) and notification from the railroad company that the contractor has provided sufficient insurance information to begin work.

(7) Notify the railroad and the region immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations within 50 feet of the railroad right of way immediately if insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph four with the following effective with the December 2012 letting:

(4) The department will randomly test each design mixture at the following minimum frequency:

FOR TONNAGES TOTALING:	
Less than 501 tons	no tests required
From 501 to 5,000 tons	one test
More than 5,000 tons	add one test for each additional 5,000-ton increment

501.2.5.5 Sampling and Testing

Replace the entire text with the following effective with the January 2013 letting:

(1) Sample and test aggregates for concrete according to the following:

Sampling aggregates	AASHTO T2
Lightweight pieces in aggregate	AASHTO T113
Material finer than No. 200 sieve	AASHTO T11
Unit weight of aggregate	AASHTO T19
Organic impurities in sands	AASHTO T21
Sieve analysis of aggregates	AASHTO T27
Effect of organic impurities in fine aggregate	AASHTO T71
Los Angeles abrasion of coarse aggregate	AASHTO T96
Freeze-thaw soundness of coarse aggregate	AASHTO T103
Sodium sulfate soundness of aggregates	AASHTO T104
Specific gravity and absorption of fine aggregate	AASHTO T84
Specific gravity and absorption of coarse aggregate	AASHTO T85
Flat & elongated pieces based on a 3:1 ratio	ASTM D4791[1]
Sampling fresh concrete	AASHTO R60
Making and curing concrete compressive strength test specimens	AASHTO T23
Compressive strength of molded concrete cylinders	AASHTO T22

[1] As modified in CMM 8-60.

506.3.22 Shop Inspection

Replace paragraph one with the following effective with the July 2010 letting:

(1) The engineer or an independent inspection agency under department contract may inspect all structural steel and miscellaneous metals furnished. The department will provide the contractor with monthly consultant inspection invoices and identify any quality deficiencies at the fabrication facility.

506.5 Payment

Add paragraph nine as follows effective with the June 2010 letting:

(9) The department will limit costs for inspections conducted under 506.3.2 to $0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

507.2.2.1 General

Replace paragraph four with the following effective with the December 2012 letting:

(4) Ensure that there are no unsound knots or knot holes. Also ensure that there are no tight knots of a diameter exceeding one-quarter of the greater dimension at the point where they occur. Measure a knot by taking its diameter at right angles to the length of the timber. Ensure that the sum of sizes of all knots in any one-foot length does not exceed 2 times the size of the largest allowed single knot. The engineer will treat cluster knots as if they were a single knot. A cluster knot is 2 or more knots grouped together, with the fibers of the wood deflected around the entire unit.

512.3.1 Driving and Cutting Off

Replace the entire text with the following effective with the December 2012 letting:

512.3.1.1 General

(1) Coordinate driving operations to prevent damage or displacement of concrete in substructure units or damage to adjacent facilities due to vibrations.

(2) Drive sheeting with a variation of 1/4 inch or less per foot from the vertical or from the batter the plans show. Ensure that the sheetpiles are within 6 inches of the plan position after driving. Do not damage sheetpiles attempting to correct for misalignment.

(3) Remove and replace, or otherwise correct, sheetpiles the engineer deems unacceptable under 105.3. Submit details of planned corrections to the engineer for review and approval before initiating any corrective actions.

(4) Drive sheetpiles to or beyond the required tip elevation the plans show.

512.3.1.2 Driving System

(1) Furnish a sheetpile driving system capable of driving the sheetpiles to the required minimum tip elevation the plans show.

(2) The engineer may order the contractor to remove a pile driving system component from service if it causes insufficient energy transfer or damages the sheetpiles. Do not return a component to service until the engineer determines that it has been satisfactorily repaired or adjusted.

(3) Drive sheetpiles with diesel, air, steam, gravity, hydraulic, or vibratory hammers.

512.3.1.3 Cut-Offs

(1) Cut off sheetpiles at the elevations the plans show or as the engineer directs. Pile cut-offs become the property of the contractor. Dispose of cut-offs not incorporated into the work.

526.3.3 Temporary Structures

Replace paragraphs two through four with the following effective with the January 2013 letting:

(2) Inspect temporary structures conforming to the National Bridge Inspection Standards (NBIS) and the department’s structure inspection manual before opening to traffic. Perform additional inspections, as the department’s structure inspection manual requires, based on structure type and time in service. Submit inspection reports on department form DT2007 to the engineer and electronic copies to the department's bureau of structures maintenance section. Ensure that a department-certified active team leader, listed online in the department's highway structures information system (HSIS), performs the inspections.

(3) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.4. Contractor-furnished materials remain the contractor's property upon removal.

614.2.5 Wood Posts and Offset Blocks

Retitle and replace the entire text with the following effective with the July 2012 letting:

614.2.5 Posts and Offset Blocks

614.2.5.1 Wood Posts and Offset Blocks

(1) Furnish sawed posts and offset blocks of one of the following species:

Douglas fir	Southern pine	Ponderosa pine	Jack pine	White pine
Red pine	Western hemlock	Western larch	Hem-fir	Oak

(2) Ensure that posts are the size the plans show and conform to the nominal and minimum dimensions tabulated in 507.2.2.3. The contractor does not have to surface the posts. Provide posts of the net length the plans show after setting and cut off.

(3) Use stress graded posts rated at 1200 psi f_b or higher. Determine the stress grade rating for douglas fir, western larch, and southern pine as specified in 507.2.2.4.

(4) For hem-fir, hemlock, red pine, white pine, jack pine, ponderosa pine, and oak conform to the following:

TABLE 614-1 PROPERTIES FOR WOOD POSTS AND BLOCKS

SPECIES			WESTERN HEMLOCK, HEM-FIR, RED PINE, WHITE PINE, JACK PINE, PONDEROSA PINE		OAK	
MAXIMUM SLOPE OF GRAIN			1 in 15		1 in 12	
NOMINAL WIDTH OF FACE			6"	8"	6"	8"
SHAKES, CHECKS, AND SPLITS		GREEN	1"	1 3/8"	2 3/8"	3 1/8"
		SEASONED	1 1/2"	2"	2 5/8"	3 1/2"
MAXIMUM WANE			1"	1 3/8"	1 1/8"	1 5/8"
MAXIMUM ALLOWABLE KNOTS	NARROW FACE	MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"	2 1/8"	2 3/8"
		END[1]	2 3/4"	3 1/4"	4 1/4"	4 3/4"
		SUM IN MIDDLE 1/2 OF LENGTH[2]	11"	13"	17"	19
	WIDE FACE	EDGE KNOT N MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"		
		EDGE KNOT AT END[1]	2 3/4" 7	3 1/4"		
		CENTERLINE	1 3/8"	1 7/8"	2 1/4"	2 7/8"
		SUM IN MIDDLE 1/2 OF LENGTH	5 1/2"	7 1/2"	9"	11 1/2"

[1] But do not exceed the maximum allowable knot on the centerline of the wide face of the same piece.

[2] But do not exceed 4 times the maximum allowable knot on the centerline of the wide face of the same piece.

(5) Pressure treat posts and offset blocks as specified in 507.2.2.6. Use one of the oil-soluble preservatives or chromated copper arsenate conforming to 507.2.3. Use the same material for offset blocks and posts and treat material used in each continuous installation with the same type of preservative.

614.2.5.2 Steel Posts

(1) Furnish steel posts conforming to AASHTO M270 Grade 36 and galvanized according to AASTHO M111.

614.2.5.3 Plastic Offset Blocks

(1) Furnish plastic offset blocks from the department's approved products list.

614.3.1 General

Replace the entire text with the following effective with the July 2012 letting:

(1) Paint the ends of cut-off galvanized posts, rail, bolts, cut or drilled surfaces of galvanized components, and areas of damaged zinc coating with 2 coats of zinc dust/zinc oxide paint. Clean the damaged and adjacent areas thoroughly before applying paint.

(2) Apply 2 coats of wood preservative to cut surfaces of wood components. Use the same preservative originally used to treat that component or use a 2-percent solution of copper naphthenate conforming to AWPA Standard P8 or P36.

614.3.2.1 Installing Posts

Replace paragraph four with the following effective with the July 2012 letting:

(4) Cut post tops to the finished elevation the plans show.

628.2.13 Rock Bags

Replace paragraph one with the following effective with the November 2012 letting:

(1) Furnish rock bags made of a porous, ultraviolet resistant, high-density polyethylene or geotextile fabric that will retain 70% of its original strength after 500 hours of exposure according to ASTM D4355 and a minimum in-place filled size of 18-inches long by 12-inches wide by 6-inches high. Ensure that the fabric conforms to the following:

TEST REQUIREMENT	METHOD	VALUE
Minimum Tensile	ASTM D4632	
Machine direction		70 lb minimum
Cross direction		40 lb minimum
Elongation	ASTM D4632	
Machine direction		20% minimum
Cross direction		10 % min
Puncture	ASTM 4833	65 lbs minimum
Minimum Apparent Opening		0.0234 inches (No. 30 sieve)
Maximum Apparent Opening		0.0787 inches (No. 10 sieve)

701.4.2 Verification Testing

Replace paragraph two with the following effective with the December 2012 letting:

(2) The department will sample randomly at locations independent of the contractor’s QC tests and use separate equipment and laboratories. The department will conduct a minimum of one verification test for each 5 contractor QC tests unless specific QMP provisions specify otherwise.

715.3.1.3 Department Verification Testing

Replace paragraph one with the following effective with the December 2012 letting:

(1) The department will perform verification testing as specified in 701.4.2 except as follows:

- Air content, slump, and temperature: a minimum of 1 verification test per lot.
- Compressive strength: a minimum of 1 verification test per lot.

Errata

Make the following corrections to the 2012 edition of the standard specifications:

107.22 Contractor's Responsibility for Utility Facilities, Property, and Services

Correct errata by eliminating references to the department. Costs are determined by statute.

(3) If the contractor damages or interrupts service, the contractor shall notify the utility promptly. Coordinate and cooperate with the utility in the repair of the facility. Determine who is responsible for repair costs according to Wisconsin statutes 66.0831 and 182.0175(2).

506.2.6.5.2 Pad Construction

Correct errata by changing ASTM A570 to ASTM A1011.

(4) For the internal steel plates use rolled mild steel conforming to ASTM A36, or ASTM A1011 grade

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512.3.3 Painting

Correct errata by changing 511.3.5 to 550.3.11.3.

(1) Paint permanent steel sheet piling as specified for painting steel piling in 550.3.11.3.

513.2.2.8 Toggle Bolts

Correct errata by changing r ASTM A570 to ASTM A1011.

(1) Use toggle bolts made of steel, conforming to the plans. Make the assembly from the material specified below:

Toggle bolt and pin	Cold finished steel heat-treated Brinell 311-363 ASTM A354.
Toggle washer	Hot rolled steel ASTM A1011. Manufacturer's standard washer.
Spacer nut	Grade 1213, ASTM A108. Cold finished steel heat-treated ASTM A325.

660.2.1 General

Correct errata by changing section 511 to 550.

(1) Furnish materials conforming to the following:

Concrete	section 501
Concrete bridges	section 502
Luminaires	section 659
Steel piling	section 550
Steel reinforcement	section 505

660.3.2.3 Pile Type Foundations

Correct errata by changing section 511 to 550.

(1) Drive piles as specified in for steel piling in section 550.

701.3 Contractor Testing

Correct errata by changing AASHTO T141 to AASHTO R60 and changing AASHTO T309 to ASTM C1064.

(1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Also perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Use test methods as follows:

TABLE 701-2 TESTING STANDARDS

TEST	TEST STANDARD
Washed P 200 analysis	AASHTO T11[1]
Sieve analysis of fine and coarse aggregate	AASHTO T27[1]
Aggregate moisture	AASHTO T255[1]
Sampling freshly mixed concrete	AASHTO R60
Air content of fresh concrete	AASHTO T152[2]
Concrete slump	AASHTO T119[2]
Concrete temperature	ASTM C1064
Concrete compressive strength	AASHTO T22
Making and curing concrete cylinders	AASHTO T23
Standard moist curing for concrete cylinders	AASHTO M201

[1] As modified in CMM 8-60.

[2] As modified in CMM 8-70.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st 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 section 3.2 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/docs/crc-basic-info.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the 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:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.

2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	County	%	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

   As referred to in this section, the Director means:

   Director
   Office of Federal Contract Compliance Programs
   Ruess Federal Plaza
   310 W. Wisconsin Ave., Suite 1115
   Milwaukee, WI 53202

   The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2012

ADDITIONAL FEDERAL-AID PROVISIONS

BUY AMERICA

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project.

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these Buy America provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://roadwaystandards.dot.wi.gov/standards/forms/hidden/ws4567.doc

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

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
ONEIDA COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on April 1, 2012

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding 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	32.66	15.92	48.58
Carpenter	29.06	15.16	44.22
Cement Finisher	29.35	15.05	44.40
Electrician	28.29	16.47	44.76
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	35.62	0.00	35.62
Ironworker	30.90	19.11	50.01
Line Constructor (Electrical)	35.97	18.08	54.05
Painter	24.10	9.54	33.64
Pavement Marking Operator	27.90	14.47	42.37
Piledriver	29.56	15.16	44.72
Roofer or Waterproofer	16.30	6.48	22.78
Teledata Technician or Installer	21.26	11.75	33.01
Tuckpointer, Caulker or Cleaner	34.30	16.60	50.90
Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	33.87	16.10	49.97
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	16.21	44.99
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	13.07	38.25
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
TRUCK DRIVERS			
Single Axle or Two Axle	22.35	16.19	38.54
Future Increase(s): Add $1.75/hr on 6/1/2012; Add $1.85/hr on 6/1/2013. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	23.60	15.76	39.36
Articulated, Euclid, Dumptor, Off Road Material Hauler	32.07	13.34	45.41
Pavement Marking Vehicle	23.84	14.77	38.61
Shadow or Pilot Vehicle	24.76	15.35	40.11
Truck Mechanic	23.60	15.76	39.36
LABORERS			
General Laborer	26.92	13.45	40.37
Future Increase(s): Add $1.60/hr on 6/1/2012: Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014. Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	23.96	12.88	36.84
Landscaper	26.92	13.45	40.37
Future Increase(s): Add $1.60/hr on 6/1/12; Add $1.70/hr on 6/1/13; Add $1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	23.55	13.45	37.00
Future Increase(s): Add $1.60/hr on 6/1/2012; Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	15.00	0.61	15.61
Railroad Track Laborer	23.96	12.88	36.84
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs.,	34.22	18.90	53.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.72	18.90	52.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.22	18.90	52.12
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor	32.96	18.90	51.86

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 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	32.67	18.90	51.57
Fiber Optic Cable Equipment.	16.00	3.39	19.39

SUPERSEDES DECISION WI20070010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
DECISION NUMBER: W1080010
DATE: December 14, 2012
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	$26.92	13.45
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	27.02	13.45
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	27.07	13.45
Group 4: Line and Grade Specialist	27.27	13.45
Group 5: Blaster and Powderman	27.12	13.45
Group 6: Flagperson; Traffic Control	23.55	13.45

CLASSES OF LABORER AND MECHANICS

Bricklayer	31.34	16.05
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker	29.24	21.20
Cement Mason/Concrete Finisher	30.52	15.44
Electrician		See Page 3
Line Construction		
Lineman	38.25	18.00
Heavy Equipment Operator	34.43	16.71
Equipment Operator	30.60	15.41
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	21.04	12.16
Painters	23.37	11.52
Well Drilling:		
Well Driller	16.52	3.70

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	23.16	17.13
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	23.31	17.13

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 March 12, 2010; Modification 1, dated March 19, 2010; Modification 2, dated June 4, 2010; Modification 3, dated July 2, 2010; Modification 4, dated August 6, 2010; Modification 5, dated September 3, 2010; Modification 6, dated October 1, 2010, Modification 7, dated November 5, 2010; Modificaton 8; dated November 15, 2010; Modification 9, dated January 7, 2011; Modification #10 dated February 11, 2011; Modification #11 dated May 6, 2011; Modification #12 dated May 13, 2011; Modification #13 dated June 3, 2011; Modification #14 dated July 29, 2011; Modification #15 dated August 12, 2011; Modification #16 dated August 26, 2011; Modification #17 dated September 16, 2011; Modification #18 dated October 14, 2011; Modification #19 dated November 11, 2011; Modification #0, dated January 6, 2012; Modification #1 dated January 13, 2012; Modification #2 dated February 3, 2012; Modification #3 dated February 10, 2012; Modification #4 dated March 2, 2012; Modification #5 dated May 4, 2012; Modification #6 dated May 11, 2012; Modification #7 dated June 1, 2012; Modification #8 dated June 15, 2012; Modification #9 dated July 6, 2012; Modification #10 dated August 3, 2012; Modification #11 dated August 31, 2012; Modification #12 dated September 28, 2012; Modification #13 dated December 7, 2012; Modification #14 dated December 14, 2012.

SUPERSEDES DECISION WI20070010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
DECISION NUMBER: W1080010
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: December 14, 2012

POWER EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer	$35.22	$19.65
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.	$34.72	$19.65
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator.	$34.22	$19.65
Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	$33.96	$19.65
Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro-portioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.	$33.67	$19.65
Group 6: Off – road material hauler with or without ejector	$27.77	$19.65

Premium Pay:
EPA Level "A" protection - $3.00 per hour
EPA Level "B" protection - $2.00 per hour
EPA Level "C" protection - $1.00 per hours

SUPERSEDES DECISION WI20070010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
DECISION NUMBER: W1080010
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: December 14, 2012

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$27.80	16.52
Area 2:		
Electricians	29.13	17.92
Area 3:		
Electrical contracts under $130,000	26.24	16.85
Electrical contracts over $130,000	29.41	16.97
Area 4:	28.10	17.24
Area 5	28.61	16.60
Area 6	35.25	19.30
Area 8		
Electricians	30.00	17.76
Area 9:		
Electricians	32.94	18.71
Area 10	28.97	19.55
Area 11	31.27	23.12
Area 12	32.87	19.23
Area 13	32.20	21.64
Teledata System Installer		
Area 14		
Installer/Technician	21.89	11.83
Sound & Communications		
Area 15		
Installer	16.47	14.84
Technician	24.75	16.04

Area 1 - CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.

Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES

Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.

Area 5 - ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Area 6 - KENOSHA COUNTY

Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES

Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES

Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Area 11 - DOUGLAS COUNTY

Area 12 - RACINE (except Burlington township) COUNTY

Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES

Area 14 - Statewide.

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

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.

SCHEDULE OF ITEMS REVISED:

CONTRACT:	PROJECT(S):	FEDERAL ID(S):
20130212012	1174-10-70	WISC 2013051
	1174-10-71	N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 CONTRACT ITEMS					
0010	201.0105 CLEARING	3.000 STA		.		.
0020	201.0120 CLEARING	100.000 ID		.		.
0030	201.0205 GRUBBING	3.000 STA		.		.
0040	201.0220 GRUBBING	100.000 ID		.		.
0050	203.0200 REMOVING OLD STRUCTURE (STATION) 01. STA 443+45	LUMP	LUMP			.
0060	203.0210.S ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. SANITARY SEWER AND FORCEMAIN PIPE	LUMP	LUMP			.
0070	204.0110 REMOVING ASPHALTIC SURFACE	43,590.000 SY		.		.
0080	204.0120 REMOVING ASPHALTIC SURFACE MILLING	3,387.000 SY		.		.
0090	204.0150 REMOVING CURB & GUTTER	10,267.000 LF		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	204.0155 REMOVING CONCRETE SIDEWALK	2,796.000 SY		.		.
0110	204.0210 REMOVING MANHOLES	15.000 EACH		.		.
0120	204.0220 REMOVING INLETS	40.000 EACH		.		.
0130	204.0245 REMOVING STORM SEWER (SIZE) 01. 12 - INCH	1,172.000 LF		.		.
0140	204.0245 REMOVING STORM SEWER (SIZE) 02. 18 - INCH	2,141.000 LF		.		.
0150	204.0245 REMOVING STORM SEWER (SIZE) 03. 24 - INCH	1,000.000 LF		.		.
0160	204.0280 SEALING PIPES	2.000 EACH		.		.
0170	205.0100 EXCAVATION COMMON	39,488.000 CY		.		.
0180	205.0400 EXCAVATION MARSH	251.000 CY		.		.
0190	206.5000 COFFERDAMS (STRUCTURE) 01. M-43-2	LUMP	LUMP			.
0200	208.0100 BORROW	500.000 CY		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0210	209.0100 BACKFILL GRANULAR	2,018.000 CY		.		.
0220	210.0100 BACKFILL STRUCTURE	330.000 CY		.		.
0230	213.0100 FINISHING ROADWAY (PROJECT) 01. 1174-10-70	1.000 EACH		.		.
0240	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	56,230.000 TON		.		.
0250	416.0160 CONCRETE DRIVEWAY 6-INCH	2,613.000 SY		.		.
0260	455.0115 ASPHALTIC MATERIAL PG64-22	475.000 TON		.		.
0270	455.0122 ASPHALTIC MATERIAL PG64-34	216.000 TON		.		.
0280	455.0605 TACK COAT	1,898.000 GAL		.		.
0290	460.1110 HMA PAVEMENT TYPE E-10	12,562.000 TON		.		.
0300	460.2000 INCENTIVE DENSITY HMA PAVEMENT	8,034.000 DOL	1.00000		8034.00	

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0310	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	999.000 TON		.		.
0320	465.0125 ASPHALTIC SURFACE TEMPORARY	460.000 TON		.		.
0330	522.0112 CULVERT PIPE REINFORCED CONCRETE CLASS III 12-INCH	56.000 LF		.		.
0340	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	282.000 LF		.		.
0350	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	3.000 EACH		.		.
0360	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	1.000 EACH		.		.
0370	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	1.000 EACH		.		.
0380	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	7.000 EACH		.		.
0390	523.0514 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH	2.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0400	523.0519 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	1.000 EACH		.		.
0410	523.0524 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH	2.000 EACH		.		.
0420	532.0200.S WALL MODULAR BLOCK GRAVITY	300.000 SF		.		.
0430	601.0120 CONCRETE CURB TYPE J	122.000 LF		.		.
0440	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D	222.000 LF		.		.
0450	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	11,332.000 LF		.		.
0460	602.0405 CONCRETE SIDEWALK 4-INCH	150.000 SF		.		.
0470	602.0415 CONCRETE SIDEWALK 6-INCH	58,494.000 SF		.		.
0480	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	96.000 SF		.		.
0490	606.0200 RIPRAP MEDIUM	845.000 CY		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0500	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	662.000 LF		.		.
0510	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	1,126.000 LF		.		.
0520	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	933.000 LF		.		.
0530	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	4,049.000 LF		.		.
0540	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	244.000 LF		.		.
0550	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	186.000 LF		.		.
0560	608.0348 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH	275.000 LF		.		.
0570	610.0114 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14X23-INCH	433.000 LF		.		.
0580	610.0119 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	239.000 LF		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0590	610.0124 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH	343.000 LF		.		.
0600	610.0129 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	149.000 LF		.		.
0610	611.0624 INLET COVERS TYPE H	109.000 EACH		.		.
0620	611.0627 INLET COVERS TYPE HM	3.000 EACH		.		.
0630	611.0645 INLET COVERS TYPE MS-A	4.000 EACH		.		.
0640	611.1004 CATCH BASINS 4-FT DIAMETER	57.000 EACH		.		.
0650	611.1006 CATCH BASINS 6-FT DIAMETER	20.000 EACH		.		.
0660	611.2004 MANHOLES 4-FT DIAMETER	1.000 EACH		.		.
0670	611.2007 MANHOLES 7-FT DIAMETER	1.000 EACH		.		.
0680	611.8120.S COVER PLATES TEMPORARY	3.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0690	611.9800.S PIPE GRATES	9.000 EACH		.		.
0700	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1174-10-70	1.000 EACH		.		.
0710	619.1000 MOBILIZATION	1.000 EACH		.		.
0720	620.0100 CONCRETE CORRUGATED MEDIAN	2,375.000 SF		.		.
0730	620.0300 CONCRETE MEDIAN SLOPED NOSE	128.000 SF		.		.
0740	624.0100 WATER	100.000 MGAL		.		.
0750	625.0100 TOPSOIL	5,851.000 SY		.		.
0760	628.1504 SILT FENCE	1,550.000 LF		.		.
0770	628.1520 SILT FENCE MAINTENANCE	387.000 LF		.		.
0780	628.1905 MOBILIZATIONS EROSION CONTROL	13.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0790	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	13.000 EACH		.		.
0800	628.2006 EROSION MAT URBAN CLASS I TYPE A	5,851.000 SY		.		.
0810	628.6005 TURBIDITY BARRIERS	972.000 SY		.		.
0820	628.7005 INLET PROTECTION TYPE A	116.000 EACH		.		.
0830	628.7010 INLET PROTECTION TYPE B	2.000 EACH		.		.
0840	628.7015 INLET PROTECTION TYPE C	114.000 EACH		.		.
0850	629.0210 FERTILIZER TYPE B	3.700 CWT		.		.
0860	630.0140 SEEDING MIXTURE NO. 40	105.000 LB		.		.
0870	630.0200 SEEDING TEMPORARY	158.000 LB		.		.
0880	634.0814 POSTS TUBULAR STEEL 2X2-INCH X 14-FT	40.000 EACH		.		.
0890	634.0816 POSTS TUBULAR STEEL 2X2-INCH X 16-FT	17.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0900	637.0202 SIGNS REFLECTIVE TYPE II	347.920 SF		.		.
0910	638.2602 REMOVING SIGNS TYPE II	47.000 EACH		.		.
0920	638.3000 REMOVING SMALL SIGN SUPPORTS	32.000 EACH		.		.
0930	642.5201 FIELD OFFICE TYPE C	1.000 EACH		.		.
0940	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 1174-10-70	190.000 DAY		.		.
0950	643.0300 TRAFFIC CONTROL DRUMS	33,189.000 DAY		.		.
0960	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	1,134.000 DAY		.		.
0970	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	134.000 EACH		.		.
0980	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	134.000 EACH		.		.
0990	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	3,357.000 DAY		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1000	643.0800 TRAFFIC CONTROL ARROW BOARDS	410.000 DAY		.		.
1010	643.0900 TRAFFIC CONTROL SIGNS	30,970.000 DAY		.		.
1020	643.1050 TRAFFIC CONTROL SIGNS PCMS	570.000 DAY		.		.
1030	645.0120 GEOTEXTILE FABRIC TYPE HR	1,690.000 SY		.		.
1040	646.0106 PAVEMENT MARKING EPOXY 4-INCH	16,152.000 LF		.		.
1050	646.0126 PAVEMENT MARKING EPOXY 8-INCH	613.000 LF		.		.
1060	646.0600 REMOVING PAVEMENT MARKINGS	6,388.000 LF		.		.
1070	647.0156 PAVEMENT MARKING ARROWS EPOXY TYPE 1	3.000 EACH		.		.
1080	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2	33.000 EACH		.		.
1090	647.0356 PAVEMENT MARKING WORDS EPOXY	6.000 EACH		.		.
1100	647.0456 PAVEMENT MARKING CURB EPOXY	425.000 LF		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1110	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH	190.000 LF		.		.
1120	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	6.000 EACH		.		.
1130	647.0656 PAVEMENT MARKING PARKING STALL EPOXY	220.000 LF		.		.
1140	647.0716 PAVEMENT MARKING DIAGONAL EPOXY 8-INCH	107.000 LF		.		.
1150	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	1,074.000 LF		.		.
1160	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	674.000 LF		.		.
1170	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	10,200.000 LF		.		.
1180	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	1,000.000 LF		.		.
1190	650.4000 CONSTRUCTION STAKING STORM SEWER	116.000 EACH		.		.
1200	650.4500 CONSTRUCTION STAKING SUBGRADE	5,897.000 LF		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1210	650.5000 CONSTRUCTION STAKING BASE	5,897.000 LF		.		.
1220	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	11,382.000 LF		.		.
1230	650.6000 CONSTRUCTION STAKING PIPE CULVERTS	4.000 EACH		.		.
1240	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. M-43-0001	LUMP	LUMP			.
1250	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. M-43-2	LUMP	LUMP			.
1260	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 1174-10-70	LUMP	LUMP			.
1270	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1174-10-70	LUMP	LUMP			.
1280	650.9920 CONSTRUCTION STAKING SLOPE STAKES	6,011.000 LF		.		.
1290	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	10.000 LF		.		.
1300	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	65.000 LF		.		.

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FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1310	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	3,414.000 LF		.		.
1320	652.0615 CONDUIT SPECIAL 3-INCH	190.000 LF		.		.
1330	653.0140 PULL BOXES STEEL 24X42-INCH	16.000 EACH		.		.
1340	654.0101 CONCRETE BASES TYPE 1	2.000 EACH		.		.
1350	654.0113 CONCRETE BASES TYPE 13	2.000 EACH		.		.
1360	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	1.000 EACH		.		.
1370	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG	320.000 LF		.		.
1380	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG	665.000 LF		.		.
1390	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	545.000 LF		.		.
1400	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. HAWK, STA 457+34	LUMP	LUMP			.

CONTRACT: 20130212012
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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1410	657.0100 PEDESTAL BASES	2.000 EACH		.		.
1420	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT	2.000 EACH		.		.
1430	657.1355 INSTALL POLES TYPE 12	2.000 EACH		.		.
1440	657.1535 INSTALL MONOTUBE ARMS 35-FT	2.000 EACH		.		.
1450	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH	2.000 EACH		.		.
1460	658.0500 PEDESTRIAN PUSH BUTTONS	2.000 EACH		.		.
1470	658.5069 SIGNAL MOUNTING HARDWARE (LOCATION) 01. HAWK, STA 457+34	LUMP	LUMP			.
1480	690.0150 SAWING ASPHALT	3,058.000 LF		.		.
1490	690.0250 SAWING CONCRETE	30.000 LF		.		.
1500	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	2,400.000 HRS	5.00000		12000.00	

CONTRACT: 20130212012
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FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1510	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	1,980.000 HRS	5.00000		9900.00	
1520	SPV.0035 SPECIAL 01. CONCRETE MASONRY CURB	40.000 CY	.		.	
1530	SPV.0035 SPECIAL 02. CONCRETE MASONRY, SPECIAL	30.000 CY	.		.	
1540	SPV.0045 SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) CELLULAR COMMUNICATIONS	570.000 DAY	.		.	
1550	SPV.0060 SPECIAL 01. SALVAGE HYDRANT	2.000 EACH	.		.	
1560	SPV.0060 SPECIAL 02. REMOVE WATERMAIN VALVE BOX	23.000 EACH	.		.	
1570	SPV.0060 SPECIAL 03. PLUG WATERMAIN ABANDONED IN PLACE	7.000 EACH	.		.	
1580	SPV.0060 SPECIAL 04. PLUG FORCEMAIN ABANDONED IN PLACE	4.000 EACH	.		.	
1590	SPV.0060 SPECIAL 05. CAP WATERMAIN TO REMAIN IN SERVICE	4.000 EACH	.		.	
1600	SPV.0060 SPECIAL 06. REMOVE SANITARY MANHOLE	1.000 EACH	.		.	

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1610	SPV.0060 SPECIAL 07. ADJUST WATERMAIN VALVE BOX	18.000 EACH		.		.
1620	SPV.0060 SPECIAL 08. ADJUST SANITARY MANHOLE CASTING	12.000 EACH		.		.
1630	SPV.0060 SPECIAL 09. RECONSTRUCT SANITARY MANHOLE	3.000 EACH		.		.
1640	SPV.0060 SPECIAL 10. SANITARY MANHOLE CASTING	1.000 EACH		.		.
1650	SPV.0060 SPECIAL 11. SANITARY MANHOLE	1.000 EACH		.		.
1660	SPV.0060 SPECIAL 12. CONNECTION TO EXISTING SANITARY MANHOLE	1.000 EACH		.		.
1670	SPV.0060 SPECIAL 13. AIR RELEASE MANHOLE	2.000 EACH		.		.
1680	SPV.0060 SPECIAL 14. HYDRANT	4.000 EACH		.		.
1690	SPV.0060 SPECIAL 15. WATERMAIN GATE VALVE AND BOX 6-INCH	6.000 EACH		.		.
1700	SPV.0060 SPECIAL 16. WATERMAIN GATE VALVE AND BOX 8-INCH	7.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1710	SPV.0060 SPECIAL 17. WATERMAIN GATE VALVE AND BOX 10-INCH	3.000 EACH		.		.
1720	SPV.0060 SPECIAL 18. FORCEMAIN PLUG VALVE AND BOX 6-INCH	2.000 EACH		.		.
1730	SPV.0060 SPECIAL 19. WATERMAIN CORPORATION STOP 1-INCH	23.000 EACH		.		.
1740	SPV.0060 SPECIAL 20. WATERMAIN CURB STOP AND BOX 1-INCH	23.000 EACH		.		.
1750	SPV.0060 SPECIAL 21. WATERMAIN SERVICE REDUCER 1 TO 3/4-INCH	22.000 EACH		.		.
1760	SPV.0060 SPECIAL 22. WATERMAIN COUPLING 6-INCH	2.000 EACH		.		.
1770	SPV.0060 SPECIAL 23. WATERMAIN COUPLINE 8-INCH	9.000 EACH		.		.
1780	SPV.0060 SPECIAL 24. WATERMAIN COUPLING 10-INCH	1.000 EACH		.		.
1790	SPV.0060 SPECIAL 25. WATERMAIN BEND 11-1/4 DEGREE 8-INCH	1.000 EACH		.		.
1800	SPV.0060 SPECIAL 26. WATERMAIN BEND 22-1/2 DEGREE 10-INCH	1.000 EACH		.		.

CONTRACT: 20130212012
PROJECT(S): 1174-10-70, 1174-10-71
FEDERAL ID(S): WISC 2013051, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SPV.0060 SPECIAL 27.					
1810	WATERMAIN BEND 45 DEGREE 6-INCH	7.000 EACH		.		.
	SPV.0060 SPECIAL 28.					
1820	WATERMAIN BEND 45 DEGREE 8-INCH	6.000 EACH		.		.
	SPV.0060 SPECIAL 29.					
1830	WATERMAIN BEND 45 DEGREE 10-INCH	8.000 EACH		.		.
	SPV.0060 SPECIAL 30.					
1840	WATERMAIN REDUCER 10 X 8-INCH	4.000 EACH		.		.
	SPV.0060 SPECIAL 31.					
1850	WATERMAIN TEE 8 X 6-INCH	2.000 EACH		.		.
	SPV.0060 SPECIAL 32.					
1860	WATERMAIN TEE 8 X 8-INCH	2.000 EACH		.		.
	SPV.0060 SPECIAL 33.					
1870	WATERMAIN TEE 10 X 6-INCH	4.000 EACH		.		.
	SPV.0060 SPECIAL 34.					
1880	WATERMAIN TEE 10 X 10-INCH	1.000 EACH		.		.
	SPV.0060 SPECIAL 35.					
1890	FORCEMAIN COUPLING 6-INCH	2.000 EACH		.		.
	SPV.0060 SPECIAL 36.					
1900	PARK BENCH	10.000 EACH		.		.
	SPV.0060 SPECIAL 37.					
1910	PLANTER	5.000 EACH		.		.

CONTRACT: 20130212012
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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SPV.0060 SPECIAL 38.					
1920	TRASH CONTAINER	5.000 EACH		.		.
	SPV.0060 SPECIAL 39.					
1930	RAILING STEEL GATE	2.000 EACH		.		.
	SPV.0060 SPECIAL 40.					
1940	WATERMAIN DIRECTIONAL BORE 10-INCH	1.000 EACH		.		.
	SPV.0060 SPECIAL 41.					
1950	FORCEMAIN DIRECTION BORE 6-INCH	1.000 EACH		.		.
	SPV.0060 SPECIAL 44.					
1960	PEDESTRIAN HYBRID BEACON	4.000 EACH		.		.
	SPV.0060 SPECIAL 45.					
1970	INLET TYPE 3M	26.000 EACH		.		.
	SPV.0060 SPECIAL 46.					
1980	CATCH BASIN TYPE 5M-8	6.000 EACH		.		.
	SPV.0060 SPECIAL 47.					
1990	CATCH BASIN TYPE 5M-10	2.000 EACH		.		.
	SPV.0060 SPECIAL 48.					
2000	INLET TYPE 8M	5.000 EACH		.		.
	SPV.0060 SPECIAL 49.					
2010	TEMPORARY WATER PASSAGE	116.000 EACH		.		.

CONTRACT: 20130212012
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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2020	SPV.0060 SPECIAL 50. FORCEMAIN BEND 45 DEGREE 6-INCH	4.000 EACH		.		.
2030	SPV.0060 SPECIAL 51. SANITARY WYE 8 X 4-INCH	4.000 EACH		.		.
2040	SPV.0085 SPECIAL 01. BAR STEEL REINFORCEMENT HS COATED RAILING	7,910.000 LB		.		.
2050	SPV.0085 SPECIAL 02. BAR STEEL REINFORCEMENT HS COATED, SPECIAL	6,640.000 LB		.		.
2060	SPV.0090 SPECIAL 01. REMOVE WATERMAIN	490.000 LF		.		.
2070	SPV.0090 SPECIAL 02. REMOVE ASBESTOS CEMENT SANITARY SEWER	282.000 LF		.		.
2080	SPV.0090 SPECIAL 03. REMOVE ASBESTOS CEMENT FORCEMAIN	54.000 LF		.		.
2090	SPV.0090 SPECIAL 04. SANITARY SEWER LATERAL 4-INCH	45.000 LF		.		.
2100	SPV.0090 SPECIAL 05. SANITARY SEWER 8-INCH	272.000 LF		.		.
2110	SPV.0090 SPECIAL 07. WATER SERVICE 1-INCH	1,739.000 LF		.		.
2120	SPV.0090 SPECIAL 08. WATERMAIN 6-INCH	202.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2130	SPV.0090 SPECIAL 09. WATERMAIN 8-INCH	990.000 LF		.		.
2140	SPV.0090 SPECIAL 10. WATERMAIN 10-INCH	694.000 LF		.		.
2150	SPV.0090 SPECIAL 12. FORCEMAIN 6-INCH	90.000 LF		.		.
2160	SPV.0090 SPECIAL 13. PIPELINE SHEET INSULATION	145.000 LF		.		.
2170	SPV.0105 SPECIAL 01. RAILING STEEL TYPE C2 GALVANIZED PEDSTRIAN M-43-1	LUMP	LUMP			.
2180	SPV.0105 SPECIAL 02. EXCAVATION FOR STRUCTURES, SPECIAL M-43-2	LUMP	LUMP			.
2190	SPV.0120 SPECIAL 01. WATER FOR SEEDED AREAS	20.000 MGAL		.		.
2200	SPV.0165 SPECIAL 01. COLORED TEXTURED CONCRETE TERRACE 6-INCH	26,662.000 SF		.		.
2210	SPV.0180 SPECIAL 01. GEOGRID REINFORCEMENT	4,824.000 SY		.		.
2220	SPV.0180 SPECIAL 02. PREPARING TOPSOIL FOR LAWN TYPE TURF	5,851.000 SY		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE