

HIGHWAY WORK PROPOSAL

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

Proposal Number: **011**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Dane	5992-09-14	WISC 2019005	City Of Madison, East Johnson St; N Baldwin Street To First Street	LOC STR
Dane	5992-09-15	N/A	City Of Madison, East Johnson St; N Baldwin Street To First Street	LOC STR
Dane	5992-09-16	N/A	City Of Madison, East Johnson St; N Baldwin Street To First Street	LOC STR

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

Proposal Guaranty Required: \$100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: December 11, 2018 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time November 15, 2019	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 12%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work:	For Department Use Only
Excavation, Base, Concrete Pavement, HMA Pavement, Curb and Gutter, Sidwalk, Signs, Structure Replacement, Pavement Marking, Street Lighting, Traffic Signals, Water and Sanitary, Storm Sewer	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

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

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

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

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

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

B Submitting Electronic Bids

B.1 On the Internet

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

2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
 2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
 4. Submit the bid before the hour and date the Notice to Contractors designates.
 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

[illegible]

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 5992-09-14, 5992-09-15, 5992-09-16, City of Madison, East Johnson Street, N Baldwin Street to First Street, Loc Str, Dane 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, 2019 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 (20180628)

2. Scope of Work.

The work under this contract shall consist of pavement removal, grading, base aggregate dense, HMA pavement, rehabilitation of Structure C-13-147, concrete sidewalk, asphaltic surface temporary, concrete curb and gutter, storm sewer, marking, signing, traffic control, signals and lighting, sanitary sewer, water main, erosion control, finishing items, 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.

A General

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.

Prior to beginning operations under this contract submit in writing a proposed schedule of operations and method of coordination and handling traffic to the engineer for approval.

Be advised that there may be multiple mobilizations and/or remobilizations to complete construction operations, for example such items as: HMA pavement, concrete pavement, concrete sidewalk, concrete curb and gutter, traffic control, signing, pavement marking, traffic signals, street lighting, finishing items and other incidental items related to the staging. No additional payment will be made, by the department, for additional mobilizations.

B Contractor Coordination and Advance Notification

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

Hold progress meetings once a week. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work to begin within the next two weeks are to attend and provide a written schedule of the next week(s) operations. Include begin and end dates of specific prime and subcontractor work operations. Agenda items to include review of contractor's schedule and subcontractor's schedule, evaluation of progress and pay items, and revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems of conflicts between contractors.

Based on the progress meeting, if a new revised schedule is requested by the engineer, submit it within seven calendar days. Failure to submit a new schedule within seven days shall result in the engineer holding pay requests until received.

Maintain access for mail delivery and garbage/recycling pickup for all properties in the project area.

Notify Madison Metro transit system two weeks prior to construction. Notify one week prior to traffic switches and street closures. Contact Tim Sobota at (608) 261-4289.

Contact and coordinate with City of Madison for signal timing and phasing setup for temporary signals prior to the start of a traffic change or stage. City of Madison contact is Brian Smith at (608) 261-9625

Notify the City of Madison Engineering Department, City of Madison Police and Fire Departments at least three days in advance of all traffic switches and closures of existing streets.

Notify business owners and residents at least two days prior to restricting access and three days prior to closing access. Schedule sidewalk and driveway approach removal and replacement so that the time lapse between removal and replacement is minimal. See the Traffic article of these special provisions for information on residential and business property access.

Notify the Dane County Regional Airport if any type of crane or lift is to be used. When notifying the airport provide the height of the crane or lift to be used and for what time period it will be used. If the schedule for using the crane or lift changes, immediately contact the airport to make them aware of the change. Provide a minimum of five working days' notice to:

Airport Operations
(608) 235-1001

C Work Restrictions

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

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

Within Tenney Park and the Yahara River Parkway, do not store equipment, vehicles, materials or disturb existing ground 5 feet beyond the slope intercepts.

Once concrete sidewalks are poured, take necessary precautions to preserve the condition of the new concrete items. Any pavement or sidewalk that is damaged shall be replaced at the contractor's expense.

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

Maintain pedestrian facilities according to American with Disabilities Act Accessibility Guidelines (ADAAG) requirements at all times. Construct temporary pedestrian access accommodations (crosswalks, curb ramps, and pedestrian surfaces) as shown in the plans, or where necessary, as directed by the engineer. Payment for the construction of temporary pedestrian access accommodations will be made by the department under the bid items Temporary Pedestrian Surface Asphalt and Temporary Curb Ramp, unless otherwise shown on the plans.

Existing trees, street light poles, and other utility poles are to remain in place during construction unless otherwise noted in the plan. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between features for the paving and grading equipment.

Keep East Johnson Street and STH 113 open to traffic at all times, except as permitted by these special provisions. Provide ingress and egress locations to the engineer ten working days in advance of anticipated use. Do not use the ingress or egress locations until approved by the engineer. Sign and/or use flag persons at the ingress and egress locations as directed by the engineer and according to standard spec 104.6.1 (4).

Do not switch traffic to the next construction stage until all signing, pavement marking, traffic control devices for the stage are in place, conflicting pavement markings and signs are covered or removed, and as directed by the engineer.

The directional detour of eastbound East Johnson Street shall not occur on holiday or special event dates outlined in the Holiday and Special Event Work Restrictions article.

Northern Long-eared Bat (*Myotis septentrionalis*)

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

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

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

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

D Construction General

Conform the schedule of operations to the construction staging as shown in the traffic control plans and as described in the Traffic article unless modifications to the schedule are approved in writing by the engineer.

Interim and Final Completion of Work

Directional Detour - Northbound Fordem Avenue

Close, detour, and complete all roadway items under northbound Fordem Avenue as indicated in the Traffic article of these special provisions for Stages 2A and 2B and as shown in the plans within 21 consecutive calendar days.

If the contractor fails to complete all roadway items under northbound Fordem Avenue as indicated in the Traffic article of these special provisions for Stages 2A and 2B and as shown in the plans within 21 consecutive calendar days the department will assess the contractor \$2,000 in interim liquidated damages for each calendar day northbound Fordem Avenue remains closed and detoured after 21 consecutive calendar days. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete beyond 12:01AM.

Work within Railroad Flagging Limits - East Johnson Street Stage 2

Upon commencing work within the limits requiring railroad flagging, complete all roadway items within the area requiring railroad flagging as shown in the plans within 21 consecutive calendar days.

If the contractor fails to complete all roadway items within the area requiring railroad flagging as shown in the plans within 21 consecutive calendar days, the contractor shall be responsible for all railroad flagging costs beyond the 21 consecutive day period.

Work within Railroad Flagging Limits - East Johnson Street Stage 3

Upon commencing work within the limits requiring railroad flagging, complete all roadway items within the area requiring railroad flagging as shown in the plans within 21 consecutive calendar days.

If the contractor fails to complete all roadway items within the area requiring railroad flagging as shown in the plans within 21 consecutive calendar days the contractor shall be responsible for all railroad flagging costs beyond the 21 consecutive day period.

Work within Railroad Flagging Limits - East Johnson Street Stage 5A

Upon commencing work within the limits requiring railroad flagging, complete all roadway items within the area requiring railroad flagging as shown in the plans within 3 consecutive calendar days.

If the contractor fails to complete all roadway items within the area requiring railroad flagging as shown in the plans within 3 consecutive calendar days, the contractor shall be responsible for all railroad flagging costs beyond the 3 consecutive day period.

Work within Railroad Flagging Limits - East Johnson Street Stage 5B

Upon commencing work within the limits requiring railroad flagging, complete all roadway items within the area requiring railroad flagging as shown in the plans within 3 consecutive calendar days.

If the contractor fails to complete all roadway items within the area requiring railroad flagging as shown in the plans within 3 consecutive calendar days, the contractor shall be responsible for all railroad flagging costs beyond the 3 consecutive day period.

Directional Detour - Eastbound East Johnson Street

Close, detour, and complete HMA paving and marking line items along eastbound East Johnson Street as indicated in the Traffic article of these special provisions for Stage 5A and as shown in the plans within 3 consecutive calendar days.

If the contractor fails to complete HMA paving and marking line items along eastbound East Johnson Street as indicated in the Traffic article of these special provisions for Stage 5A and as shown in the plans within 3 consecutive calendar days, the department will assess the contractor \$3,000 in interim liquidated damages for each calendar day eastbound East Johnson Street remains closed and detoured after 3 consecutive calendar days. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete beyond 12:01 AM.

Directional Detour - Westbound East Johnson Street

Close, detour, and complete HMA paving and marking line items along westbound East Johnson Street as indicated in the Traffic article of these special provisions for Stage 5B and as shown in the plans within 3 consecutive calendar days.

If the contractor fails to complete HMA paving and marking line items along westbound East Johnson Street as indicated in the Traffic article of these special provisions for Stage 5B and as shown in the plans within 3 consecutive calendar days, the department will assess the contractor \$2,250 in interim liquidated damages for each calendar day westbound East Johnson Street remains closed and detoured after 3 consecutive calendar days. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete beyond 12:01 AM.

4. Traffic.

General

The work under this item shall conform to the requirements of standard spec 643, the Manual on Uniform Traffic Control Devices (MUTCD), and as hereinafter provided.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency, local event, or significant traffic delays.

Submit to engineer for approval a detailed traffic control plan for any changes to the proposed traffic control as shown on the plans. Submit the plan 14 days before the preconstruction conference, or if after the preconstruction conference, 14 days before the intended use of the revised traffic control. A request does not constitute approval.

Do not disturb, remove, or obliterate any traffic control signs, or advisory signs in place along the traveled roadways without the approval of the engineer. Immediately repair or replace any damage done to the above during the construction operations at contractor's expense.

Provide 24 hours-a-day availability of equipment and forces to expeditiously restore devices such as, but not limited to, pavement marking, lights, signs, drums, barricades, arrow boards or other traffic control devices that are damaged or disturbed. The department will pay for materials that the engineer deems necessary to maintain these items at contract unit prices, or as extra work, if the disturbance or damage is not the result of the contractor's operations, negligence or noncompliance with the requirements of the contract.

Conduct operations in such a manner that causes the least interference and inconvenience to the free flow of vehicles, bicyclists, and pedestrians on the roadways, sidewalks, and path. This includes the following:

- Do not park or store any vehicle, piece of equipment, or construction materials within the roadway lateral clearance or on adjacent streets beyond the project limits without approval of the engineer.
- No operations shall take place until all traffic control devices for such work are in the proper location.
- All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic, bicyclists, and pedestrians.
- Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1,000 feet. Activate the beam when merging into or exiting a live traffic lane.
- Do not deliver and store materials and equipment within open travel lanes or open side roads during any stage of construction. Temporary lane closures and/or halting of traffic within open roadways is not permitted unless mentioned specifically below. Flagging operations will be incidental to the work item being performed for the contract according to standard spec 104.6.1(4).

Maintain areas for turning vehicles at all times except for specific construction operations in those areas. Undistributed quantities of Base Aggregate Dense 1 1/4-Inch are included in this contract to accommodate the turning movements.

Maintain a minimum of 1 foot of lateral clearance from the edge of live travel lanes to all traffic control devices.

Do not use flag persons to direct, control, or stop traffic, unless provided written approval from the engineer.

Mount all traffic control signs at a minimum height of 5 feet, measured from the bottom of the sign, above the edge of pavement.

Upon switching traffic to temporary pavement, designate a representative to monitor the condition of the temporary pavement for a period of not less than 8 hours after the switch and prior to beginning any work that may take place upon the existing roadway after completion of the traffic switch. Should the temporary pavement show signs of failure, immediately notify the engineer.

The project includes street lighting and traffic signals. Maintain existing traffic signals and functionality of the lighting system during the project with existing lighting or temporary lighting. Maintain existing traffic signals at each intersection until temporary traffic signals are in place and operating at that intersection. The City of Madison Traffic Engineering department will set timing of signals after the contractor has installed the temporary and permanent signals.

General Traffic Operations During All Stages

Maintain one lane of traffic in each direction at all times on East Johnson Street and First Street (STH 113) except for closures and detours defined in this article.

Maintain a minimum lane width of 10 feet at all times during construction and provide wider lane widths when shown in the plans.

Clear Zone Working Restrictions

Provide a minimum of 6 feet of lateral clearance from the edge of travel lane to temporary drop offs. Do not leave any slopes steeper than 3:1 within the 6-foot lateral clearance or any drop offs at the edge of the traveled way greater than 2 inches. In areas where 6 feet of lateral clearance cannot be provided to drops-offs and a 3:1 or flatter slope cannot be provided, protect the drop-offs with concrete barrier temporary. Limit the length of open utility trenches adjacent to the lateral clearance to 100 feet. Backfill or plate utility trenches adjacent to the lateral clearance zone during non-working hours.

If unsure whether an individual work operation will meet the safety requirements for working within the lateral clearance, review the proposed work operation with the engineer before proceeding with the work.

Property Access

Maintain access to all commercial and private entrances at all times for local residents, businesses, emergency vehicles, garbage pickup, and postal services on existing pavement, temporary pavement, or base aggregate dense according to the plans or as directed by the engineer. Maintain a minimum travel width of 20 feet for temporary access to business entrances and a minimum travel width of 10 feet for temporary access to residential entrances. Additional intermediate construction staging or staging gaps, not shown on the plans, may be necessary to maintain continuous access to all properties. A minimum of

one driveway access shall be maintained at all times for businesses having multiple access points. Contact the property owner 48 hours prior to removing any existing entrance in order to coordinate temporary closures. Restore private entrances, including a gravel surface, within 12 hours of removal.

For the City of Madison Fleet Service building at 200 North First Street, only one access will be allowed to be closed at any given time.

If the contractor coordinates the closure of any access to a business or private property with the owner(s), provide written documentation of coordination with the owner(s) to the engineer, prior to the start of work regarding the access closure.

Pedestrian Access

Maintain pedestrian access, including access to all businesses and residences at all times, according to current Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG), within the project limits by means of existing sidewalk, Temporary Pedestrian Surface Asphalt bid item, Temporary Curb Ramp bid item, or new sidewalk at a minimum width of 5 feet. Preserve the existing sidewalk as long as practicable to maintain pedestrian access. Provide temporary pedestrian access as detailed in the plans and as directed by the engineer. Place Temporary Pedestrian Safety Fence as shown in the plans and as directed by the engineer. When required as shown in the plans, close sidewalks according to the standard detail drawing "Traffic Control, Pedestrian Accommodation."

Maintain pedestrian movements crossing the construction zone at the intersections of North Baldwin Street, Fordem Avenue, First Street (STH 113), and East Mifflin Street at all times and as shown in the plans, unless otherwise directed by the engineer.

Madison Metro Transit Access and Bus Stops

Maintain pedestrian access, according to current ADA Accessibility Guidelines, within the project limits to all Madison Metro Transit bus stop locations as shown in the plans. Place Temporary Bus Stop Pad as shown in the plans and as directed by the engineer. Closures of bus stops shall be according to the plans. Do not close a bus stop without approval of the engineer. Notify Madison Metro Transit a minimum of one week prior to closing a bus stop.

Wisconsin Lane Closure System Advance Notification (for STH 113 only)

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

Traffic Control Signs PCMS

Install Traffic Control Signs PCMS at the project ends to notify motorists of upcoming construction activities two weeks before the start of construction activities and one week prior to beginning each construction stage or prior to any detour. These timeframes may be adjusted by the engineer.

Coordinate the locations of Traffic Control Signs PCMS with the engineer. Obtain acceptance from the engineer for all messages for all Traffic Control Signs PCMS.

Advance Notification

Notify City of Madison first responders (police, fire, EMS), Dane County Sheriff's Department, engineer, City of Madison traffic engineering, Madison Metro Transit, Madison Metropolitan School District, garbage/recycling pick-up companies, and the post office two weeks in advance of all traffic switches, lane closures, road closures, and detours. Notifications should be confirmed with all parties one week before implementation. Parties shall also be notified if a closure is cancelled.

Notify Eric Heggelund, Wisconsin Department of Natural Resources Transportation Liaison at (608) 275-3301 a minimum of two working days prior to beginning construction.

Traffic Control Operations

This information is included to assist the contractor and its subcontractors; do not interpret this information as a demonstration of specified means and methods. Coordinate the schedule of operations for the construction staging as shown in the plans and as noted in these special provisions. Do not move operations within the proposed construction staging unless modifications to the staging and schedule are approved in writing by the engineer. Address traffic, construction, transit, and pedestrians with any proposed staging modifications provided to the engineer.

Stage 1A

Traffic

- East Johnson Street: Close the eastbound travel lanes to two travel lanes east of First Street (STH 113) using temporary single lane closures to allow for construction of temporary widening at the First Street (STH 113) intersection.
- North Baldwin Street: No closures. Maintain full access and existing traffic signal equipment/operations.
- Marston Avenue: No closures. Maintain full access.
- Dickinson Street: No closures. Maintain full access.
- Thornton Avenue: No closures. Maintain full access.
- Fordem Avenue: No closures. Maintain full access.
- First Street (STH 113): Close the northbound right-turn lane at the intersection with East Johnson Street to allow for construction of temporary widening at the First Street (STH 113) intersection. Provide temporary signals as shown in the plans. Close the northbound left-turn lane at East Mifflin Street and restrict southbound First Street (STH 113) to one travel lane using temporary single lane closures to allow for construction of temporary pavement in the First Street (STH 113) median.
- East Dayton Street: No closures. Maintain full access.
- East Mifflin Street: No closures. Maintain full access.

Construction

- Construct temporary widening at the East Johnson Street and First Street (STH 113) intersection.
- Construct temporary pavement in the median of First Street (STH 113).

Pedestrians

- Reroute pedestrians around the work zone for the temporary widening at the intersection of East Johnson Street and First Street (STH 113) using temporary pedestrian surface asphalt and temporary curb ramps as shown in the plans.
- Close crosswalks across the south and east approaches of the East Johnson Street and First Street (STH 113) intersection.
- Close crosswalk across the south approach of the First Street (STH 113) and East Mifflin Street intersection.
- Maintain existing accommodations and transit stops elsewhere as shown in the plans.

Stage 1B

Traffic

- East Johnson Street: Restrict the eastbound lanes and westbound lanes to one travel lane in each direction using temporary single lane closures to allow for construction of temporary pavement in the roadway median.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations. Provide temporary signal pole according to the article "Temporary Traffic Signal Pole East Johnson Street-Baldwin Street."
- Marston Avenue: Close the eastbound left-turn lane onto Marston Avenue. Restrict Marston Avenue to right-in/right-out to westbound East Johnson Street.
- Dickinson Street: Restrict to right-in/right-out to eastbound East Johnson Street.
- Thornton Avenue: No closures. Maintain full access.
- Fordem Avenue: No closures. Maintain full access. Provide temporary signals as shown in the plans.
- First Street (STH 113): No closures. Maintain full access. Provide temporary signals as shown in the plans.
- East Dayton Street: No closures. Maintain full access.
- East Mifflin Street: No closures. Maintain full access.
- STH 113: Restrict the eastbound lanes to two travel lanes and the westbound lanes to one travel lane using temporary single lane closures to allow for construction of permanent and temporary pavement in the roadway median.

Construction

- Construct temporary widening for the crossovers east of North Baldwin Street and east of First Street (STH 113) for use in later stages.
- Construct temporary pavement in the median of the Fordem Avenue intersection for use in later stages.
- Construct new left-turn lane concrete pavement along westbound STH 113 east of First Street (STH 113).
- Complete sawing concrete as shown in the plans to facilitate removals in later stages.

Pedestrians

- Maintain pedestrian access in the southwest quadrant of the intersection of East Johnson Street and First Street (STH 113) using temporary pedestrian surface asphalt and temporary curb ramps as shown in the plans.
- Reopen crosswalks across the south and east approaches of the East Johnson Street and First Street (STH 113) intersection.
- Reopen crosswalk across the south approach of the First Street (STH 113) and East Mifflin Street intersection.
- Maintain existing accommodations and transit stops elsewhere as shown in the plans.

Stage 2

Traffic

- East Johnson Street: Shift westbound East Johnson Street traffic to the eastbound travel lanes using the temporary widening/cross-overs constructed in the previous stages. Restrict East Johnson Street traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts and drums and provide turn lanes as shown in the plans.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations, except prohibit westbound to southbound left-turns. Provide temporary signal pole according to the article "Temporary Traffic Signal Pole East Johnson Street-Baldwin Street."

- Marston Avenue: Close Marston Avenue at East Johnson Street.
- Dickinson Street: Restrict to right-in/right-out to eastbound East Johnson Street.
- Thornton Avenue: No closures. Maintain full access.
- Fordem Avenue: Shift northbound Fordem Avenue traffic to the southbound travel lanes. Restrict Fordem Avenue traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts and provide turn lanes and temporary signals as shown in the plans.
- First Street (STH 113): Shift southbound First Street (STH 113) traffic to the northbound travel lanes using the temporary widening/cross-overs constructed in previous stages. Restrict First Street (STH 113) traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts and drums and provide turn lanes and temporary signals as shown in the plans.
- Provide two northbound travel lanes on First Street (STH 113), south of East Mifflin Street, to maintain the northbound dual-left turn lane operations from East Washington Avenue as shown in the plans.
- East Dayton Street: Restrict to right-in/right-out to northbound First Street (STH 113).
- East Mifflin Street: Restrict to right-in/right-out to northbound First Street (STH 113).
- STH 113: Restrict the eastbound lanes and westbound lanes to one travel lane in each direction using temporary single and dual lane closures.

Construction

- East Johnson Street: Construct westbound East Johnson Street, temporary widening, and all other associated roadway items as shown in the plans. Place only the lower layer of HMA pavement from the Fordem Avenue intersection to the west. For the sanitary lateral at Station 85+55 LT, connect the existing sanitary mainline and existing 6-inch lateral with a wye and construct the new 6-inch lateral to the southeast to the staging limits without connecting into the existing system. After new sanitary sewer is constructed, this wye will be excavated and removed in Stages 4A and 4B, the existing main abandoned, and the new 6-inch lateral tied into the existing. In the area of the wye, place asphaltic curb to avoid having to remove new curb and gutter in later stages.
- North Baldwin Street: No work. Maintain existing traffic signal equipment/operations. Provide temporary signal pole according to the article "Temporary Traffic Signal Pole East Johnson Street-Baldwin Street."
- Marston Avenue: No work. Maintain existing pavement.
- Dickinson Street: No work. Maintain existing pavement.
- Thornton Avenue: No work. Maintain existing pavement.
- Fordem Avenue: Construct the northbound pavement. Place only the lower layer of HMA pavement.
- First Street (STH 113): Construct southbound First Street (STH 113), temporary pavement, and all other associated roadway items as shown in the plans.
- East Dayton Street: No work. Maintain existing pavement.
- East Mifflin Street: No work. Maintain existing pavement.
- STH 113: Construct westbound STH 113 and all other associated roadway items as shown in the plans.
- Pedestrians
- Close crosswalks across East Johnson Street at the following intersections:
 - Marston Avenue.
 - Dickinson Street.
 - Thornton Avenue (underpass to remain open).
 - East Dayton Street.
 - First Street (STH 113); west approach.

- Close existing sidewalk along the north side of East Johnson Street from the Yahara River to First Street (STH 113).
- Close existing sidewalk along the west side of First Street (STH 113) from East Johnson Street to East Mifflin Street.
- Maintain access and transit stops elsewhere as shown in the plans. Maintain existing sidewalk for as long as possible.

Stage 2A

Traffic

Same as Stage 2 except for the following:

- Fordem Avenue: Restrict Fordem Avenue traffic to one southbound travel lane and provide temporary signals as shown in the plans. Detour northbound Fordem Avenue along East Johnson Street, STH 113, and Commercial Avenue as shown in the plans. Northbound Fordem Avenue may be closed for a maximum of 21 total calendar days to complete the work in Stages 2A and 2B.

Construction

Same as Stage 2 except for the following:

- Fordem Avenue: Construct the roadway median and associated temporary pavement and the inside southbound lane, and all other associated roadway items as shown in the plans. Place only the lower layer of HMA pavement.

Pedestrians

Same as Stage 2 except for the following:

- Close to pedestrian traffic sidewalk along the east side of Fordem Avenue.

Stage 2B

Traffic

Same as Stage 2 except for the following:

- Fordem Avenue: Shift southbound Fordem Avenue traffic to the pavement constructed in Stages 2 and 2A. Restrict Fordem Avenue traffic to one southbound travel lane and temporary signals as shown in the plans. Continue detour of northbound Fordem Avenue. Northbound Fordem Avenue may be closed for a maximum of 21 total calendar days to complete the work in Stages 2A and 2B.

Construction

Same as Stage 2 except for the following:

- Fordem Avenue: Construct the remaining pavement along the west side of Fordem Avenue, and all other associated roadway items as shown in the plans. Place only the lower layer of HMA pavement.

Pedestrians

Same as Stage 2A except for the following:

- Open to pedestrian traffic sidewalk along the north side of East Johnson Street between Fordem Avenue and First Street (STH 113).
- Close the existing sidewalk along the south side of East Johnson Street between the Yahara River Bike Path (located between the railroad tracks east of Fordem Avenue) and First Street (STH 113) to allow construction of temporary pavement in the southwest quadrant of the First Street (STH 113) intersection.
- Open sidewalk along the south side of East Johnson Street between the Yahara River Bike Path (located between the railroad tracks east of Fordem Avenue) and First Street (STH 113) upon completion of the temporary pavement in the southwest quadrant of the First Street (STH 113) intersection.

- Provide a crosswalk East Johnson Street on the west approach to the First Street (STH 113) intersection for bus stop access.
- Maintain access and transit stops elsewhere as shown in the plans. Maintain existing sidewalk for as long as possible.

Stage 3

Traffic (without Directional Detour)

- East Johnson Street: Shift East Johnson Street traffic to the westbound travel lanes and temporary widening constructed in Stage 2. Restrict East Johnson Street traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts and provide turn lanes as shown in the plans.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations.
- Marston Avenue: Restrict to right-in/right-out to westbound East Johnson Street.
- Dickinson Street: Close Dickinson Street at East Johnson Street.
- Thornton Avenue: No closures. Maintain full access.
- Fordem Avenue: Restrict Fordem Avenue traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts and provide turn lanes and temporary signals as shown in the plans.
- First Street (STH 113): Shift southbound First Street (STH 113) traffic to the southbound travel lanes constructed in Stage 2. Maintain northbound First Street (STH 113) traffic on the existing northbound travel lanes. Restrict First Street (STH 113) traffic to one travel lane southbound, to two travel lanes northbound separated by drums, and provide turn lanes and temporary signals as shown in the plans.
- East Dayton Street: Restrict to right-in/right-out to northbound First Street (STH 113).
- East Mifflin Street: No closures. Maintain full access.
- STH 113: Restrict the eastbound lanes and westbound lanes to one travel lane in each direction using temporary single and dual lane closures.
- Directional detours will not be allowed during special event or holiday weekends.

Construction

- East Johnson Street: Construct eastbound East Johnson Street, and all other associated roadway items as shown in the plans. Place only the lower layer of HMA pavement from the Fordem Avenue intersection to the west.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations.
- Marston Avenue: No work. Maintain existing pavement.
- Dickinson Street: Construct the entire roadway.
- Thornton Avenue: No work. Maintain existing pavement.
- Fordem Avenue: No work.
- First Street (STH 113): Construct the First Street (STH 113) median pavement and northbound left-turn lanes, and all other associated roadway items as shown in the plans.
- East Dayton Street: No work. Maintain existing pavement.
- East Mifflin Street: No work. Maintain existing pavement.
- STH 113: Construct eastbound STH 113 and all other associated roadway items as shown in the plans.

Pedestrians (Phase 1)

- Maintain closure of crosswalks across East Johnson Street at the following intersections:
 - Marston Avenue.
 - Dickinson Street.
 - Thornton Avenue (underpass to remain open).
 - East Dayton Street.
 - First Street (STH 113); west approach.
- Open new sidewalk along the north side of East Johnson Street between the carriage walk at approximately Station 90+25 LT and First Street (STH 113).
- Close existing sidewalk along the south side of East Johnson Street from North Baldwin Street to Thornton Avenue and from east of the Yahara River path east of Fordem Avenue to First Street (STH 113).
- Close the crosswalk across the south approach of the East Johnson Street and First Street (STH 113) intersection.
- Maintain existing sidewalk on the south side of East Johnson Street between Thornton Avenue and the Yahara River Path until Phase 2.
- Close existing sidewalk along Dickinson Street between Dayton Street and East Johnson Street.
- Maintain access and transit stops elsewhere as shown in the plans. Maintain existing sidewalk for as long as possible.

Pedestrians (Phase 2)

Same as Phase 1 except for the following:

- Shift pedestrians to sidewalk constructed in Stage 3 Phase 1 on the south side of East Johnson Street between from the Yahara River Path to First Street (STH 113).
- Close the sidewalk along south side of East Johnson Street between Thornton Avenue and the Yahara River Path.
- Reopen the crosswalk across the west approach of the East Johnson Street and First Street (STH 113) intersection.
- Reopen sidewalk along the west side of First Street (STH 113).
- Maintain access and transit stops elsewhere as shown in the plans. Maintain existing sidewalk for as long as possible.

Traffic (with Directional Detour-Eastbound East Johnson Street)

Same as Stage 3 (without directional detour) except for the following:

- East Johnson Street: Close to all traffic and detour eastbound East Johnson Street between North Baldwin Street and Fordem Avenue during weekends (Saturday and Sunday) for a maximum of three consecutive weekends to allow for forming and paving of concrete pavement adjacent to the westbound travel lanes over the Yahara River Bridge (P-13-728), installation of sanitary sewer and water main utilities from Baldwin Street to Marston Avenue, removal and restoration of temporary pavement in the East Johnson Street median between Baldwin Street and Marston Avenue for use during Stage 3 traffic, water main connection at Station 86+35, and storm sewer from Structure J-3.4 to Structure J-3.6. Restrict access accordingly at side roads as shown in the plans. Provide temporary signal pole according to the article "Temporary Traffic Signal Pole East Johnson Street-Baldwin Street."

Construction

Same as Stage 3 (without directional detour) except for the following:

- East Johnson Street: Form and construct the concrete pavement adjacent to the westbound travel lanes over the Yahara River Bridge (P-13-728), construct sanitary sewer and water main utilities from Baldwin Street to Marston Avenue, remove and restore temporary pavement used in previous stage in the East Johnson Street median between Baldwin Street and Marston Avenue, construct water main connection at Station 86+35, and construct storm sewer from Structure J-3.4 to Structure J-3.6. Provide temporary signal pole according to the article "Temporary Traffic Signal Pole East Johnson Street-Baldwin Street."

Stage 3A

Traffic

Same as Stage 3 except for the following:

- First Street (STH 113): Restrict northbound First Street (STH 113) north of East Mifflin Street to one travel lane. Provide two northbound travel lanes on First Street (STH 113), south of East Mifflin Street, to maintain the northbound dual-left turn lane operations from East Washington Avenue as shown in the plans.

Pedestrian Traffic

- Same as Stage 3.

Construction

Same as Stage 3 except for the following:

- First Street (STH 113): Continue construction activities as listed above in Stage 3. Also, construct temporary widening in the roadway median as shown in the plans and construct the remainder of the sanitary lateral at Station 13+40 FI and connect the lateral into the existing sanitary main as shown in the plans.

Stage 3B

Traffic

Same as Stage 3 except for the following:

- First Street (STH 113): Shift southbound First Street (STH 113) traffic to new and temporary pavement constructed in the previous stages as shown in the plans. Restrict First Street (STH 113) traffic to one travel lane southbound to the north of East Dayton Street, to two southbound travel lanes south of East Dayton Street, to two travel lanes northbound separated by drums, and provide turn lanes and temporary signals as shown in the plans.

Pedestrian Traffic

- Same as Stage 3.

Construction

Same as Stage 3 except for the following:

- First Street (STH 113): Construct pavement located on the western side of the First Street (STH 113) and East Johnson Street intersection as shown in the plans.

Stage 3C

Traffic

Same as Stage 3 except for the following:

- First Street (STH 113): Shift southbound First Street (STH 113) traffic to the new southbound travel lanes as shown in the plans. Shift northbound First Street (STH 113) traffic to the new and temporary pavement constructed in the previous stages as shown in the plans. Restrict First Street (STH 113) traffic to one travel lane southbound, to two travel lanes northbound separated by drums, and provide turn lanes and temporary signals as shown in the plans.

Pedestrian Traffic

- Same as Stage 3.

Construction

Same as Stage 3 except for the following:

- First Street (STH 113): Construct the southeast quadrant of the First Street (STH 113) and STH 113 intersection as shown in the plans.

Stage 3D

Traffic

Same as Stage 3 except for the following:

- First Street (STH 113): Southbound First Street (STH 113) traffic unchanged from Stage 3C. Shift the outside northbound First Street (STH 113) travel lane to existing and new pavement constructed in the previous stage as shown in the plans. Restrict First Street (STH 113) traffic to one travel lane southbound, to two travel lanes northbound separated by drums, and provide turn lanes and temporary signals as shown in the plans.

Pedestrian Traffic

- Same as Stage 3.

Construction

Same as Stage 3 except for the following:

- First Street (STH 113): Construct the remaining pavement located within the First Street (STH 113) and East Johnson Street intersection as shown in the plans.

Stage 4

Traffic

- East Johnson Street: Shift eastbound and westbound traffic back to their respective lanes. Close the inside/median eastbound and westbound travel lanes using temporary single lane closures to allow for removal of temporary pavements and construction operations in the roadway median as shown in the plans.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations.
- Marston Avenue: Restrict to right-in/right-out to westbound East Johnson Street.
- Dickinson Street: Restrict to right-in/right-out to eastbound East Johnson Street.
- Fordem Avenue: Shift northbound and southbound traffic back to their respective lanes. Restrict the northbound lanes and southbound lanes to one travel lane in each direction and stage traffic as shown in the plans to allow for removal of temporary pavements and construction operations in the roadway median as shown in the plans.
- First Street (STH 113): Shift northbound and southbound traffic back to their respective lanes. Close the inside/median northbound and southbound travel lanes using temporary single lane closure and maintain two travel lanes in the northbound direction and turn lanes as shown in the plans to allow for removal of temporary pavements and construction operations in the roadway median as shown in the plans.
- East Dayton Street: No closures. Maintain full access.
- East Mifflin Street: No closures. Maintain full access.
- STH 113: Close the inside/median eastbound and westbound travel lanes using temporary single lane closures to allow for removal of temporary pavements and construction operations in the roadway median as shown in the plans.
- Pedestrian Traffic

- Maintain closure of crosswalks across East Johnson Street at the following intersections:
 - Marston Avenue.
 - Dickinson Street.
 - Thornton Avenue (underpass to remain open).
- Open the crosswalks across First Street (STH 113) at the East Dayton Street and East Mifflin Street intersections.
- Open all sidewalk to pedestrians except along the north side of East Johnson Street between Thornton Avenue and the carriage walk at approximately Station 90+25 LT.
- Maintain access and transit stops elsewhere as shown in the plans.

Construction

- East Johnson Street: Construct the roadway median and median pavements not constructed in previous stages as shown in the plans. Place only the lower layer of HMA pavement.
- North Baldwin Street: No work.
- Marston Avenue: No work.
- Dickinson Street: No work.
- Fordem Avenue: Construct the roadway median as shown in the plans. Place only the lower layer of HMA pavement.
- First Street (STH 113): Construct the median immediately south of East Johnson Street as shown in the plans.
- East Dayton Street: No work.
- East Mifflin Street: No work.
- STH 113: Construct the roadway median as shown in the plans.

Stage 4A

Traffic

- East Johnson Street: Close the outside eastbound travel lane between Dickinson Street and Fordem Avenue and close the outside westbound travel lane east of Dickinson Street using temporary single lane closures to allow for construction operations as shown in the plans.
- North Baldwin Street: Maintain full access and existing traffic signal equipment/operations.
- Marston Avenue: No closures. Maintain full access.
- Dickinson Street: No closures. Maintain full access.
- Fordem Avenue: Close the outside southbound travel lane using temporary single lane closures to allow for construction operations as shown in the plans.
- First Street (STH 113): No closures. Maintain full access.
- East Dayton Street: No closures. Maintain full access.
- East Mifflin Street: No closures. Maintain full access.
- STH 113: Close the two outside westbound travel lanes using temporary dual lane closures to allow for construction operations as shown in the plans.

Pedestrian Traffic

Same as Stage 4 except for the following:

- Open the crosswalks across East Johnson Street at Marston Avenue, Dickinson Street and Thornton Avenue and the Madison Metro Transit stops at those locations.
- Close the crosswalk across East Johnson Street at the Fordem Avenue intersection.

Construction

- East Johnson Street: Construct curb and gutter, sidewalk, and remaining items not constructed in previous stages as shown in the plans along the north side of East Johnson Street between Thornton Avenue and Fordem Avenue. Also, excavate the wye connection installed in Stage 2 at approximately Station 85+55 LT. Remove the wye connection, plug both ends of the existing sanitary main, and connect the new 6-inch lateral placed in Stage 2 to the existing lateral and install the cleanout.
- North Baldwin Street: No work.
- Marston Avenue: No work.
- Dickinson Street: No work.
- Fordem Avenue: Construct curb and gutter, sidewalk, and remaining items not constructed in previous stages as shown in the plans along the west side of Fordem Avenue.
- First Street (STH 113): No work.
- East Dayton Street: No work.
- East Mifflin Street: No work.
- STH 113: No work.

Stage 4B

Traffic

Same as Stage 4A.

Pedestrian Traffic

All sidewalk, path, crosswalks, and Madison Metro Transit stops shall be open except for the following:

- Close the path underpass on the west side of the Yahara River.
- Close sidewalk along the south side of East Johnson Street between Thornton Avenue, and Fordem Avenue.
- Close the crosswalk across East Johnson Street at the Fordem Avenue intersection.
- Close the crosswalk across East Johnson Street at the east approach of the First Street (STH 113) intersection.

Construction

Same as Stage 4A except for the following:

- East Johnson Street: Construct curb and gutter, sidewalk, and remaining items not constructed in previous stages as shown in the plans along the south side of East Johnson Street between Thornton Avenue and Fordem Avenue including the Thornton Avenue cul-de-sac and the path connection from Thornton Avenue to East Johnson Street. Construct the bump-out along the westbound travel lanes at the First Street (STH 113) intersection.
- Fordem Avenue: No work.

Stage 5A (Placement of Upper Layer of HMA Pavement and Pavement Markings)

Traffic

Close to all traffic and detour eastbound East Johnson Street between North Baldwin Street and First Street (STH 113) for up to 3 consecutive calendar days. The 3 consecutive days may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM) to allow for placement of the upper layer of HMA pavement and final pavement marking. Restrict access accordingly at side roads as shown in the plans.

Closures will not be allowed during special event or holiday weekends and must adhere to the requirements of the "Public Convenience and Safety" article. Stage 5A will not be allowed to occur concurrent with Stage 5B.

Pedestrian Traffic

All sidewalk, path, crosswalks, and Madison Metro Transit stops shall be open except during paving and pavement marking operations. Minimize the duration of crosswalk closures.

Construction

Construct the upper layer of HMA pavement and final pavement markings.

Stage 5B (Placement of Upper Layer of HMA Pavement and Pavement Markings)

Traffic

Close to all traffic and detour westbound East Johnson Street between North Baldwin Street and First Street (STH 113) and southbound Fordem Avenue for up to 3 consecutive calendar days. The 3 consecutive days may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM) to allow for placement of the upper layer of HMA pavement and final pavement marking. Restrict access accordingly at side roads as shown in the plans.

Closures will not be allowed during special event or holiday weekends and must adhere to the requirements of the "Public Convenience and Safety" article. Stage 5B will not be allowed to occur concurrent with Stage 5A.

Pedestrian Traffic

All sidewalk, path, crosswalks, and Madison Metro Transit stops shall be open except during paving and pavement marking operations. Minimize the duration of crosswalk closures.

Construction

Construct the upper layer of HMA pavement and final pavement markings.

5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying East Johnson Street or STH 113 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:

- University of Wisconsin-Madison Graduation, all day Sunday, May 12, 2019;
- From noon Friday, May 24, 2019 to 6:00 AM Tuesday, May 28, 2019 for Memorial Day;
- Shake the Lake, all day, 2019 date pending;
- From noon Wednesday, July 3, 2019 to 6:00 AM Friday, July 5, 2019 for Independence Day;
- Downtown apartment move in dates, all day Thursday August 15, 2019 and Friday August 16, 2019;
- Concerts on the Square, starting at 3:00 PM, 2019 dates pending;
- From noon Friday, August 30, 2019 to 6:00 AM Tuesday, September 3, 2019 for Labor Day;
- Wisconsin Badger home football games, all day, September 7, 21, and 28, 2019, October 5 and 12, 2019, and November 9, 2019;
- Freakfest, all day, date pending.
- Halloween, from 3:00 PM to 12:00 AM, Thursday, October 31, 2019.

stp-107-005 (20050502)

6. Utilities.

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

stp-107-066 (20080501)

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 10 to 12 working days in advance of when the prior work will be completed, and the site will be available to the utility owner. Follow-up with a confirmation notice to the engineer and the utility owner 3 to 5 working days before the site will be ready for the utility owner to begin its work.

Additional detailed information regarding the location of the relocated utility facilities is available on the permits issued to the utility companies.

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

Prospective bidders are cautioned that the arrangements set forth in this article represent the utility companies' best estimate of their plans to relocate and/or adjust conflicting facilities.

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

Known utilities in the project area are as follows and station locations are approximate locations:

All utilities within the construction limits of Project ID's 5992-09-15 and 5992-09-16 were coordinated under project ID 5992-09-14.

American Transmission Company (ATC) - Electric

General ATC Utility Description:

ATC underground 69 kV electric facilities consist of an energized 8-inch pipe which crosses East Johnson Street diagonally at Station 99+00. This pipe is about 30 feet deep at the crossing.

The second ATC 8-inch pipe is a spare (not energized) pipe on the south side of First Street crossing East Johnson Street diagonally at approximately Station 100+00. This spare pipe is also 30 feet deep at the crossing.

ATC Plans to Address Identified Conflicts:

No conflicts are anticipated.

American Transmission Company (ATC) -Communications

General ATC Utility Description:

Buried fiber optic lines are located in the same trench as ATC underground electric facilities crossing East Johnson Street diagonally at Station 99+00.

ATC Plans to Address Identified Conflicts:

No conflicts are anticipated. Keep ATC informed of the construction schedule. At a minimum, contact Mart Aldrich a minimum of 7 days prior to beginning work over the ATC communication facilities.

AT&T Wisconsin - Communications

General AT&T Wisconsin Utility Description:

AT&T Wisconsin has numerous telephone and fiber optic lines along the project corridor. Buried fiber-optic cable is present along south side of East Johnson Street from the Yahara River to First Street. The buried fiber-optic crosses East Johnson Street at Fordem Avenue. Buried copper cable is also present along the median of East Johnson Street from Fordem Avenue to the First Street intersection. Both aerial (attached to Madison Gas & Electric poles) and buried copper are present along the west and east sides of First Street.

AT&T Wisconsin Plans to Address Identified Conflicts:

AT&T will install a new handhole at the southeast corner of North Baldwin Street and East Johnson Street (Station 75+35, 64' RT) for future capacity. Proposed Two (2) 4-inch conduits will be installed in the terrace of East Johnson Street from this handhole at Station 75+35 heading to the east to approximately Station 88+00, where the duct will turn southeast and run along Thornton Avenue and tie into the existing AT&T handhole F220 (Station 11+53 YP, 50' RT). Ducts will be installed at an average depth of 3 to 4 feet at an average distance of 5 feet behind the proposed back of curb, with the exception of approximately Station 81+25, where the ducts will go above the pipe running between storm sewer Structures J-3.2 and J-3.3. These ducts will lay in a 1x2 configuration. This work will be completed prior to construction.

The existing AT&T handhole (HH 1701) at approximately Station 90+50, 43' RT will not conflict with the proposed roadway construction but will be located in the proposed bike path. This handhole will be adjusted to finished grade during construction.

At approximately Station 94+08, 59' RT, the existing AT&T manhole (HH 1801) will be adjusted to finished grade. The manhole is currently in the existing sidewalk and will need to be adjusted to the finished grade of the path during construction.

Between existing AT&T Handhole 1701 (approximately Station 90+50, 43' RT) and existing AT&T Handhole 1801 (approximately Station 94+08, 59' RT), proposed two (2) 4-inch conduits will be installed for future capacity. Proposed ducts will be installed with 2-3 feet of separation from the existing AT&T underground facilities, approximately nine (9) feet behind the existing back of curb. These ducts will lay in a 1x2 configuration. This work will be completed prior to construction.

Existing AT&T underground facility crosses diagonally underneath East Johnson Street between Stations 94+25 and 96+00, 47' RT to 75' LT. In order to accommodate proposed pipe between storm sewer structure J-10.4 and the existing storm sewer pipe on the west side of Fordem Avenue, this duct will be exposed and raised above the proposed drainage pipe to an elevation of 849.00. This work will be completed during roadway construction and will require approximately two weeks of work by the AT&T contractor. This existing AT&T facility is not in conflict with proposed water main.

Existing AT&T fiber running from the existing AT&T manhole at Station 94+25, 51' RT will not need to be relocated, as it does not conflict with the proposed storm sewer or water main. The fiber runs between the existing AT&T manhole to beyond the project limits at approximately Station 96+00, 70' LT.

Existing AT&T 1800 cable running below Fordem Avenue and East Johnson Street will be discontinued in place. This cable will be replaced with a 600 pair cable. This new cable will be directionally bored between the existing AT&T facilities along the west side of Fordem Avenue (approximately Station 12+50 FO, 53' LT) to the existing AT&T manhole at the intersection of East Washington Ave and First Avenue outside of the roadway project limits. This bore will run down the west side of Fordem Avenue, continue underneath East Johnson Street to existing AT&T Handhole 1801. From Existing Handhole 1801, the proposed 600 pair cable will travel along the south side of East Johnson Street between Stations 94+00 and approximately Station 100+50. The cable will then turn south and run to the existing AT&T manhole at the intersection of East Washington Street and First Street. The cable will not enter the existing AT&T manhole at the southeast corner of East Johnson Street and First Street. This bore will provide a minimum of two (2) feet from all proposed facilities. There will also be an additional proposed 4-inch conduit installed along this path between Existing Handhole 1801 and the existing manhole at the intersection of First Street and East Washington Street for future capacity. AT&T plans to relocate jointly with MGE Electric between existing AT&T Handhole 1801 (Station 94+00) and existing AT&T Handhole 1847 (Station 97+00) to the southwest corner of First Street and East Johnson Street (approximately Station 99+50). This work will be completed prior to construction.

Existing AT&T handhole at approximately Station 98+52, 42' LT will need to be adjusted in place during construction to accommodate the finished grade. Underground facilities will not need to be relocated.

Existing AT&T handhole at approximately Station 97+22, 63' RT will need to be adjusted in place during construction to accommodate the finished grade. Underground facilities will not need to be relocated.

Along the east side of First Street, AT&T has aerial lines running between Stations 11+00 FI and 16+00 FI. These aerial facilities are currently attached to power poles. These lines will need to be transferred to the proposed power pole locations after the poles have been relocated to accommodate proposed construction. This work will be completed prior to construction and is dependent on MGE Electric completing their pole relocations. The transfer of these lines for this location will require approximately four weeks of work by the AT&T contractor after MGE Electric completes their pole relocations.

At Station 10+92 FI, 58' LT, an existing AT&T one-duct is in conflict with proposed structure J-20.5. This facility will be exposed and adjusted during construction to avoid conflicts with structure installation. Depth of existing facility will be maintained.

Along the west side of First Street, AT&T will be completing pole transfers to proposed MG&E pole locations. This work will be completed prior to construction and is dependent on MGE Electric completing their pole relocations. The pole transfers for this location will require approximately four weeks of work by the AT&T contractor after MGE Electric completes their pole relocations.

Invite AT&T and their contractor to project meetings to coordinate their work during construction. AT&T requires at least two weeks of notice to schedule their work during construction. During construction, AT&T will complete frame and cover adjustments on the existing AT&T manholes and handholes that are not being relocated in order to adjust the lid to finished grade. Each frame/cover adjustment location will require approximately one day of work by the AT&T contractor. Also, facilities will be exposed and adjusted during construction to avoid conflicts with storm sewer structure J-20.5. The adjustment for this location will require approximately two (2) days of work by the AT&T contractor.

AT&T Transmission - Communications

General AT&T Utility Description:

AT&T Transmission has buried fiber optic cable in a 6 duct package crossing East Johnson Street at about Station 89+66 at a depth of approximately 200-inches and a crossing of East Johnson Street at about Station 98+62 in steel pile at a depth of approximately 60 inches.

AT&T Transmission Plans to Address Identified Conflicts:

No conflicts are anticipated. Contact Todd Norman at 608-556-7199 a minimum of 7 days prior to sanitary sewer and water main construction at the AT&T facility crossings so an AT&T representative can be on site during the sanitary sewer and water main construction.

CenturyLink - Communications

General CenturyLink Utility Description:

NOTE: CenturyLink includes utilities formerly known as Level 3 Communications, KMC Telecom, and LightCore.

CenturyLink has numerous fiber optic lines along the project corridor. Buried fiber-optic cable is present along south side of East Johnson Street from Baldwin Street to Fordem Avenue where it crosses East Johnson Street at two separate locations and runs to the north along the east side of Fordem Avenue to outside the project limits and also east along the north side of East Johnson Street to First Street where they proceed north outside the project limits.

Buried fiber optic lines are also present in MGE conduit in the East Johnson Street median from Fordem Avenue to First Street. At First Street buried fiber optic crosses East Johnson Street to the north.

CenturyLink Plans to Address Identified Conflicts:

Existing CenturyLink fiber in two 1.5-inch conduits running along the southern sidewalk of East Johnson Street from the east project limits to the existing manhole at Station 94+19, 50' RT has depth ranging from 48- to 60-inches. This fiber is not in conflict with construction. The existing manholes at Station 82+08, 41' RT and Station 94+19, 50' RT will be adjusted to finished sidewalk grade during construction. Provide CenturyLink at least two weeks of notice to schedule their work during construction. The adjustment for each manhole location will require approximately one day of work by the CenturyLink contractor.

Existing CenturyLink fiber in two 1.5-inch conduits crosses diagonally underneath East Johnson Street between Stations 94+50 and 95+50. This crossing will be reconstructed three 1.5-inch conduits paralleling the existing crossing about 18-inches to the west at an elevation of 850 feet. The existing crossing consisting of two 1.5-inch conduits will be discontinued in place. This work will be completed prior to roadway construction.

Existing CenturyLink fiber in two 1.5-inch conduits crosses diagonally underneath East Johnson Street between Stations 94+50 and 96+00. This crossing will be reconstructed two 1.5-inch conduits paralleling the existing crossing to the west at an elevation of 850 feet. The new crossing will tie into a new manhole at Station 96+10, 50' LT where it will tie-in to existing conduit along the north side of East Johnson Street. The existing crossing consisting of two 1.5-inch conduits will be discontinued in place. This work will be completed prior to roadway construction.

Existing CenturyLink fiber is present within existing MG&E electric conduit along East Johnson Street. This fiber exits the MG&E conduit at an existing MG&E manhole at Station 99+47, 30' RT where it continues northerly to an existing Rogers Telecom handhole outside the project limits. This fiber is not in use and will be discontinued prior to construction.

Charter Communications - Communications

General Charter Communications Utility Description:

Charter has aerial facilities on MGE poles along the south side of East Johnson Street west of the Yahara River. Charter has buried fiber optic crossing East Johnson Street in 2-inch orange conduit at about Station 89+80 that is approximately 10 feet below existing ground. Charter has aerial facilities on MGE poles the west side of First Street from East Johnson Street to the south with an overhead crossing of First Street at East Dayton Street.

Charter Communications Plans to Address Identified Conflicts:

Charter will relocate their existing aerial facilities attached to MGE poles at about Station 77+95 RT and Station 81+30 RT to the locations discussed in the MGE Electric Plans to Address Identified Conflicts section of these special provisions.

Charter will relocate their existing underground facilities along First Street from Mifflin Street to the west and their existing aerial facilities attached to MGE poles on the west side of First Street to the existing MGE poles on the east side of First Street and cross First Street to the MGE proposed poles discussed in the MGE Electric Plans to Address Identified Conflicts section of these special provisions.

No conflicts are anticipated with the buried crossing of East Johnson Street at about Station 89+80.

Charter plans to relocate their facilities prior to construction.

City of Madison - Communications

General City of Madison Utility Description:

City of Madison has fiber optic lines along the project corridor. Buried fiber-optic cable is present along north side of East Johnson Street from about 250 feet west of the Yahara River to about 200 feet east of the Yahara River where the buried fiber-optic crosses inbound East Johnson Street and continues down the roadway median to Fordem Avenue. From Fordem Avenue to First Street buried fiber optic is present along the south side of East Johnson Street. At First Street buried fiber optic continues east along STH 113 down the roadway median and continues south along First Street along the west side of the roadway.

City of Madison Plans to Address Identified Conflicts:

The City of Madison will temporarily relocate existing underground fiber facilities overhead to MG&E Electric poles on the east side of First Street and overhead onto existing City owned streetlight poles along the south side of East Johnson Street east of First Street or onto temporary wood poles as needed to avoid conflicts. The relocation work for the fiber facilities will be completed prior to construction. Existing fiber/conduit west of First Street will be discontinued in place.

City of Madison - Sanitary Sewer

General City of Madison Utility Description:

The City of Madison has sanitary sewer along the north and south side of East Johnson Street from the Yahara River to the west. Sanitary sewer also runs along the east side of First Street.

City of Madison Plans to Address Identified Conflicts:

City of Madison (Sanitary Sewer) will be adjusted according to the plans. This work will be done as part of project 5992-09-16.

Madison Gas & Electric - Electric

Madison Gas & Electric (Electric)(MGE) Utility Description:

Overhead facilities are located along the south side of East Johnson Street west of the Yahara River with multiple crossings of East Johnson Street. Overhead facilities along the west and east sides of First Street from East Johnson Street to the south.

Underground electric along the south side of East Johnson Street from the Yahara River to Fordem Avenue. From Fordem Avenue to the east underground electric continues in the median of East Johnson Street to east of the project limits. At the intersection of First Street underground electric crosses East Johnson Street and continues south along the west side of First Street to the project limits.

Underground electric crosses East Johnson Street at the Fordem Avenue intersection and continues to the north along the west side of Fordem Avenue. Underground electric also First Street at the East Mifflin Street intersection.

MGE (Electric) Plans to Address Identified Conflicts:

The existing power pole at about Station 77+95 RT will be shifted 10 feet to the east. The existing power pole at about Station 81+30 RT will be moved to the west and north into the terrace.

The existing power poles on the west side of First Street will be removed and new poles will be placed with sidewalk guys at about Station 11+20 FI 40 feet RT, Station 13+46 FI 31 feet RT, Station 14+76 FI 31 feet RT and Station 11+20 FI 59 feet LT.

The existing underground facilities crossing East Johnson Street at about Station 99+65 and continuing to the existing power pole on First Street at about Station 12+24 FI will be discontinued in place.

The existing underground facilities in concrete encased conduit on the west side of First Street from about Station 11+12 FI to Station 12+50 FI and crossing East Johnson Street at about Station 99+35 will be discontinued in place. New conduit is proposed under the proposed sidewalk from about Station 11+12 FI to 12+50 FI and cross East Johnson Street at approximately Station 99+50. The top of the concrete encased conduit is anticipated to be three feet below finished ground. Conduit package is anticipated to be either 9 or 12 ducts. A new switch gear will be placed behind the proposed sidewalk on First Street at about Station 11+05. MGE Electric will complete this relocation work during construction. Coordinate roadway construction with MGE Electric to accommodate their conduit installation.

New 2-inch plastic gas main is proposed jointly with MGE Gas along the west side of First street under the proposed sidewalk from about Station 14+00 FI to about Station 16+25 FI.

MGE Electric anticipates relocation work for the overhead facilities will begin in November 2018 and take approximately 20 days to complete and work for the underground facilities is anticipated to begin in March 2019 and will take approximately 25 days to complete.

Contact Rich Parker a minimum of 7 days prior to the need to have an existing power pole held.

Contact Mark Bohm a minimum of 7 days prior to the need for manholes adjustments. Each manhole adjustment is anticipated to require half a working day to complete. Finished grades will need to be provided to MGE.

Madison Gas & Electric - Gas

Madison Gas & Electric (MGE) Utility Description:

Natural gas facilities are located in the following areas:

- Along the south side of East Johnson Street west of the Yahara River with crossings at Baldwin Street, Marston Avenue and to the Tenney Park pavilion.
- Along the north side of East Johnson Street between the Yahara River and Fordem Avenue.
- Along the north side of STH 113 east of First Street.
- Along both sides of First Street with a crossing at East Johnson Street.

High pressure gas main crosses East Johnson Street at about Station 99+50.

MGE Relocation Plans to Address Identified Conflicts:

The existing 6-inch steel distribution gas main along the west side of First Street from about Mifflin Street to East Johnson Street including the crossing of East Johnson Street at about Station 99+80 will be discontinued in place.

New 6-inch plastic gas main is proposed crossing East Johnson Street at approximately Station 100+05. The new gas main will continue approximately 4 feet left of the First Street reference line to Station 13+00 FI where it will turn 90 degrees and proceed to the new westerly sidewalk along First Street. The new gas main will then proceed south under the western sidewalk to Station 16+20 FI where the facility will connect to existing gas main in the median of First Street.

The existing 12-inch high-pressure gas main crossing East Johnson Street diagonally at about Station 99+50 will be discontinued in place.

New 12-inch high-pressure gas main will connect to existing under the proposed sidewalk along the south side of East Johnson Street at about Station 99+45. From this location new high-pressure main will continue northeasterly under the proposed sidewalk to the south side of the East Johnson Street and First Street intersection at about Station 100+04. The high-pressure gas main will then cross East Johnson Street in a joint trench with the new 6-inch distribution gas main and connect to the existing high-pressure gas main under the northern sidewalk of East Johnson Street at about Station 100+04.

MGE Gas will relocate the existing gas service crossing East Johnson Street at Station 85+50 to avoid conflicts with proposed storm sewer.

MGE Gas will relocate the existing gas main on the south side of East Johnson Street at about Station 82+00 around the proposed light pole base.

MGE Gas anticipates no conflicts with the existing 6-inch steel gas main and proposed signal poles at Station 100+00 LT, 100+50 LT, and 100+90 LT. ULO's are included in the contract for these locations. If a conflict is discovered MGE will relocate as needed.

MGE Gas will complete their relocation work during construction. Coordinate roadway construction with MGE Gas to accommodate their gas main installation. Provide MGE Gas 3 weeks advance notice prior to when the site will be available for their crews to perform their work. At a minimum the existing concrete pavement needs to be removed and traffic control in place before MGE Gas can begin their work. MGE Gas anticipates it will take about 3 weeks to complete the 12-inch high pressure work and about 2 weeks to complete the 6-inch distribution main work.

Proposed depths of new gas main under the proposed roadway and sidewalk surfaces will vary from 36- to 48-inches. MGE Gas will offset new gas main around existing or proposed utilities.

Existing facilities that will be discontinued in place are in conflict with construction and may be asbestos wrapped. Contact MGE Gas when existing facilities discontinued in place are exposed. MGE will determine if asbestos is present and will properly dispose of any asbestos. MGE Gas will require up to 3 days to remove and dispose of the asbestos depending on the amount of pipe exposed and in conflict with the given stage of construction.

Madison Metropolitan Sewerage District (MMSD) -Sanitary Sewer

General MMSD Utility Description:

MMSD has multiple sanitary sewer crossings of East Johnson Street at the First Street intersection. Sanitary sewer also runs along the STH 113 median from the First Street intersection to the east.

MMSD Plans to Address Identified Conflicts:

MMSD will be adjusted according to the plans. This work will be done as part of project 5922-09-14.

MMSD will provide new manhole castings (if required) and rubber adjustment rings for the top ring in roadways. Contact Ray Schneider a minimum of 3 days in advance of manhole adjustment/reconstruction work to obtain these materials.

Madison Water Utility - Water

General Madison Water Utility Description:

The Madison Water Utility has water main along East Johnson Street and First Street for the entire project length.

Madison Water Utility Plans to Address Identified Conflicts:

Madison Water Utility (Water) will be adjusted according to the plans. This work will be done as part of project 5992-09-15.

Midwest Fiber Networks - Communications

General Midwest Fiber Networks Utility Description:

Midwest Fiber Networks has buried fiber-optic cable crossing East Johnson Street at Station 99+80. This buried fiber-optic cable continues along west side of First Street to East Dayton Street where it enters an aerial US Signal splice case and runs jointly with US Signal aerial facilities.

Midwest Fiber Networks Plans to Address Identified Conflicts:

Existing underground facilities crossing East Johnson Street and along the west side of First Street will be removed and the conduit will be discontinued in place. Beginning at the existing Windstream handhole at Station 99+70 50' LT, Midwest Fiber Networks will joint directionally drill with Windstream new conduit under existing sidewalk to Station 100+55 50' LT. This new conduit will be at a minimum depth of 4 feet. At Station 100+55 50' LT the joint directional drill with Windstream will cross East Johnson Street to Station 100+55 125' RT/Station 11+25 55' LT. This new crossing will be installed at a depth of approximately 12 feet. From this location new overhead facilities will be installed jointly with Windstream on new MG&E Electric poles along the east side of First Street to Station 13+45 55' LT where they will over lash to a US Signal splice case.

Midwest Fiber Networks anticipates relocation work for their facilities will begin in the fall of 2018 and take approximately 45 days to complete.

Rogers Telecom - Communications

General Rogers Telecom Utility Description:

Rogers Telecom has buried fiber optic lines crossing East Johnson Street diagonally at about Station 96+60 and then running along the north side of East Johnson Street to First Street where they proceed north outside the project limits.

Rogers Telecom Plans to Address Identified Conflicts:

Rogers Telecom will directional bore new fiber from Station 99+95 LT to Station 97+50 LT along the north side of East Johnson Street at or beyond the proposed back of sidewalk. Rogers Telecom will directional bore diagonally across East Johnson Street at Station 97+25 parallel to the railroad line and continue boring along the railroad line outside of the projects limits to 4th Street. The depth of the crossing at East Johnson Street will be 15 feet.

Rogers Telecom plans to relocate their facilities prior to construction.

Sprint - Communications

General Sprint Utility Description:

Sprint has a buried fiber optic cable crossing East Johnson Street at about Station 96+90.

Sprint Plans to Address Identified Conflicts:

No conflicts are anticipated. Contact Patrick Berry a minimum of 7 days prior to construction over Sprint's facilities so a watchdog can be present.

US Signal - Communications

General US Signal Utility Description:

US Signal has underground fiber-optic along the west side of First Street to a pole south of East Dayton Street. From this riser pole US Signal has aerial fiber-optic cable along the west side of First Street to the East Dayton Street intersection. At East Dayton Street the aerial fiber-optic crosses First Street and continues east along the south side of East Dayton Street beyond the project limits.

US Signal Plans to Address Identified Conflicts:

US Signal plans to relocate their facilities to outside the limits of construction.

Beginning about 65 feet southeast of East Mifflin Street on First Street US Signal will intercept existing underground fiber optic and place a new hand-hole. US Signal will directional bore across North First Street to the northeast side of the road and continue down to East Dayton Street and then turn east along the south side of East Dayton Street to the second power pole. At this pole they will riser back up to their original aerial lead. The new underground described above will be approximately 630 feet in total.

US Signal plans to relocate their facilities prior to construction.

Verizon - Communications

General Verizon Utility Description:

Verizon has buried fiber-optic cable crossing East Johnson Street at Station 95+70. The existing facility is anticipated to be approximately 5 feet below existing ground in 4-inch pipe.

Verizon Plans to Address Identified Conflicts:

No conflicts are anticipated.

Windstream - Communications

General Windstream Utility Description:

Windstream has buried fiber-optic cable crossing East Johnson Street at Station 99+80. This buried fiber-optic cable continues along west side of First Street to East Dayton Street where it enters an aerial US Signal splice case and runs jointly with US Signal aerial facilities.

Windstream Plans to Address Identified Conflicts:

Existing underground facilities crossing East Johnson Street and along the west side of First Street will be removed and the conduit will be discontinued in place. Beginning at the existing Windstream handhole at Station 99+70 50' LT, Windstream will joint directionally drill with Midwest Fiber Networks new conduit under existing sidewalk to Station 100+55 50' LT. This new conduit will be at a minimum depth of 4 feet. At Station 100+55 50' LT the joint directional drill with Midwest Fiber Networks will cross East Johnson Street to Station 100+55 125' RT/Station 11+25 55' LT. This new crossing will be installed at a depth of approximately 12 feet. From this location new overhead facilities will be installed jointly with Midwest Fiber Networks on new MG&E Electric poles along the east side of First Street to Station 13+45 55' LT where they will over lash to a US Signal splice case.

Windstream anticipates relocation work for their facilities will begin in the fall of 2018 and take approximately 45 days to complete.

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

Both the department and City of Madison personnel will inspect construction of sanitary sewer and water main under this contract. However, testing of the sanitary sewer will be by the contractor and acceptance will be by the City of Madison. Testing and acceptance of the water main will be by the Madison Water Utility.

8. Referenced Construction Specifications.

Construct the work enumerated below conforming to the City of Madison Standard Specifications for Public Works Construction-Latest Edition (City Standard Specifications). If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

Water Main—All work required in Project 5992-09-15

Sanitary Sewer—All work required in Project 5992-09-16

stp-105-002 (20130615)

9. Notice to Contractor - Railroad Work During Construction and Additional Notification Requirements

The information contained within this article outlines the various work that will be completed by Wisconsin & Southern Railroad (WSOR) and/or its contractor during the project and the resulting notification and working times required.

Provide a minimum of two weeks notification in advance of when WSOR and C.D.L. Electric (CDL) can begin their work, in advance of any traffic shift, and in advance of any construction stage to:

- Roger Schaalma, WSOR, (608) 620-2044
- Brent Marsh, WSOR, (414) 750-6433
- Mark Smallwood, C.D.L. Electric, (502) 618-2165.

Invite the above contacts to the preconstruction meeting and progress meetings during construction.

WSOR has underground railroad signal cable and conduit serving the railroad gates and signals at both tracks crossings of East Johnson Street between Fordem Avenue and First Street.

NOTE: WSOR must be contacted directly to have these facilities marked as they are not marked as part of a Digger's Hotline request. Contact Chris Roland with CDL Electric (414) 737-8974, chris.roland@cdl-electric.com, a minimum of 72 hours in advance of needing WSOR's facilities marked.

Conflicts are not anticipated with WSOR's underground conduit. Work around WSOR's existing conduit. ULOs are included with this contract to identify the depth of the existing conduit. Complete these ULO's as early as possible so conflicts can be avoided. If an unavoidable conflict is discovered notify WSOR immediately. WSOR will need adequate notice and approximately 2 working days to relocate each conduit location that is in conflict.

WSOR and/or C.D.L. Electric will require one week to complete the necessary work for each stage of construction as summarized below. Prior to construction contact WSOR to confirm the anticipated work below.

The following summarize the work anticipated to be performed by WSOR and/or CDL during construction:

- Railroad Work Required During Stage 1B
- WSOR will install temporary gates in the median of East Johnson Street for use in Stages 2 and 3.
- WSOR will adjust existing gate arm lengths as needed prior to switching traffic to Stage 2 and deactivate existing gates not needed for Stage 2 operations.
- Railroad Work Required During Stage 2.
- WSOR will relocate the existing inbound median gate to its final location.

- WSOR will adjust gate arm lengths as need prior to switching traffic to Stage 3.
- WSOR will be performing work on their property to match the proposed, widened access along East Johnson Street at Station 97+95 LT. Complete work on this access to relocate it to its proposed location and width as early in Stage 2 as practical so WSOR can complete their on-site work.
- Railroad Work Required During Stage 3.
- WSOR will adjust gate arm lengths as needed prior to switching traffic to Stage 4.
- WSOR will deactivate temporary gates and reactivate gates as needed for Stage 4 operations.
- Railroad Work Required During Stage 4.
- WSOR will remove the temporary median gates installed in Stage 1B.

The following summarize work anticipated to be performed prior to construction by WSOR and/or CDL:

- WSOR will extend the concrete crossing surface along the south side of East Johnson Street.
- WSOR will install the concrete bases and conduit for the temporary gates in the median of East Johnson Street.

Railroad Flagging Notification Requirements - Submit a flagging request form to WSOR a minimum of 48 hours in advance of needing flagging. WSOR contact for flagging is Chris Jacobson, (414) 750-6427.

10. Railroad Insurance and Coordination - Wisconsin and Southern Railroad Company.

A Description

Comply with standard spec 107.17 for all work affecting Wisconsin and Southern Railroad Company property and any existing tracks.

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Amanda Haggerty, Office Administrator; 1890 E Johnson Street, Madison, WI 53704; Telephone (608) 620-2048; E-mail: ahaggerty@watcocompanies.com.

Also send a copy to the following: Teri Beckman, SW Region Railroad Coordinator; 2101 Wright Street, Madison, WI 53704; Telephone (608) 516-6512; E-mail: teri.beckman@dot.wi.gov.

Include the following information on the insurance document:

- Project ID: 5992-09-09
- Project Location: Madison, Wisconsin
- Route Name: East Johnson Street, Dane County
- Crossing ID: 178052L
- Railroad Subdivision: Reedsburg Subdivision
- Railroad Milepost: 139.9
- Work Performed: Pavement removal, grading, base aggregate dense, HMA pavement, asphaltic surface, concrete curb and gutter, concrete sidewalk, signals and lighting, water main, storm sewer, marking, signing, traffic control, erosion control, and finishing items.

A.2 Train Operation

Approximately 6 through freight trains operate daily at up to 10 mph. Approximately 10 switching trains per day.

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

Construction Contact

Roger Schaalma, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co.; 1890 East Johnson Street, Madison, WI 53704; Telephone (608) 620-2044; E-mail rschaalma@watcocompanies.com for consultation on railroad requirements during construction.

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

Flagging Contact

See Construction Contact. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Cable Locate Contact

In addition to contacting Diggers Hotline, contact Amanda Haggerty, Office Administrator; Telephone (608) 620-2048; E-mail ahaggerty@watcocompanies.com at least five working days before the locate is needed. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

WSOR will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

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

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

A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

B Railroad Flagging

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

The following conditions may also warrant flagging:

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

Projects with concurrent activity may require more than one flagger.

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

The department and railroad will monitor operations for compliance with the above flagging requirements. Violations may result in removal from railroad property until arrangements to adhere to the flagging requirements are satisfied. If the railroad imposes additional flagging requirements beyond the above flagging requirements due to the previous violations, the contractor shall bear all costs of the additional flagging requirements.

C Flagging by Railroad– Railroad Does Not Pay Flagging Costs

C.1 General

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

Comply with the railroad's rules and regulations regarding operations on railroad right-of-way. If the railroad's chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Bear the cost of these services and

make payment directly to the railroad. Notify the appropriate railroad representative as listed in section A.3 above, in writing, at least 40 business days before starting work near a track. Provide the specific time planned to start the operations.

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

C.2 Rates - Wisconsin and Southern Railroad Company

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

- \$95 per hour for up to nine-hours at the work-site per day (including wages, labor surcharges, meals, lodging, vehicle and mileage expenses),
- \$140 per hour for all hours over nine in any week-day (including wages, labor surcharges, meals, lodging, vehicle and mileage expenses),
- \$190 per hour for up to nine hours at the work-site on Saturdays (including wages, labor surcharges, meals, lodging, vehicle and mileage expenses),
- \$190 per hour for all hours over nine on Saturdays (including wages, labor surcharges, meal, lodging, vehicle and mileage expenses).
- \$190 per hour for up to nine hours on Sundays or holidays (including wages, labor surcharges, meal, lodging, vehicle and mileage expenses).

C.2 Reimbursement Provisions

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

C.3 Excluded Conditions

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

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

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

C.4 Payment for Flagging

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

ITEM NUMBER	DESCRIPTION	UNIT
801.0117	Railroad Flagging Reimbursement	DOL

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

Railroads may issue progressive invoices. Notify the railroad when the work is completed and request a final invoice from the railroad. Promptly pay railroad-flagging invoices, less any charges that may be in dispute. The department will withhold flagging reimbursement until any disputed charges are resolved and the final invoice is paid. No reimbursement for flagging will be made by the department if a violation of subsection B is documented.

D Rail Security Awareness and Contractor Orientation

Prior to entry on railroad right-of-way, the contractor shall arrange for on-line security awareness and contractor orientation training and testing, and be registered through "e-RAILSAFE" for all contractor and subcontractor employees working on railroad right-of-way. See e-railsafe.com "Information". The security awareness and contractor orientation training is shown under the railroad's name.

The department has secured right of entry to railroad property; neither the contractor nor subcontractors or their employees will be required to sign a right of entry form.

The security awareness and contractor orientation certification is valid for 2 year(s) and must be renewed for projects that will carry over beyond the 2 year period. Contractor and subcontractor employees shall wear the identification badge issued by e-RAILSAFE when on railroad right-of-way. Costs associated with training and registration are incidental to other items in the contract.

stp-107-034 (20170615)

Hauling Restrictions.

Conduct operations in a manner that will cause a minimum of inconvenience to the free flow of traffic on roadways carrying East Johnson Street and First Street (STH 113) traffic at all times.

Use City of Madison designated truck routes for material haul roads.

Equip all vehicles traveling on public roads, hauling materials or removals that are subject to spillage, by either wind or vibration, with tailgates and adequate sideboards. Use canvas covers and any other protective devices to prevent spillage as determined necessary by the engineer. Comply with all local ordinances.

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

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Mark Westerveld, P.E. at (608) 246-5355. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

12. 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 sedimentation basin 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 waterway or wetland as provided in the standard specifications and these special provisions. As part of the Erosion Control Implementation Plan (ECIP) submittal, supply all pertinent information and calculations used to determine the best management practice for dewatering at each location.

Refer to the dewatering guidelines of WisDNR Storm Water Management Technical Standards, Code #1061, "Dewatering". This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/documents/Dewatering_1061.pdf

The cost of all work and materials associated with water treatment and/or dewatering is incidental to other bid items.

13. Environmental Protection, Native Plantings.

Native plantings are present near the roadway right-of-way along Tenney Park and are to be protected with silt fence as shown on the erosion control plans. Minimize grading adjacent to these planting areas to avoid impacts. If impacts cannot be avoided, minimize the amount of disturbance to the extent possible.

14. Environmental Protection, Aquatic Exotic Species Control.

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

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

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

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

Use the following inspection and removal procedures:

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

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

stp-107-055 (20130615)

15. Dust Abatement.

Supplement standard spec 104.6.1 with the following:

Dry brooming of the pavement will not be allowed.

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

16. Erosion Control.

Supplement standard spec 107.20 with the following:

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

Provide the ECIP 14 days prior to the pre-construction conference. Do not implement the ECIP until department approval, and perform all work according to the approved ECIP.

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

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

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

Do not allow any excavation for structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering is considered incidental to the project.

Keep all public roadways clean and free from dirt and debris at all times. Provide a self-contained mechanical or air conveyance street sweeper and dispose of the accumulated material.

Do not wash out equipment in drainage ways or direct conduits to waters of the state. Keep slurry out of inlets and drainage ways. Remove all temporary erosion control measures after disturbed areas are stabilized or at the direction of the engineer.

17. Preservation of Existing Trees.

Tree preservation is of great importance on the project. Take precautions during construction so as not to disfigure, scar, or impair the health of any tree on public or private property that is not marked for removal. Do not place, park, or store on the surface of any unpaved areas within the drip lines of trees any equipment, vehicles, or materials. Do not deposit any chemicals, rinsates, or petroleum products within the drip lines of trees. The drip line is defined as the outermost extent of the tree canopy, extended vertically to the ground surface. The engineer and the City Forestry Representative will review trees that are in close proximity to the grading limits of the project and will identify specific trees to be protected. Contact Brad Hofmann, City of Madison Forestry at (608) 267-4908 with questions regarding tree preservation.

Preconstruction Pruning

Trees larger than 10 inches Diameter Breast Height (DBH) will be pruned by City Forestry to an approximate height of 14 feet above the road wherever construction equipment is expected to invade the tree crown. Pruning will be done according to ANSI A300 tree pruning specifications. Occasionally a limb may have to remain at height less than 14 feet above the roadway. Note these instances during the 'walk through' and employ methods to protect the limb.

Excavations

Do not rip or pull roots out towards the trunk of a tree while excavating. The use of an excavator, backhoe, or loader to cut roots is not acceptable. Immediately cut damaged roots over 1/2-inch in diameter in back of the damaged section. Make cuts with an ax, lopping shears, chainsaw, stump grinder, or other means that will produce a clean cut. Cover any exposed roots as soon as excavation and installation are complete. Root pruning will be paid under the item Root Pruning Trees.

Underground Utility Excavation and Installation

Do not grade, excavate, or disturb the area within 5 feet of any tree measured from the outside edge of the tree at DBH along the length of the terrace, without permission from the City Forestry Representative.

The engineer and the City Forestry Representative will review laterals that are in close proximity to terrace trees on a case by case basis. The engineer may elect to terminate lateral or service installation prior to conflict with tree roots (i.e., at the curb line). For laterals that continue to the property line, use construction methods that minimize tree damage as directed by the engineer. The engineer may allow boring under or within the 5 feet protection zone.

Curb and Gutter Removal and Replacement

Provide extra care to root masses that grow very close to, up to or over the curb during excavation. The City Forestry marks "NRC" (No Root Cutting) next to trees with roots that could be damaged in curb removal.

Sidewalk Removal and Replacement

Provide extra care to root masses that grow very close to the sidewalk during excavation. The City Forestry marks "NRC" (No Root Cutting) next to trees with roots that could be damaged in sidewalk removal.

Terrace Restoration

Do not mechanically grade within 5 feet of any tree. If in the root protection zone, grade with hand implements in a manner that will minimize damage to the root system.

Damages

Failure to follow the proper safeguards of this specification, or the Root Pruning Trees Bid Item will result in the following cost recovery charges and liquidated damages assessed against the contractor:

Where construction damage occurs causing or resulting in removal of the tree, the following damages will be assessed against the contractor:

- The costs associated with removing the tree including wood disposal.
- The costs associated with removing the stump to a depth of at least 24 inches below the ground.
- The costs associated with replanting a replacement tree that is balled and burlapped and a minimum caliper diameter of 3 inches. The species and replanting location will be determined by the City Forestry.
- The value of the existing tree which will equal \$125.00 per trunk diameter inch, measured at 4.5 feet above ground.

For bark scraping and broken branches the following damages will be assessed against the contractor:

- The costs associated with pruning broken branches, including wood disposal.
- Loss of limb or broken branch larger than 3 inches in diameter: \$150.00 for each occurrence. Breakage of limbs that are less than 14 feet above the roadway shall be reviewed on a case by case basis.
- Damage to trunk or bark larger than one square foot in area: \$400.00 each area.

For root cutting or excavation within the root protection zone the following damages will be assessed against the contractor:

- For mechanical excavation within 5 feet of a tree, along the length of the terrace or sidewalk of the tree, including ripping of roots back towards the trunk, without prior permission from City Forestry Representative: \$150.00 for each occurrence.
- For mechanical excavation beyond 6 inches or 1 foot of the proposed curb installation, as determined by the size of the existing tree and terrace width, including ripping of roots back towards the trunk: \$150.00 for each occurrence.

18. Archaeological Site.

Archaeological site 47DA818 (Site H) is located approximately from Station75+50 to Station94+50 LT/RT within the limits shown on the plans.

Notify the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.

Do not use the site for borrow or waste disposal. Do not use the site area not currently capped by asphalt/concrete for the staging of personnel, equipment and/or supplies.

stp-107-220 (20180628)

19. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

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

stp-107-001 (20060512)

Any changes to the above working hours require the approval of the City of Madison.

20. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and hold one meeting per month thereafter. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

21. Signing.

The City of Madison Traffic Engineering Division will remove existing City of Madison signs and sign posts as shown in the plans. Contact Steve Grob, City of Madison Traffic Engineering at (608) 266-4767 at least five days prior to starting construction to arrange to have signs removed. Sign support bases are to be removed and disposed of by the contractor.

The City of Madison Traffic Engineering Division will be installing bus route, bus stop and bike route signs as shown in the plans. Contact Steve Grob, City of Madison Traffic Engineering at (608) 266-4767 at least five days prior to installing new sign support bases and sign posts to arrange for signing installation.

22. Notice to Contractor - Structure Removed by Others Prior to Construction.

The existing, abandoned City of Madison Water Utility well number 3 building at 212 N. First Street (STH 113) will be demolished under City of Madison Public Works contract 8240 prior to the project. The building and its foundation will be razed, the site brought to grade, and the disturbed area matted and seeded. The contact for the building removal is Randy Wiesner, City of Madison Engineering, (608) 267-8679.

23. General Provisions for Storm Sewer.

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

Prior to ordering drainage pipes and structures, verify related drainage information in the plan with the engineer. This shall include all information obtained from the bid item "Utility Line Opening" (ULO).

Seal the joints for reinforced concrete pipe with either mastic or internal rubber gaskets as described in standard spec 607.2.3 and 607.2.4. The use of mortar as a pipe joint method is prohibited.

Lay all round and elliptical shape storm sewers on a 6-inch minimum thick bed of Base Aggregate Dense Graded 1 1/4-Inch according to standard spec 305.2.1 or when water is encountered, No. 1 coarse concrete aggregate according to standard spec 501.2.5.4. Bedding for round and elliptical pipe shall be incidental to the installation costs of the round or elliptical pipe.

Construct catch basins, manholes and inlets using only precast or cast in place concrete masonry options. All structures shall be reinforced concrete. Concrete brick and block options are prohibited.

Construct all structures (manholes and inlets) on a 12-inch minimum thick bed of Base Aggregate Dense Graded 1 1/4-Inch according to standard spec 305.2.1 or when water is encountered, No. 1 coarse concrete aggregate according to standard spec 501.3.6.4.5, and as shown on the plans. Bedding for structures shall be incidental to the installation costs of the structure.

Submit shop drawings for all precast structures to the engineer. The engineer will coordinate with the City of Madison design engineer and shall have three days to approve or reject the shop drawings. Under no circumstance shall a precast structure be brought to or used on the construction site without a written approval of the shop drawing for that structure prior to its use on site.

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

The costs to connect storm sewer to existing structures or pipes including tapping the hole, placing the pipe and sealing the joint, will be included in the unit price bid for the pipe of the type, class and diameter used. The cost includes installing a concrete plug in the portion of the abandon pipe that remains in place after completion of storm sewer trench.

Carefully remove and stockpile all existing inlet, manhole, and catch basin covers that are not being adjusted and reused on the project at a location on the right-of-way outside the construction limits for pickup by City of Madison personnel. Contact Chris Scharf, City of Madison Department of Public Works at (608) 267-1973 to schedule pickup.

Remove from the right-of-way and dispose of all frames or grates and all other material that the city does not want.

24. General Provisions for City of Madison Sanitary Sewer.

Contact Information

Madison Sewer Utility
Mark Moder
Phone: (608) 261-9250
Email: mmoder@cityofmadison.com

Utility Standard Specifications

Perform work according to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the *City Standard Specifications*.

Work Sequence

Contact the identified person above 10 working days prior to starting work on the sanitary sewer and provide a schedule of operations. Construct sanitary sewer main and laterals in stages according to the traffic control plan and in proper coordination with construction for activities adjacent to the sanitary sewer main.

Provide bypass pumping of sanitary sewage to maintain sanitary sewer service when new sewer access structures are being constructed over the existing mains.

Shop Drawings and Samples

Submit shop drawings and samples to the engineer and City of Madison Engineering Department as required in these Special Provisions and for the following:

- Sanitary Sewer Pipe Material.
- Sanitary Sewer Access Structure Casting and Manhole Covers Type J (Madison logo lid).
- Sanitary Sewer Internal Chimney Seal.
- Sanitary Sewer Access Structure (4-Foot Diameter).
- Sewer Electronic Markers.
- Select Fill for Sanitary Sewer.

Contractor's responsibilities include:

- Review shop drawings and samples prior to submittal.
- Determine and verify field measurements, field construction criteria, catalog numbers and similar data, and conformance with specifications.
- Coordinate each submittal with requirements of work and of Special Provisions.

Notify City Engineer or City Engineer's Representative, in writing, at time of submittal of deviations in submittals from requirements of special provisions.

NOTE: Do not begin any fabrication or work listed above as requiring shop drawings or samples until return of submittals with City Engineer's or City Engineer Representative's approval.

Provide shop drawings containing the following:

- Date of submittal and dates of previous submittals.
- Project title and number.
- Contract identification.
- Names of contractor, supplier, and manufacturer.
- Identification of product, with identification numbers, and drawing and specification section numbers.
- Field dimensions clearly identified.
- Identification of details required on drawings and in specifications.
- Manufacturer and model number (give dimensions and provide clearances).
- Relation to adjacent or critical features or work or materials.
- Applicable standards, such as ASTM, and identification of deviations from contract documents.
- Source of samples and material properties.
- Identification of revisions on re-submittals.
- Eight-inch and three-inch blank space for contractor and City Engineer stamps.
- Contractor's stamp, signed, certifying to review of submittal, verification of products, field measurement, field construction criteria, and coordination of information with submittal with requirements of work and special provisions.

If required by the City Engineer or City Engineer's Representative, resubmit shop drawings that include the following:

- Corrections or changes from previous submittals as indicated by City Engineer or City Engineer's Representative. Re-submittals are required until approved.
- Shop Drawings and Product Data: Review initial drawings or data and resubmit as specified for initial submittal. Indicate changes, which have been made other than those requested by City Engineer.

Testing and Acceptance

Submit materials production and field placement testing results as required by the City Standard Specifications or as required by the City Engineer or City Engineer's Representative. Final acceptance of sanitary sewer and related materials such as backfill, slurry, etc. will come from the City Engineer or City Engineer's Representative.

Allow the City of Madison to sample/test materials as requested. Provide complete copies of required submittals as follows:

Shop Drawings: Six copies.

Sampling/Testing Results: Three copies.

Deliver required copies of submittals and testing results to:

Mark Moder
City of Madison, Department of Public Works
City-County Building, Room 115, 210 Martin Luther King Jr. Boulevard
Madison, Wisconsin 53710.

The City Engineer or City Engineer's Representative will review and return shop drawings to the contractor within one week of date of receipt.

Protection of Sewers

Take adequate measures to prevent impairment of operation of existing sanitary sewer and storm sewer systems. Prevent construction material, concrete, earth, or other debris from entering sewer or sewer structure.

Divert sewage flow interfering with construction to sanitary sewers leading away from construction area. Prior to commencing excavation and construction of work impacting existing city sewer, submit to City Engineer for review, detailed plans, including routing and connections, required to handle and dispose of sanitary wastes. By reviewing the plan, the City Engineer neither accepts responsibility for adequacy thereof nor for damages to public or private property resulting there from, such responsibilities remain with the contractor.

Sanitary sewer damaged or removed during construction, which is to remain in service, shall be restored or replaced to original material and workmanship used for original construction.

All City of Madison manhole castings removed from sewer access structures (removed, abandoned, or swapped out with a casting elevation adjustment) shall be delivered to City Engineering's Service Building, 1600 Emil Street, Madison, WI 53713.

The costs to remove all abandoned utility pipes within the new sanitary sewer pipe trench or new sewer access structure excavation will be included in the unit price bid for the new pipe of the type, class and diameter used. The cost includes installing a concrete plug in the portion of the abandon pipe that remains in place after completion of sanitary sewer trench.

According to the City Standard Specifications, "Pipe to be removed that is in the same trench as a new pipe will not be compensated as remove pipe and will be considered to be incidental to the new pipe installation." Same trench will be considered to be any pipe located with 3 feet horizontally of the pipe being installed.

City of Madison (sanitary sewer) has underground facilities located within the project area. Relocation of the underground facilities shall be accomplished as part of contract 5992-09-16 by the contractor. Existing facilities and anticipated proposed relocations are as follows:

- East Johnson Street- east side of street (12-inch diameter): Station 75+06 to Station 87+45.
- North Baldwin-Center of Street (12-inch).
- Marston Avenue-Center of street (8-inch).

Sanitary sewer removals, replacements, and adjustments are included as part of the project as shown on the plans. Complete all work within the existing right-of-way. Coordinate operations with the City of Madison. Contact Mark Moder, (608) 261-9250.

25. General Provisions for City of Madison Water Main.

Contact Information

Madison Water Utility
Kelly Miess
Phone: (608) 261-9640
E-mail: kmiess@madisonwater.org

Utility Standard Specifications

Perform work according to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the *City Standard Specifications*. In the event of a conflict the Wisconsin Department of Transportation Standard Specifications will take precedence.

Work Sequence

Contact the identified person above 10 working days prior to starting water main work and provide a schedule of operations.

Construct water main and water service laterals in stages according to the traffic control plans and in proper coordination with construction activities adjacent to the water main.

As construction staging and sequence allows, disinfect the new water mains. Madison Water Utility will flush and test all newly installed water mains. Coordinate as necessary with Madison Water Utility for these operations. After the water main has passed bacteriological and pressure testing, install replacement water services and make connections to the existing water system. Water main installation will consist of strategic abandonment of the existing water main. Abandon existing water main only after the new water main has passed all required testing, new main has been properly brought online into the system and all service laterals, except those called to be abandoned, have been relocated to the new main.

Keep valves at connection points between the new water main and the existing water main closed until the new water main has passed all testing. Where new valves need to be opened to fill the new water main for testing and flushing, sequencing shall be so arranged to preclude backflow of any water from the new water main to the existing water main.

Following the installation of replacement water services and the connection of replacement water main to the existing water main at locations noted on the plans, the existing water main shall be cut off; drained; open ends plugged or bulk-headed with concrete; and the pipe abandoned in place. This work is considered incidental to the new water main installation.

Installations inside Protective Measures Areas

There are areas within the project limits where groundwater testing revealed contaminant levels approaching or exceeding the NR 809 Safe Drinking Water Maximum Contaminant Levels (MCLs). All water main installed inside the boundary is required by WDNR to meet specific criteria. Meet the following protective measures for all water main installations inside the protective measures areas as identified in the plans:

- Permanently plug, prior to installation, the drain ports on hydrants or install hydrants without drain ports.
- Furnish and install nitrile gaskets as directed in the plans.
- Furnish and install clay trench plugs where directed in the plans.

Service Disruption Notification

Follow City Standard Specifications for water service outage notification for all affected customers.

Hydrants

Determine the location of the curb line, sidewalk limits, and existing utilities in the area prior to hydrant installation to assure the proper location of the hydrant relative to the curb line. This work is considered incidental to the new water main installation.

Where needed, use offsets and/or bends on the hydrant lead such that the hydrant is installed at a minimum bury depth of six feet and required clearances with storm sewer, sanitary sewer and other pipes are maintained. In no case may a hydrant be set at a depth greater than 9 feet from grade. Assess the need for hydrant extensions. All hydrant extensions and fittings on the lead are incidental to the installation of the hydrant.

Either permanently abandon or securely bag any installed hydrant, either existing or new, that is not supplied by an in-service main overnight or for longer than 12 hours until the hydrant is permanently abandoned or back in service.

Temporary Flushing Hydrants

The installation of temporary flushing hydrants may be desired as part of the phasing and sequencing of water main installation. The furnishing, installation, use and abandonment of temporary flushing hydrants is considered incidental to water main installation.

Temporary Air Bleed

Where any installation of proposed water main does not have an adjacent hydrant or other means of bleeding air from the main, install a temporary 2-inch corporation stop at the high point of the main. Remove the stop and plug the opening after successful completion of water main testing. Installation, use, maintenance, removal and plugging of corporation stops for use as air bleeding devices are considered incidental to the installation of water main.

Abandoned Facilities

Abandoned facilities exist within the project limits and utility companies will be abandoning some additional facilities in place after relocating facilities to avoid conflicts with the proposed work. Removal by the contractor of any abandoned facilities necessary to complete the proposed work, including plugging the remaining ends of the facility, is considered incidental to the contract. Contact each utility company individually to verify if any can be expected and to possibly obtain facility maps for approximate locations. The costs to remove all abandoned utility pipes within the new water main trench or related excavation will be included in the unit price bid for the respective bid item. The cost includes installing a concrete plug in the portion of the abandoned pipe that remains in place after completion of the trench or excavation.

Location of Existing Water Service Laterals

The horizontal location and size of all water laterals indicated on the plans is taken from surveys, approximate measurements, and the City's available records. These records are not guaranteed to be accurate in all cases and do not indicate at what depths these laterals are located. As such, determine the location and size of the existing laterals before making a tap into the new water main. Follow the plans to determine which services are to be abandoned, reconnected, extended, or replaced to the property line.

Location of Existing Water Facilities

The horizontal and vertical location and size of all existing water mains indicated on the plans is taken partially from surveys, approximate measurements, and the City's available records. These records are not guaranteed to be accurate in all cases. Due to the unverified depth and location of existing pipelines, alteration of the lines and grades shown on the plans for new pipelines where connections are to be made to existing pipelines may be necessary. Notify the engineer of locations where alterations of the lines and grades shown are necessary so that an acceptable solution can be determined.

26. General Provisions for Conduit Installation.

Supplement standard spec 652 as follows:

Use Schedule 80 conduit under all traffic areas.

Install all conduit at a minimum depth of 30 inches, unless otherwise approved by the engineer. Solvent weld all joints. Mark the location of each conduit, where conduit crosses traffic areas, by a permanent chiseled arrow or other appropriate permanent stamp in top of the curb head.

Install and connect all conduit to the concrete bases, manholes, handholes, existing conduit, or conduit elbows so as to provide a continuous network, unless otherwise indicated on the plan. All connections shall be watertight. Do not install drainage holes in conduit. Uncover the ends or mid-sections of all existing conduit that is being extended by or incorporated into this project work.

When connections are to be made to an existing conduit, first verify that the existing conduit is fully clear and useable for its entire cross-section and length. When the existing conduit is found to be defective, notify the engineer and do not proceed until the engineer so directs. If the contractor connects to an existing defective conduit without the express direction from the engineer, make any and all necessary repairs and replacements to all conduits, including conduit that was "existing" prior to the contractor starting work. All costs of this work shall be at the expense of the contractor.

Turn up conduits terminating in a non-paved location and not in a structure, and end at terrace finish grade with a PVC cap securely attached, per duct termination detail. Where conduit runs parallel to curb and gutter, place the conduit within 12 inches of the back of the curb, except as directed by the engineer. The engineer will determine termination points not within pull boxes or concrete bases.

Unless the contract provides for installation of cable, cap the ends of each run of conduit with standard conduit caps or otherwise appropriately plug the ends to preclude infiltration of water and soil. Install a pull wire in each conduit, except those with only streetlight wire. A pull wire shall be approximately 4 feet longer than the conduit run and shall be doubled back for at least 2 feet at each terminal. The pull wire shall be #10 AWG copper, stranded, with THHN insulation and green color coding. Install the pull wire within seven days of completing a conduit installation from structure-to-structure.

Use a 6-inch minimum sand padding below the conduit and a 6-inch minimum sand lift above the conduit. Do not backfill trench with any rocks larger than 4 inches in diameter or any foreign debris.

27. General Provisions for Traffic Signals.

Perform all work on the lighting and conduit/pull box system according to the Wisconsin Electrical Code, the applicable provisions of the standard specifications, and these special provisions and plans.

The City of Madison will remove existing traffic signals and "signal only" poles when the temporary signals are in place at each intersection. Contact Michael Christoph at the City of Madison Traffic Engineering Shop, (608) 266-9031, to coordinate removal of existing signals and installation of new signals.

Remove existing streetlight poles identified for removal, including those that also have traffic signal equipment on them.

Each pedestrian push button installation shall include "Push Button for Walk Signal" signs. Single direction arrow signing shall also be used with all buttons except two direction arrow signing is needed for single buttons on median poles.

Maintain Interconnect to all traffic signals.

All new electric services shall be metered power, 100 amperes, 120 volt. The Electric service at First-Johnson shall be a CG-3 time-of-use rate. The Electric service at Fordem-Johnson shall be a CG-5 rate.

Maintain a minimum of 6 feet of separation between any adjacent loop detectors.

The City of Madison will maintain and operate the existing signal at the Baldwin Street intersection. Supplementary temporary signal indications will be installed by the City of Madison at the Baldwin Street intersection for the various construction phases. Provide a temporary signal base and pole at the Baldwin Street intersection as shown on the plans for use by the City of Madison. Provide a minimum of 7 working days' notice to Contact Michael Christoph at the City of Madison Traffic Engineering Shop, (608) 266-9031 prior to beginning each construction stage. The existing signal poles, conduit and structures at the Baldwin Street intersection will remain in service and be maintained by the City of Madison throughout the construction project.

28. General Provisions for City Electrical Systems.

A General Requirements

Perform this work according to the Wisconsin Electrical Code, National Electrical Contractors Association (NECA) electrical construction practices, OSHA and the standard specifications.

Perform all work on the lighting and conduit/pull box system according to the Wisconsin Electrical Code, and applicable provisions of standard spec 659, and these special provisions and plans.

Carefully remove and salvage the steel frames and covers from all pull boxes and manholes to be removed or abandoned, and all street light poles, arms, transformer bases, fixtures, concrete handholes, and associated equipment. Material designated by the City to be saved shall be returned to City Traffic Engineering, 1120 Sayle St, Madison.

Complete electrical work by a journey-worker electrician or be completed by an electrical apprentice under the supervision of a journey-worker electrician. Legal status or standing as a journey-worker and apprentice electricians shall be certified or otherwise documented to the engineer before beginning any electrical work. Electrical work is hereby defined as electrical and related construction required to be performed under the contract by the contractor, according to the standard specifications, contract provisions, standard detail drawings and plan details applicable to electrical construction.

At the pre-construction conference, supply the engineer with a list of names and qualifications of journey-workers and/or electrical apprentices who will or may be working on this contract.

Proof of qualification to do electrical journey-worker level work shall be the "Completion of Apprenticeship" certification card issued by an approved state agency, or a resume showing sufficient electrical education and a minimum of 14,000 hours of varied electrical work experience. All apprentices shall be indentured by an approved state agency.

The contractor is hereby advised that electrical apprentices must work under the terms of their indentures, which require an apprentice be under the direct supervision of a journey worker with the exception of an apprentice in the final year as an apprentice. Any violation, or suspected violation, of these terms will be reported to the Bureau of Apprenticeship Standards.

On completion of the work, test the installation and ensure that it is entirely free of grounds and short circuits. This contract contemplates and intends a complete and operating installation of electrical work. Everything in the form of labor or material necessary for this result is in the intent of the contract.

It must be understood that electrical drawings and details are diagrammatic; they are not intended to be shop drawings. It is expected it may be necessary to move conduit, and/or equipment in some cases, to get a coordinated installation. Such changes are considered part of the contract obligation, without cost to the owner. Do not locate any equipment where its usefulness and/or operation may be affected by the work of other trades, door swing, counter, equipment, etc.

The contractor acknowledges his acquaintance with the plans and specifications and their respective requirements and shall guarantee the electrical system has been installed strictly according to the electrical plans and specifications, using only the best of materials available and installed in a substantial manner by experienced labor. The contractor agrees to replace and/or repair items failing

from causes of faulty workmanship, material or design, without extra cost, at any time within one year from the date of final acceptance.

Furnish the City of Madison with service manuals for all items furnished under this contract. Service manuals shall be complete with drawings, diagrams, operation and installation instructions, and parts lists.

New streetlight wire in conduits shall consist of 3#6 and 1#8 green wire. The color coding for the #6 wire shall be one black, one red, and one white.

Ground wires shall have green insulation or be marked with green tape at all junction or pull boxes and at all terminations. Equipment and enclosures shall be grounded, ground connection surfaces shall be cleaned, and connections shall be made so it is impossible to move them.

All maintenance of existing street light facilities within the project limits shall be the contractor's responsibility. Maintain the new street lights until project work is accepted. This work shall be considered incidental to installation of street light units, temporary lighting, and no separate compensation will be paid.

Extend existing lighting circuits to feed the new and relocated lights as part of this project. Verify the existing loads of each lighting circuit before adding additional load to a lighting circuit. Loading on any circuit shall not exceed NEC requirements.

Submit one copy of as-built plans, including cable and conduit routing diagrams, wiring of fixtures and other pertinent details, to the engineer and the City of Madison.

Furnish equipment and appliances necessary to test the complete installation of electrical conductors. Test and demonstrate to the satisfaction of the engineer that the circuits are properly connected, continuous and free from short circuits and unspecified grounds, that the circuits are connected according to the manufacturer's wiring layout, and that each circuit is operational. The lighting system shall not be deemed complete until the electrical work has been completed and the electrical systems are found to be in proper working order, including operation for ten consecutive nights without failure.

B Materials

All materials furnished by the contractor for lighting installation under this contract are subject to approval by the engineer.

Manufacturers shall be responsible for providing materials listed by UL or other approved agencies and all governing codes and ordinances. Materials must bear a UL and/or other approved labels, where possible. Items specified by catalog number or brand name and shop drawing approval will not relieve the manufacturer of this responsibility. All electrical material for which a standard has been established by the Underwriters Laboratories, Inc. shall be furnished and installed under this contract. Material shall have the UL label firmly attached and be listed by UL Listing signifies that the material has passed the established standard testing. All electrical materials shall conform to the latest requirements of the Wisconsin Electrical Code.

All materials, not specified herein, used in the work shall conform to the requirements specified on the plan or the contract special provisions.

Furnish and install incidental items, such as wire nuts, grommets, tape, connectors, and electrical varnish that are obviously necessary to make the proposed system complete from the source of supply to the most remote unit.

Touch up marks and scratches on painted equipment with two coats of synthetic resin enamel or as directed by the engineer.

Furnish a complete list and cut sheets/shop drawings of materials to be furnished and used for lighting. Include the names and addresses of manufacturers, together with catalog numbers, certificates of compliance, specifications, and other product information requested by the engineer. Submit the list and cut sheets/shop drawings within 20 calendar days of the award of the contract. Do not incorporate any materials into the lighting system prior to obtaining the written approval of the engineer. Approval does not change the intent of the specifications. Do not substitute any materials. The contractor is allowed up to two submittals of material for approval. If more than two submittals are required, the contractor will be charged on a time-and-material basis for additional review time with payment made before submittals will be reviewed.

C Splices

Splices shall comply with standard spec 659.3.2. All splices within a junction box, handhole, etc. shall be of the same type. No splices are allowed in underground pull boxes, except for grounding conductors.

D Circuit Identification

Accomplish color coding by using cable jackets of the proper color. Code all tails of all splices. Color-code secondary distribution circuits as shown on the plans; the ground conductor shall be green. Each accessible location of underground cable in junction boxes, pull boxes and pole bases shall have a permanent white nylon tag with black lettering, attached in a "flag" manner using a nylon tie, identifying the cabinet and conductor circuit number.

E Branch Circuit Tagouts

The contractor may at his option work on live circuits or he may disconnect and tag out circuits. Any branch circuit not disconnected and tagged out shall be considered live; restrict work force to those qualified to work on live circuits. Disconnection may be made by disconnecting branches at the overcurrent device. Make tagouts with contractor furnished manufactured electrical warning tags and endorse with the name of the contractor, the date, and the project. Clear all tagouts by the end of the workday.

F Threaded Fasteners

Liberal coat all threaded fasteners, i.e., screws, and bolts with an approved anti-seize compound. Excepting fasteners inside control cabinets, fasteners up to 1/2-inch in diameter shall be stainless steel.

Provide rust, corrosion and anti-seize protection at threaded assemblies by coating the mating surfaces with Markal (Hightemp E-Z Break), Never-Seez (marine grade), LPS 100, Lubriplate or approved equal.

G Bonding Wire

Install bonding wire in conduits for equipment grounding. Ground all equipment as required.

H Initial Failures

The contractor and the engineer shall agree on a time for test burning of completed installations, which is generally toward the end of the contract period. Replace failed lamps, along with any other non-functioning component, for no additional compensation. Only one test burn for the purpose of identifying initial failures will be required. Coordinate supply of replacement lamps with the city.

I Project Construction Staging

The construction of the new lighting system shall maintain the integrity of the existing lighting systems within and beyond the project limits at all times. Exceptions to this shall only be granted for just cause by the engineer.

J Items of the Same Classification

All items of the same classification shall be of the same manufacturer and series.

L Underground Installation

Ensure that the engineer has inspected all underground conduit and concrete base forms before backfilling any trench or pouring concrete. Any work completed without such inspection is subject to rejection as unacceptable work and shall be immediately removed and acceptably replaced or otherwise satisfactorily corrected by and at the expense of the contractor. It is the contractor's responsibility to arrange for inspections. There will not be any additional compensation to the contractor for delays and inconvenience associate with arranging and waiting for inspections.

29. Abandoning Sewer, Item 204.0291.S.

A Description

This special provision describes abandoning existing sewer by filling it with cellular concrete as the plans show and conforming to standard spec 204 and standard spec 501 as modified in this special provision.

B Materials

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

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.
stp-204-050 (20080902)

30. Stamping Colored Concrete, Item 405.1000.

This special provision describes stamping and coloring concrete with a color approved by the engineer prior to placement of any color imprinted concrete constructed under other contract bid items. Conform to standard spec 405 as modified in this special provision.

Replace standard spec 405.2.1.1(1) with the following:

- (1) Integrally color concrete using non-fading pigments conforming to ASTM C979.
 - For Natural Bark: use synthetic non-fading iron oxides at a loading of six percent minimum and a maximum loading of eight percent by weight of total cementitious material in the mix. Match the concrete color in reasonably close conformance with color similar to the existing colored concrete located along Mineral Point Road between Junction Road and USH 12 in the City of Madison.

Replace standard spec 405.2.1.1(3) with the following:

- (3) The department will accept the color based on comparison to color samples available for viewing along Mineral Point Road between Junction Road and USH 12 in the City of Madison.

Replace the entire contents of standard spec 405.2.2 with the following:

- (1) Furnish Natural Bark full-depth colored concrete conforming to standard spec 405.2.1.
- (2) Use a 6-inch x 6-inch cobblestone pattern applied parallel to roadway centerline or city approved alternative.
- (3) Supply a powder antiquing form release agent. Apply form release agent according to manufacturer's instructions using manufacturer's recommended application techniques.

Replace the entire contents of standard spec 405.3.2 with the following:

- (1) Color concrete full-depth conforming to standard spec 405.3.1. Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete. Remove and replace discolored concrete at no cost to the department.
- (2) Uniformly apply liquid release agent onto the colored still plastic state concrete to provide clean release of imprinting tools from the concrete surface without lifting imprint or tearing concrete.

While initially finished concrete is in plastic state, accurately align and place imprinting stamps. Contractor will need to monitor the setting up of the concrete. Once the concrete has set to the point it can be stamped begin stamping. Uniformly pound or press imprint tools into concrete to produce required pattern and depth of imprint on concrete surface. Remove platform tools immediately. Hand texture and stamp edges and surfaces unable to be imprinted by stamp mats. Touch up imperfections such as broken corners, double imprints and surface cracks.

Stamp concrete consistently so that stamped concrete does not have a vertical elevation difference of ½ inch or depressions in concrete capable of causing ponding water or ice.

For concrete hand stamp edges and surfaces that are unable to be imprinted by platform tools, use texture mats and single blade hand stamps to match platform tool stamping pattern. Finish imprinting to match sample panels.

After concrete has been stamped and the sheen has left the surface of the colored concrete, seal colored concrete. Apply per manufacturer's recommendations. Apply two coats of seal. Apply second coat after first coat has dried. Do not seal over blemishes or imperfections caused by rainfall or protection materials.

stp-405-100 (20160607)

31. Protection of Concrete.

Supplement standard spec 415.3.14 with the following:

Provide for a minimum of one concrete finisher to remain on the project site after final finishing of all concrete surfaces until such time as the concrete has hardened sufficiently to resist surface scarring caused by footprints, handprints, or any other type of imprint, malicious or otherwise. Actively and continuously patrol on foot the newly placed concrete and repair any damage to the surface that might be sustained as described above.

The cost for providing the finisher(s), the necessary equipment, and materials is to be included in the contract unit price for each concrete item.

32. Concrete Pavement Joint Layout, Item 415.5110.S.

A Description

This special provision describes providing a concrete pavement or concrete base joint layout design for intersections and marking the location of joints in the field

B (Vacant)

C Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer at least 7 calendar days before paving each intersection. Do not lay out joints until the engineer has reviewed the joint layout design. Mark the location of concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking, 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
415.5110.S	Concrete Pavement Joint Layout	LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.

The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

stp-415-020 (20170615)

33. Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.

A Description

This special provision describes reheating the abutting edge of the previously compacted layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction

C.1 Equipment

Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints

Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted layer in the adjacent lane as follows:

- Reheat the joint to within 60 degrees F (15 degrees C) of the mix temperature at the paver auger. Measure joint temperature immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

D Measurement

The department will measure Reheating HMA Pavement Longitudinal Joints by the linear foot, acceptably completed, as measured along each joint for each layer of asphalt placed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF

Payment is full compensation for all the work required under this bid item.

stp-460-015 (20140630)

34. Cold Patch, Item 495.1000.S.

A Description

This special provision describes furnishing cold patch and filling potholes and other voids in existing pavement surfaces as the engineer directs.

B Materials

Furnish a mixture of course aggregate, natural sand, and MC-250 bituminous material designed to have a workability range of 15-100° F without heating. Ensure that the mixture:

- Adheres to wet surfaces.
- Resists damage from water, salt, and deicing products.
- Requires no mixing or special handling before use.
- Supports traffic immediately after placement and compaction.

Conform to the following gradation:

SIEVE SIZE	PERCENT PASSING (by weight)
1/2-inch (12.5 mm)	100
3/8-inch (9.5 mm)	90 - 100
No. 4 (4.75 mm)	90 max
No. 8 (2.38 mm)	20 - 65
No. 200 (0.074 mm)	2 - 10
Bitumen	4.8 - 5.4

The department will accept cold patch based primarily on the engineer's visual inspection. The department may also test for gradation.

C Construction

Stockpile cold patch on site on a smooth, firm, well-drained area cleared of vegetation and foreign material. Cover the stockpile and ensure that it is easily accessible. Replenish the stockpile throughout the project duration, but limit the size at any given time to 10 tons on site unless the engineer approves otherwise. Dispose of unused material at project completion unless the engineer directs otherwise.

Place cold patch by hand. Remove ponded water and loose debris before placement. Compact flush with a tamper, roller, or vehicle tire after placement.

Refill patched areas as necessary to maintain a flush pavement surface until project completion.

D Measurement

The department will measure Cold Patch by the ton, acceptably stockpiled on site.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
495.1000.S	Cold Patch	TON

Payment for Cold Patch is full compensation for providing and maintaining patches; for furnishing and replenishing stockpiled material on-site; and for disposing of excess material at project completion.

stp-495-010 (20160607)

35. Sawing Pavement Deck Preparation Areas, Item 509.0310.S.

A Description

This special provision describes sawing around deteriorated areas requiring deck repairs under the Preparation Decks bid items on decks receiving asphalt or polymer overlays and for deck repairs that will not receive an overlay.

B (Vacant)

C Construction

The department will sound and mark areas of deteriorated concrete that require deck preparation. The engineer may identify and mark additional areas as the work is being performed.

Wet cut a minimum of 1 inch deep and at least 2 inches outside of the marked areas. Bound each marked area by providing cuts aligned parallel and perpendicular to the deck centerline.

Remove sawing sludge after completing each area. Do not allow sludge or resulting residue to enter a live lane of traffic, storm sewer, stream, lake, reservoir, marsh, or wetland. Dispose of sludge at an acceptable material disposal site located off the project limits or, if the engineer allows, within the project limits.

D Measurement

The department will measure Sawing Pavement Deck Preparation Areas by the linear foot, acceptably completed, measured as the total linear feet of bounding cuts.

The department will not measure for payment over-cuts or cuts made beyond what is required to bound engineer-marked deterioration limits.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.0310.S	Sawing Pavement Deck Preparation Areas	LF

Payment is full compensation for making all saw cuts; and for debris disposal.

stp-509-070 (20170628)

36. Concrete Masonry Deck Repair, Item 509.2100.S.

A Description

This special provision describes providing concrete masonry on the sawed deck preparation areas of the concrete bridge deck and in full depth deck, curb, and joint repair areas. Conform to standard spec 502 and standard spec 509.

B Materials

B.1 Neat Cement

Furnish a neat cement bonding grout. Mix the neat cement in a water-cement ratio approximately equal to 5 gallons of water per 94 pounds of cement.

B.2 Concrete

Furnish grade C, C-FA, C-S, C-IS, C-IP, C-IT, or E concrete conforming to standard spec 501 for deck preparation, full-depth deck repair, curb repair and joint repair areas except as follows:

1. The contractor may increase slump of grade E concrete to 3 inches.
2. The contractor may use ready-mixed concrete.

C Construction

C.1 Neat Cement

Immediately before placing the concrete deck patching, coat the prepared surfaces with a neat cement mixture. Ensure the prepared concrete surfaces are moist without any standing water before coating with the neat cement mixture. Brush the neat cement mixture over the prepared concrete surfaces to ensure that all parts receive an even coating, and do not allow excess neat cement to collect in pockets. Apply the neat cement at a rate that ensures the cement does not dry out before being covered with the new concrete.

C.2 Placing Concrete

Place concrete conforming to standard spec 509. As determined by the engineer, consolidate smaller areas by internal vibration, strike them off, and finish the areas with hand floats to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Give all deck patching areas a final hand float finish.

C.3 Curing Concrete

Cure the concrete masonry deck patching conforming to standard spec 502.2.6(1).

D Measurement

The department will measure the Concrete Masonry Deck Repair bid item by the cubic yard, acceptably completed.

The department will measure concrete used in deck preparation areas and in full depth deck, curb, and joint repair as part of the Concrete Masonry Deck Repair bid item.

The department will not measure wasted concrete.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.2100.S	Concrete Masonry Deck Repair	CY

Payment is full compensation for furnishing, hauling, preparing, placing, finishing, curing, and protecting all materials.

stp-509-060 (20170615)

37. Inlet Covers Type H; Type H-S.

Perform this work according to standard spec 611 and as hereinafter provided.

Provide inlet covers with the design as detailed in the plans.

38. Manhole Covers Type J-Special.

Perform this work according to standard spec 611 and as hereinafter provided.

Provide castings according to standard spec 611 and Article 507 of the City Standard Specifications and as shown on the plans. Provide lids with logo per City Standard Specifications Standard Detail Drawing 5.7.16.

39. Adjusting Manhole Covers.

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

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

Revise standard spec 611.3.7 by deleting the last paragraph.

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

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

stp-611-005 (20030820)

40. Cover Plates Temporary, Item 611.8120.S.

A Description

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

B Materials

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

C (Vacant)

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

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

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

stp-611-006 (20151210)

41. Insulation Board Polystyrene 2-Inch, Item 612.0902.S.001.

A Description

This special provision describes furnishing and placing polystyrene insulation board as the plans show.

B Materials

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230 as modified in this special provision.

Delete flammability requirement.

B.1 Certification

Before installation, obtain from the manufacturer a certification indicating compliance and furnish it to the engineer.

C (Vacant)

D Measurement

The department will measure Insulation Board Polystyrene 2-Inch by area in square yards of work, completed and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
612.0902.S.001	Insulation Board Polystyrene 2-Inch	SY

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

stp-612-005 (20030820)

42. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

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

Furnish fence fabric meeting the following requirements.

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

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

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

stp-616-030 (20160607)

43. Fastening Signs to Supports.

Supplement standard spec 637.3.3.3 as follows:

Fasten type II and type III signs to 2-inch pipe installations using single or double Morris ring sign brackets from Vulcan Signs, TAPCO (#318), or Decker Supply, or approved equal.

44. Flexible Tubular Markers.

Supplement standard spec 643.3.2 to include the following:

When fastening flexible tubular marker bases to new pavement or existing pavement to remain, attach the base with an engineer-approved adhesive.

45. Temporary Pedestrian Surface Asphalt, Item 644.1410.S.

A Description

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

B Materials

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

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

C Construction

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

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

Construct conforming to the following:

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

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

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

D Measurement

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

E Payment

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

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

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

stp-644-010 (20150630)

46. Temporary Curb Ramp, Item 644.1601.S.

A Description

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

B Materials

Furnish materials as follows:

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

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

C Construction

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1601.S	Temporary Curb Ramp	EACH

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

stp-644-020 (20150630)

47. Temporary Pedestrian Safety Fence, Item 644.1616.S.

A Description

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

B Materials

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

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

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

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

C Construction

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1616.S	Temporary Pedestrian Safety Fence	LF

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

stp-644-025 (20150630)

48. Luminares Utility LED (Type).

Supplement standard spec 659.2 to include the following:

Provide LED luminaires having a Type-3 medium light distribution pattern and a 3000-degree K color temperature.

49. Removing 50-Foot Camera Pole, Item 677.9051.S.

A Description

This special provision describes removing existing camera poles.

B (Vacant)

C Construction

Disconnect all cables, wiring and equipment that are mounted on or in the poles, and remove the pole from the concrete footing. The department will pick up any antennae, cameras, or other equipment mounted on the pole; contact maintenance staff at (414) 227-2166 at the department's Statewide Traffic Operations Center, when the material is ready to be picked up. Properly dispose of the pole, conduit, cabling, and wiring away from the project site.

D Measurement

The department will measure Removing (Height) Camera Pole by the unit, acceptably removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
677.9051.S	Removing 50-Foot Camera Pole	EACH

Payment is full compensation for removing and disposing of the existing camera pole; disconnecting any necessary wiring; removing the equipment mounted on the poles; disposing of cabling and wiring; and transportation.

stp-677-901 (20100630)

50. Removing CCTV Camera, Item 677.9200.S.

A Description

This special provision describes removing existing CCTV cameras from existing camera poles as the plans show.

B (Vacant)

C Construction

Disconnect all wiring at the control cabinet and at the top of the camera pole. Remove all fastening hardware and remove the existing camera and pan, tilt, and zoom mechanisms from the top of the pole. Salvage and store the cameras for pick up by the department; contact maintenance staff at (414) 227-2166 at the department's Statewide Traffic Operations Center to coordinate when the materials will be picked up.

The contractor may request a meeting with the engineer to assess the condition and operability of the camera before beginning work on removing the camera. Any damage or improper operation not noted at the meeting, or before the contractor starting work on the removal, will be assumed to be the fault of the contractor; repair or replace the camera. Store the camera until the department picks up the camera.

D Measurement

The department will measure Removing CCTV Camera by the unit, acceptably and completely removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
677.9200.S	Removing CCTV Camera	EACH

Payment is full compensation for removing an existing CCTV camera; for disconnecting all necessary cables and wiring; and properly storing the materials.

stp-677-902 (20100630)

51. Optimized Aggregate Gradation Incentive, Item 715.0710.

Description

This special provision describes optional contractor optimized aggregate gradation, optional optimized mixture designs, and associated additional requirements for class 1 concrete used in concrete pavements. Conform to standard spec part 7 and as follows:

Optimized Aggregate Gradation

A Job Mix Formula (JMF) contains all of the following:

Proportions for each aggregate fraction conforming to table 1.

Individual gradations for each aggregate fraction.

Composite gradation of the combined aggregates including working ranges on each sieve according to table 2.

Submit the target JMF and aggregate production gradation test results to the engineer for review 10 business days before initial concrete placement.

TABLE 1 TARANTULA CURVE GRADATION BAND

SIEVE SIZES	PERCENT RETAINED
2 in.	0
1 1/2 in.	≤5
1 in.	≤16
3/4 in.	≤20
1/2 in.	4-20
3/8 in.	4-20
No. 4	4-20
No. 8 ^[1]	≤12
No. 16 ^[1]	≤12
No. 30 ^{[1] [2]}	4-20
No. 50 ^[2]	4-20
No. 100 ^[2]	≤10
No. 200 ^[2]	≤2.3

^[1] Minimum of 15% retained on the sum of the #8, #16, and #30 sieves.

^[2] Conform to 24-34% retained of fine sand on the #30-200 sieves.

TABLE 2 JMF WORKING RANGE

SIEVE SIZES	WORKING RANGE ^[1] (PERCENT)
2 in.	+/- 5
1 1/2 in.	+/- 5
1 in.	+/- 5
3/4 in.	+/- 5
1/2 in.	+/- 5
3/8 in.	+/- 5
No. 4	+/- 5
No. 8	+/- 4
No. 16	+/- 4
No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2
No. 200	≤ 2.3

^[1] Working range limits of composite gradation based on moving average of 4 tests.

Test each component aggregate once per 1,500 cubic yards during concrete production. Take samples by one of the following sampling methods:

1. At the belt leading to the weigh hopper.
2. Working face of the stock piles at the concrete plant if approved by the engineer.

The department will take independent QV samples using the same sampling method the contractor uses for QC sampling. QV samples may be taken by the contractor's QC personnel if witnessed by the department's QV personnel. The department will split each QV sample and retain half for all dispute resolutions. 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.

If, during concrete production, the moving average of four for any sieve fall outside the allowable JMF working range do the following:

1. Notify the engineer of the test results within 1 business day from the time of sampling.
2. Make immediate adjustments to the JMF, within the limits specified in Table 3;
3. Review JMF adjustments with the engineer. Both the contractor and engineer will sign the adjusted JMF if the adjustments comply with Table 3.
4. If the moving average of four falls outside the adjusted allowable working range, stop production and provide a new mix design including JMF to the engineer.

TABLE 3 ALLOWABLE JMF ADJUSTMENTS

SIEVE SIZES	ALLOWABLE ADJUSTMENT (PERCENT)
\geq No. 4	+/- 5
No. 8 – No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2

Dispute Resolution

The department will resolve disputes as specified in standard spec 106.3.4.3.5 using QV split samples.

Sublot and Lot Size

A sublot consists of up to 1,500 cubic yards. A lot consists of two sublots.

Optimized Concrete Mixtures

The contractor may use a reduced cementitious content for concrete pavement placed if the contractor does the following:

1. Use an optimized aggregate gradation as defined in this special provision.
2. Conform to the additional testing requirements for flexural strength as specified in the contract special provisions.
3. Submit aggregate gradation result records no more than 2 years old when developing the mix design.
4. Determine the volume of voids in the optimized aggregates using ASTM C29.
5. Download and follow the instructions tab of the Optimized Gradation and Mix Design Spreadsheet located at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
6. Design an appropriate paste content based upon the Performance-based PCC Mix Design Guide located at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
7. Provide a minimum V_{paste}/V_{voids} of 1.25. (Paste/Void ratio equals the volume of paste divided by the volume of voids.).
8. Evaluate workability of trial batches by following section 6.8 of AASHTO Draft Performance Engineered Concrete Pavement Mixtures Specifications located at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
9. Submit trial batch workability results when submitting the mix design.
10. Submit the CP Tech center computer spreadsheet concrete mix design to the engineer for review at least 3 business days before producing concrete.
11. Provide a minimum cement content of 520 pounds per cubic yard, except if using type I, II, or III cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.
12. The contractor may use class C fly ash or grade 100 or 120 slag as a partial replacement for cement. For binary mixes use up to 30% fly ash or slag. For ternary mixes use up to 30% fly ash plus slag in combination. Replacement values are in percent by weight of the total cementitious material in the mix.
13. See CMM 8-70.2.2.3 for additional guidance.

Measurement

The department will measure Optimized Aggregate Gradation Incentive by the dollar, for each combined averaged lot of QC test results meeting Table 1.

Payment

The department will pay incentive of 3 percent of the contract unit price for concrete pavement under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
715.0710	Optimized Aggregate Gradation Incentive	DOL
stp-715-005 (20180628)		

52. Flexural Strength for Concrete Mix Design.

This special provision describes optional testing requirements for flexural strength during the mix design process. Conform to standard spec part 7 as modified in this special provision.

Add the following to standard spec table 701-2:

TEST	TEST STANDARD
Flexural Strength of Concrete	AASHTO T97

Replace standard spec 715.2.3.1(1) with the following:

- (1) Provide both compressive and flexural strength information to demonstrate the strength of the proposed mix design. Use either laboratory strength data for new mixes or field strength data for established mixes as follows:
1. Use at least 5 pairs of cylinders for compressive strength. Demonstrate that the 28-day compressive strength will equal or exceed the 85 percent within limits criterion specified in 715.5.2.
 2. Use at least 5 pairs of beams for flexural strength. Demonstrate that the 28-day flexural strength will equal or exceed 650 psi.

stp-715-010 (20170615)

53. Polyester Polymer Concrete Overlay with Milling, Item SPV.0025.001.

A Description

This special provision describes furnishing and applying a polyester polymer concrete overlay with a high molecular weight methacrylate (HMWM) resin prime coat, to the limits shown on the plans. Minimum thickness of finished overlay thickness to be as shown on plans.

Provisions in standard spec 509 for concrete masonry overlays apply unless otherwise specified herein.

B Materials

The polyester polymer concrete system shall consist of a polyester resin binder and aggregate, and a compatible primer.

B.1 Primer

The primer shall be a HMWM resin that is low viscosity, wax free, low odor, and shall meet the following requirements:

Property	Requirements	Test Method
Viscosity ^{A B}	≤ 25 cps	ASTM D 2196 – Brookfield RVT
Specific Gravity ^{A B}	>0.90	ASTM D 1475
Flash Point ^B	≥ 180°F	ASTM D 3278
Tack-free Time ^A	≤ 400 minutes	California Test Method 551
Vapor Pressure ^{A B}	≤ 0.04-in Hg	ASTM D 323
Volatile Content ^B	< 30%	ASTM D 2369
PCC Saturated Surface Dry Bond Strength ^C	≥ 500 psi (24hrs)	California Test Method 551

^A Value based on specimens or samples cured or aged and tested at 77°F.

^B Test performed prior to adding the initiator

^C Value based on specimens or samples stored at 70±1°F.

The initiator for the methacrylate shall consist of a metal drier and peroxide. These materials must be stored separately and in a manner which will not allow the materials to contact each other if spilled or if the packaging leaks.

B.2 Resin

The resin shall be an unsaturated isophthalic polyester-styrene co-polymer with the following properties:

Property	Requirements	Test Method
Viscosity ^{A B}	75-200 cps	ASTM D 2196 – Brookfield RVT
Specific Gravity ^{A B}	1.05-1.10	ASTM D 1475
Absorption	≤ 1 percent (24 hr)	ASTM D 570
Tensile Elongation	35-80 percent (7 days)	ASTM D 638
Tensile Strength	≥ 2,500 psi (7 days)	ASTM D 638
Styrene Content ^B	40-50 percent by weight	ASTM D2369
Silane Coupler	> 1 percent by weight of resin	
PCC Saturated Surface Dry Bond Strength ^C	≥ 500 psi (24 hrs)	California Test Method 551
Permeability to Chloride ion	≤ 100 coulombs (28 days)	AASHTO T 277

^A Values are based on specimens or samples cured or aged and tested at 77°F

^B Test performed prior to adding initiator

^C Values are based on specimens or samples cured or aged and tested at 70°F

The silane coupler shall be an organosilane ester, gammamethacryloxypropyltrimethoxysilane. The promoter/hardener shall be compatible with methyl ethyl ketone peroxide and cumene hydroperoxide initiators.

B.3 Aggregates

For mixing with the polyester polymer resin, furnish natural or synthetic aggregates that have a proven record of performance in applications of this type. Furnish aggregates that are non-polishing; clean; free of surface moisture; fractured or angular in shape; and free from silt, clay, asphalt, or other organic materials. The fine aggregate shall be natural sand. The aggregate gradation shall meet either of the following gradation requirements:

Sieve Size	% Passing by Weight	% Passing by Weight
1/2-in	100	100
3/8-in	100	83-100
No. 4	62-85	65-82
No. 8	45-67	45-64
No. 16	29-50	27-48
No. 30	16-36	12-30
No. 50	5-20	6-17
No. 100	0-7	0-7
No. 200	0-3	0-3

The coarse aggregate shall have a Moh's hardness of 7.0 or greater. The percent wear shall not exceed 50%, and the weighted soundness loss shall not exceed 12% per ASTM C131 and C88, respectively.

Aggregates shall have an absorption not to exceed 1% and the moisture content shall not exceed one half of the aggregate absorption. Aggregates retained on the No. 8 sieve shall have a maximum of 45% crushed particles. 100% of the aggregate retained on No.16 will have at least 1 fractured face and at least 80% will have at least 2 fractured faces of material as measured by ASTM 5821.

The finishing sand aggregate shall be commercial quality dry blast sand with an average absorption of no more than 1%. 95% of the sand shall pass the No. 8 sieve and at least 95% shall be retained on the No. 20 sieve.

B.4 Required Properties of Overlay System

The required properties of the overlay system are listed in the table below:

Property	Requirements ^A	Test Method
Minimum Compressive Strength	2,000 psi (8 hrs) 5,000 psi (24 hrs)	ASTM C 579 Method B, Modified ^B
Set Time	30-120 minutes	ASTM C 266
Minimum Pull-off Strength	500 psi (24 hrs)	ACI 503R, Appendix A

^A Based on samples cured or aged and tested at 75°F.

^B Plastic inserts that will provide 2-in by 2-in cubes shall be placed in the oversized brass molds.

B.5 Approval of Bridge Deck Polymer Overlay System

A minimum of 15 working days prior to the pre-construction meeting, submit to the engineer for approval the product data sheets and specifications from the manufacturer, an overlay placement plan, and a certified materials report from an independent testing laboratory. The engineer may request samples of the primer, resin, and/or aggregate prior to application for the purpose of acceptance testing by the department.

Product data sheets and specifications from the manufacturer consist of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, and any other applicable information.

C Construction

C.1 General

C.1.1 Pre-Installation Conference

Conduct a pre-installation conference with the manufacturer's representative prior to construction to establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer with a copy of the recommended procedures, the manufacturer's instructions, and the polyester polymer overlay mix design including the recommended initiator percentages for the expected application temperature.

A manufacturer's representative familiar with the overlay system installation procedures shall be present at the start of and during the first staged overlay placement to provide quality assurance that the work is being performed properly.

C.1.2 Material Storage and Safety Plan

Store resin materials in their original containers in a dry area. Store and handle materials according to the manufacturer's recommendations. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.

Safety Plan: Prior to arrival of the product on the job site, provide a product shipping, storage, and use safety plan to detail how the product will be delivered and stored on site in a manner that will not allow the constituent components to come in contact with each other in the event of a spill or container leakage. This plan must also include a description of the safety training workers applying the product have received regarding the product's use, and list any and all safety precautions which must be taken during application of the product.

C.2 Deck Surface Preparation

Where milling of the existing concrete surface is shown in the plans, clean the surface of the culvert deck receiving the polyester polymer concrete overlay using a suitable mechanical scarifier. Accomplish this in a way that prevents hooking or tearing the reinforcing steel and that removes any existing polymer overlay as well as at least the minimum thickness of concrete from the deck surface shown on plans, but not more than the maximum depth approved by the engineer.

As specified on the plans, use material designed for concrete deck patching that is compatible with the polyester polymer concrete or Portland cement based patch mix to fill in deck repair areas for Preparation Deck Type 1, Preparation Deck Type 2, and Full Depth Deck Repair as defined by standard spec 509.3.4 and standard spec 509.3.8, respectively. Patching materials with magnesium phosphate shall not be used when the deck is receiving a polyester polymer concrete overlay. Polyester polymer concrete shall not be used in full depth deck repair areas with a plan area larger than 10 feet by 10 feet or when the total amount of patching in a given span exceeds 10% of the deck area. All existing asphalt, magnesium phosphate, and epoxy patches, and any unsound concrete patches must be fully removed to sound concrete as part of the deck preparation process.

If polyester polymer concrete material is used to fill in deck repair areas, place patches after surface is prepared via shot blasting and cleaning as described below. Prime patch area as described in Section C.3.1 of this specification and place polyester polymer concrete material in patch areas a minimum of 1 hour before placing remainder of overlay or per the manufacturer's recommendation for placing deck patches of polyester polymer concrete, as approved by the engineer. If a Portland cement based patch mixed is to be used for deck repairs, the overlay cannot be placed until patches have cured for 28 days.

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface a profile meeting CSP 5 according to the International Concrete Repair Institute Technical Guideline No. 03732.

The engineer may consider alternate surface preparation methods per the overlay system manufacturer's recommendations. The engineer must approve the final surface profile and deck cleanliness prior to the contractor placing the polyester polymer concrete overlay.

Prepare the entire deck (or portion of the deck to be overlaid in one placement when staged construction is being employed) using the final accepted adjustments to the shotblasting machine as determined above. Blasting shall remove all dirt, oil, asphalt, rubber, curing compound, paint, carbonation, grease, slurry, membranes, striping, rust, weak surface mortar, laitance, and other foreign or potentially detrimental materials. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours prior to the application of the primer. Blasted surface shall not be exposed to vehicular or pedestrian traffic other than that required for overlay placement.

Just prior to overlay placement, clean all dust, debris, and concrete fines from the deck surface with compressed air. The air stream must be free of oil and moisture. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely.

Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from material adhering and entering. Tape or form all construction joints to provide a clean straight edge.

C.3 Application of the Overlay System

Apply the overlay system conforming to the manufacturer's instructions.

Do not apply the overlay system if any of the following is true:

- Ambient air temperature is below or expected to drop below 50°F, or the manufacturer's recommended temperature, within 8 hours.
- Deck surface temperature is below 50°F or above 100°F.
- Moisture content in the deck exceeds 4.5% when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured according to ASTM D4263.
- Rain is forecasted by the National Weather Service with a greater than 39% chance to occur within 4 hours of completion or it has rained within the last 24 hours.
- Materials component temperatures are below 50°F or above 100°F.
- Concrete age is less than 28 days, unless approved by the engineer.
- Gel time is 10 minutes or less at predicted high air temperature for the day.
- The relative humidity is greater than 85%.

C.3.1 Application of the Primer

Apply primer to the deck surface within 5 minutes of mixing at approximately 1 gallon per 100 square feet or the rate specified by the manufacturer. Use a squeegee, roller, broom, low pressure sprayer, etc. to distribute the material uniformly and to completely cover the area receiving the overlay. Remove excess buildup and re-prime any areas that appear dry from absorbing material. Wait a minimum of 15 minutes or as recommended by the manufacturer before placement of the overlay. If the primed surface becomes contaminated, clean and re-prime it.

C.3.2 Application of the Overlay

Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions. Mix polyester polymer concrete using a plant/mixer calibrated according to the manufacturer's recommendations.

The polyester concrete shall be placed within 15-120 minutes after the primer has been applied, or per the manufacturer's recommendation.

The polyester concrete shall contain approximately 12% polyester resin by weight of dry aggregate; the exact percentage will be determined by the engineer during placement to enable proper finishing and texturing of the overlay surface.

The amount of initiator used in polyester concrete shall be per manufacturer's recommendation.

Place the polyester polymer concrete before gelling or within 15 minutes of adding the initiator, whichever comes first, or within a more restrictive range if recommended by the manufacturer. Discard any polyester polymer concrete not placed within this time limit at no additional cost.

Consolidate and finish to the required grade and cross-section per standard spec 509. Taper at drains and expansion joints as specified by the manufacturer or as indicated on the plans. Terminating edges of the overlay may require application and finishing by hand trowel. Finishing and texturing equipment shall be fitted with vibrators and tines or other means of consolidating and texturing the polyester concrete to a compaction no less than 97% or as recommended by the manufacturer. A vibratory screed may be used for placement lengths less than 300 ft. A roller type screed is not allowed. If a vibratory screed is used, the surface shall be tested according to standard spec 415.3.10.

If the overlay is placed with a paving machine which incorporates tines, apply the finishing sand immediately after texturing. Otherwise, apply the finishing sand immediately before texturing or as directed by the manufacturer. The finishing sand must be applied before gelling occurs.

The finish sand shall be applied by either mechanical or hand dispersion immediately after strike-off, before gelling occurs. Apply at approximately 15 to 20 lbs per 100 square foot or until saturation as determined by the engineer.

Texture the overlay surface by transverse grooving as soon as the condition of the polyester polymer concrete will permit. Use a steel tined tool or a finned float with a single row of fins. Grooves shall be approximately 3/16-in wide at 3/4- to 1-in on center with a depth of approximately 1/8-in. Do not tine within 1 foot of gutters. Tining may be performed manually provided that the finish obtained is satisfactory to the engineer.

The completed polyester polymer concrete overlay surface shall be free of any smooth areas. Any surface defects shall be repaired by the contractor to the satisfaction of the engineer at no additional cost.

Allow material to fully cure to a firm, hard surface before allowing traffic on the overlay. Cure times will vary depending on product and ambient temperature; refer to manufacturer's recommendation. The overlay shall be protected from moisture while it cures.

Prior to opening to traffic, clean expansion joints and joint seals of all debris and polymer. All working deck joints shall be extended through the overlay and sealed according to plan details. If required by the engineer, a minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.

If the overlay is not completed within the work period (including if staged construction is used), the polyester polymer overlay edges shall be tapered unless directed otherwise by the engineer. Taper the edges at a 1:1 slope. Provide the transverse edge with a 1/2-in lip at the top of the taper so a feather edge is not required for the completion pour. Tapering is not necessary if there is less than a 3/4-in height difference in the elevation of the overlay section and the adjacent pavement. Prime the tapered portion and the vertical faces of butt joints of the previously placed overlay before placing the next portion of the overlay.

C.3.3 Acceptance Testing

C.3.3.1 Bond Strength

Between 24 and 48 hours after overlay placement, conduct one tensile bond test per stage as specified in ACI 503R in the presence of the engineer and at location specified by the engineer. Drill core through the overlay and into the existing concrete a minimum of 1/4-in but no more than 1/2-in. A passing test will have a tensile strength greater than 250 psi, or a failure into the substrate where more than 50% of the core area has failed deeper than 1/4-in. Immediately patch test core holes by blowing out with oil- and moisture-free compressed air and filling with polyester polymer concrete per manufacturer's instructions.

C.3.3.2 Smoothness Quality

The finished surface, when tested with a 10 foot straightedge, shall not vary by more than 1/4-in. Any surface that fails to conform to the above tolerance shall be corrected with a diamond grinder.

C.4 Repair of Polyester Polymer Concrete Overlay

Repair all areas determined by the engineer to be unbonded, uncured, segregated, or damaged at no cost to the department. Submit repair procedures from the manufacturer to the engineer for approval. Absent manufacturer's repair procedures and with the approval of the engineer, complete repairs as follows: Cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or

other approved methods; shot blast or sand blast and air blast the concrete surface prior to placement of overlay material; and place the polyester polymer concrete overlay according to C.3.

D Measurement

The department will measure Polyester Polymer Concrete Overlay with Milling bid item in volume by the cubic foot, acceptably completed. The department will not measure wasted material or material used for trial overlays.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0025.001	Polyester Polymer Concrete Overlay with Milling	CF

Payment for Polyester Polymer Concrete Overlay with Milling is full compensation for preparing the surface including milling of existing deck; for tensile bond testing; providing, hauling, placing, finishing, curing, and protecting the overlay; for cleanup; for sweeping/vacuuming and disposing of excess and waste materials; and for the presence of the manufacturer's representative on the site.

If Portland cement concrete is used for patching, the department will pay for that concrete under a separate bid item.

54. Abandon Sanitary Sewer–Slurry, Item SPV.0035.100.

A Description

This work consists of abandoning sanitary sewer pipe with slurry as shown in the plans and as hereinafter provided.

B Materials

Provide slurry conforming to Type B Slurry Mix as specified in Article 301.9 of the City Standard Specifications.

C Construction

Abandoning sewer pipe with slurry includes plugging one end of the pipe paid separately under the bid item Abandon Sanitary Sewer–Pipe Plug, and requires the entire pipe be filled with slurry. Vent holes may be required by the engineer to verify there are no voids left in the pipe. Saw cutting and removal of the existing pipe at the limits of abandonment is included in this item. Abandon sewer pipe by plugging the end(s) of the pipe. Maintain service in the existing sewers until the replacement sewers or appropriate bypasses approved by the engineer have been installed, at such time bulkheads or plugs may be placed. Contact and coordinate with other utilities so that they may plug their own facilities.

D Measurement

The department will measure Abandoning Sanitary Sewer - Slurry by the cubic yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.100	Abandon Sanitary Sewer–Slurry	CY

Payment is full compensation for all work in abandoning sanitary sewer with slurry as specified herein.

55. Root Pruning Trees, Item SPV.0060.001.

A Description

This special provision describes pruning roots of existing terrace or median trees by hand or using a mechanical root cutting machine to allow for excavation; storm sewer, sanitary sewer or water main installation; and paving and curb and gutter operations.

B (Vacant)

C Construction

Preserve existing terrace or median trees not shown as being removed on the plans. Prune roots of existing terrace or median trees by hand or using a mechanical root cutting machine to allow for adjacent construction operations. Prune roots along the roadway side of the tree from drip edge to drip edge of the tree.

Cleanly cut roots by hand or by using a sharp clean carbide tipped rotary saw blade. If using a saw, disinfect the blade between cuts to avoid spreading disease. All root cuts shall be made smooth and clean to facilitate root regeneration. Tearing or ripping of roots is not acceptable. Removal of roots using a backhoe or endloader without proper root pruning is not acceptable.

Cover exposed tree roots with mulch and keep moist until backfilling is completed.

Backfilling of the area after removal of the roots shall be performed by the contractor as part of this item according to the pertinent provisions of standard spec 207. Backfilling shall be done by use of hand implements within the dripline of terrace or median trees.

Dispose of tree roots according to standard spec 201. Burning or burying of roots will not be permitted.

Do not conduct root pruning during bud break, shoot growth, or environmentally stressful times such as extreme drought or heat conditions.

D Measurement

The department will measure Root Pruning Trees as each individual root pruning trees, 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.0060.001	Root Pruning Trees	EACH

Payment is full compensation for all pruning, cutting, covering exposed roots with mulch, and backfilling.

56. Precast Sign Post Base, Item SPV.0060.002.

A Description

This special provision describes constructing and installing precast sign post bases at locations shown on the plans and as hereinafter provided.

B Materials

All materials furnished for the work shall meet the requirements for the class of materials named.

Specific reference is made to the following sections of the standard specifications:

Concrete Masonry standard spec 501

Steel Reinforcement standard spec 505

Concrete Masonry shall be of a 3,200-psi minimum strength in 28 days. The 2-inch x 24-inch +1/3-inch insert shall be an ASTM Designation 120 A53 Fed Spec P404, Schedule 40 untreated black pipe 2-inch diameter, with a galvanized rigid conduit coupling installed.

C Construction

Form the 24-inch x 11-inch precast base according to the details in the plan. Weld the coupling and pipe over 50 percent of the circumference. Center the insert in the base and plumb with the vertical axis of the base, and place so that the coupling is flush 1/8 inch with the top of the troweled surface of the base. The bottom of the insert extends a minimum of 1/8-inch below the base and shall remain open to permit drainage. Weld 3/8-inch by 8-inch reinforcing bar to the insert 8 inches from the top of the base and 8 inches from the bottom of the base to prevent the insert from rotating within the concrete base.

Set the signpost bases at the locations shown on the plans. The center of the finished installation shall be 2 feet 6 inches from the face of the adjacent curb.

Upon request and reasonable notice from the contractor, the engineer will establish and stake the location for the sign post bases. The City of Madison Traffic Engineering Division Staff will verify all signpost base locations.

Coat the threads of the pipe and coupling in the base with graphite grease prior to assembly. Install the base and pipe as a unit, level with the finished grade of the surrounding surface with the pipe plumb. Tamp the material used for backfilling around the base in 6-inch layers to ensure the installation will remain plumb. Provide a one-year warranty that the signpost base installation shall remain plumb.

Remove and dispose of all excess excavation, surplus material and debris resulting from operations and satisfactorily repair and restore other work damaged by operations.

D Measurement

The department will measure Precast Sign Post Base as each individual precast sign post base, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Precast Sign Post Base	EACH

Payment is full compensation for furnishing all materials; for the manufacture of the sign post base; for hauling, handling and installing the sign post base, including backfill.

57. Sign Post Base for Concrete Installation, Item SPV.0060.003.

A Description

This special provision describes constructing and installing the sign post bases in concrete sidewalk or pavement at locations shown on the plans and as hereinafter provided.

B Materials

The 2-inch x 16-inch sign post base shall be an ASTM Designation 120 A53 Fed Spec P404, Schedule 40 untreated black pipe 2-inch diameter, with a galvanized rigid conduit coupling installed.

Waterproof anchoring cement for concrete shall be Unitex, Thorogrip 29/64 or equivalent.

C Construction

The sign post base shall consist of a 2-inch x 16-inch schedule 40 pipe with attached 2-inch rigid conduit galvanized coupling according to the details in the plan. Weld the coupling and pipe over 100 percent of the circumference.

Set the signpost bases at the locations shown on the plans. The center of the finished installation shall be 5 feet 0 inches (2 feet 6 inches for Advanced Street Name Sign Special installations) from the face of the adjacent curb or from the edge of paved shoulder. Upon request and reasonable notice from the contractor, the engineer will establish and stake the location for the sign post bases. The City of Madison Traffic Engineering Division Staff will verify all signpost base locations.

Box out all installations in hard surfaced areas (concrete) with a round PVC pipe with a minimum diameter of 3-inches or installed by drilling or core drilling a 3-inch hole all the way through the concrete to the base material. If drilling in architectural concrete pavement, cover the surface prior to drilling to protect the surface from drilling slurry. Coordinate all box out locations. With a temporary pipe 4 to 5 feet long, hand-tighten it into the insert. Drive the insert into the base material at a level/plumb position until the insert is flush with the top of the concrete. Shim insert to a level/plumb position with lag bolts or p.k. nails. All shims must be set below the concrete/insert. Remove temporary pipe, replace with permanent pipe, and tighten into insert with large pipe wrench until insert turns. Reset shims or add shims until pipe no longer turns. Retighten pipe and recheck level/plumb/top of concrete with insert. Patch concrete with a waterproof anchoring cement for concrete. Mix patch to a liquid consistency, not a paste. Pour patch until it is flush with the top of the insert. Recheck level/plumb/top of concrete with insert immediately due to fast setting time of cement. Additional cement may be required as it settles. Completed installation shall be level/plumb, solid, and able to support required sign post and signs. Patch shall be flush with adjacent concrete without exposed shims.

Coat the threads of the pipe and coupling in the base with graphite grease prior to assembly. Install the base such that the installed sign post will be plumb. Provide a one- year warranty that the signpost base installation shall remain plumb.

Remove and dispose of all excess excavation, surplus material and debris resulting from operations and satisfactorily repair and restore other work damaged by operations.

D Measurement

The department will measure Sign Post Base for Concrete Installation as each individual sign post base for concrete installation, 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.0060.003	Sign Post Base for Concrete Installation	EACH

Payment is full compensation for furnishing all materials; for the manufacture of the sign post base; for hauling, handling and installing the sign post base, including drilling holes in concrete; and anchoring cement.

58. Erecting City Owned Signs, Item SPV.0060.004.

A Description

Erect city-owned signs according to the requirements of standard spec 638, except that the City of Madison will furnish the signs.

B Materials

Conform to standard spec 638, except that the City of Madison will furnish the signs.

C Construction

Conform to standard spec 638.

D Measurement

The department will measure Erecting City Owned Signs as each individual erecting city-owned signs type II, 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.0060.004	Erecting City Owned Signs	EACH

Payment is full compensation conforming to standard spec 638, except that the City of Madison will furnish the signs.

59. Storm Sewer Tap, Item SPV.0060.005.

A Description

This special provision describes tapping various sized storm sewer pipes or culverts into existing structures, including manholes and inlets, or other pipes as detailed on the plans, using Grade A concrete. However, water levels fluctuate in the existing pipes or box culvert and contractor may encounter water levels above flow line of the proposed storm sewer pipe. If this is the case, the contractor shall also comply with standard spec 502.3.5.3. The tapped pipe shall be left flush with the interior wall of the existing pipe. Tuck-point and seal the tap inside and outside using approved mortar as described in the article, "General Provisions for Storm Sewer."

B (Vacant)

C Construction

The work under these items shall be according to the provisions of standard spec 611, as shown on the plans and as provided herein.

D Measurement

The department will measure Storm Sewer Tap as each individual storm sewer tap, 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.0060.005	Storm Sewer Tap	EACH

Payment is full compensation for tapping the hole; connection of the pipe (pipe paid separately); furnishing and placing concrete.

60. Inlet Covers Type DW, Item SPV.0060.006.

A Description

Perform work according to the applicable provisions of standard spec 611 and as detailed in the plans.

B Materials

Conform to standard spec 611 and as detailed in plans.

C Construction

Conform to standard spec 611 and as detailed in plans.

D Measurement

The department will measure Inlet Covers Type DW as each individual Inlet Covers Type DW, 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.0060.006	Inlet Covers Type DW	EACH

Payment is full compensation for providing new covers, including frames, grates or lids, all other required materials, and for installing and adjusting each cover.

61. Slurry Backfill, Item SPV.0060.007.

A Description

Utility Mains and Laterals:

Work under this item will include all work, materials, equipment, and incidentals required to install dig-able slurry backfill where proposed utility mains or laterals cross existing duct packages (electrical or telephone) or storm sewer boxes. This bid item will only be utilized if the vertical separation between the top of the proposed lateral or main and bottom of the duct being crossed is less than 12 inches and where pipe supports are not called out on the plan set. This bid item is intended for locations where the existing duct packages, conduit, or storm sewer lines are larger diameter (24 inches or larger) where hand digging (tunneling) is used to install the proposed utility.

Various underground structures or manholes:

Work under this item will include all work, materials, equipment, and incidentals required to install dig-able slurry backfill where proposed manholes or other underground structures are less than 12 inches apart from other proposed or existing structures or are too close to allow compaction of backfill between them.

B Materials

Provide slurry conforming to the following one cubic yard mix:

25 lb	Type I Portland Cement
300 lb	Class C Fly Ash
2700 lb	Sand
50 gallons	Water

C Construction

Utility Mains and Laterals:

Install from the bottom of trench to the bottom the existing duct package or storm sewer box being crossed. Use Select backfill to backfill from the top of the slurry to the finished grade on both sides of the duct being crossed. Allow slurry backfill to completely dry before select backfill is placed.

Various underground structures or manholes:

Install between structures only where their proximity to each other does not allow compaction to be attained. Allow slurry backfill to completely dry before backfill is placed.

D Measurement

The department will measure Slurry Backfill as each individual slurry backfill, acceptably completed.

For sewer mains and laterals, the department will measure Slurry Backfill for each completed unit for each existing duct package or storm sewer box being crossed that has less than 12-inches of vertical clearance where tunneling is required to install the proposed utility. For various underground structures or manholes the department will measure Slurry Backfill for each completed unit between two underground structures where compaction cannot be attained.

The amount of slurry backfill is estimated to be approximately one cubic yard per crossing. Any additional Slurry Backfill used will be considered incidental to the contract unit bid price. No extra compensation will be granted for alternate dig-able flowable mix design. For utility mains and laterals, select fill will still be paid for the full length of the pipe being installed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.007	Slurry Backfill	EACH

Payment is full compensation for all excavation; disposing of excess material; furnishing and placing backfill.

62. Street Light Removal, Item SPV.0060.008.

A Description

This special provision describes removing and salvaging a base mounted light pole, direct bury light pole, transformer bases, arm, and luminaire.

B (Vacant)

C Construction

Contact Brian Smith at (608) 261-9625 at least 7 days prior to removing any street lights on the City of Madison lighting systems. Arrange a meeting to document the existing condition of all street lighting materials that will be affected by construction activities.

The City of Madison will provide the following information:

1. Identify all items to be salvaged or disposed.
2. Identify existing feed-point locations and circuit breaks.

When removing existing street lights, carefully remove and stockpile all equipment at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground. Protect luminaires from moisture. Either reinstall lights as the plans show or make available for City of Madison to pick up and salvage. Properly dispose of any equipment that the city does not salvage.

Replace any equipment damaged in the removal process with equipment that is of greater or equal quality than the damaged piece.

See the "Temporary Lighting" article for additional information on maintaining lighting operation in areas as noted.

D Measurement

The department will measure Street Light Removal as each individual removed street light, 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.0060.008	Street Light Removal	EACH

Payment is full compensation for removals, stockpiling, and disposal as required above.

63. Pruning Tree, Item SPV.0060.009.

A Description

This special provision describes pruning existing trees as needed to perform the work under this contract without causing damage to the existing trees. There are several trees within the project limits that potentially have limbs hanging out into the work zone; however, due to the location of the tree, City of Madison Forestry is unable to perform the pruning prior to construction.

B (Vacant)

C Construction

Prior to performing any pruning, verify with the engineer that pruning is necessary and contact the property owner for permission to prune the tree. If the property owner does not give permission, work around the tree as necessary. Perform pruning work according to Article 209.4(e) of the City Standard Specifications and Standard Detail Drawing 2.05 of the City Standard Specifications. Limit pruning to only what is absolutely necessary to perform the work under this contract; however, the amount of pruning should be sufficient so that no limbs are damaged while performing the work. Limit the pruning on any tree to a maximum height of 14 feet. Have a certified arborist on site while performing any tree pruning, to direct the pruning activities.

Note that some species of trees may not be pruned at the time of year that this work is to take place. If any of these types of trees are encountered, work around the tree without any pruning.

D Measurement

The department will measure Pruning Tree as each individual pruning tree, 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.0060.009	Pruning Tree	EACH

Payment is full compensation for all pruning, cutting, contacting the property owner, and providing a certified arborist on site to direct the pruning.

64. Locate and Reference Property Corners, Item SPV.0060.010.

A Description

This work consists of locating and referencing existing property corners within or adjacent to temporary limited easements. Locate and provide adequate reference ties for existing property corners which may be disturbed during construction such that the original monument position may be re-established upon completion of construction.

B (Vacant)

C Construction

Approve the methods with the engineer prior to beginning the work. Use a degree of accuracy for the survey work consistent with A-E 7.06 of the Wisconsin Administrative Code.

D Measurement

The department will measure Locate and Reference Property Corners as each individual locate and reference property corners, 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.0060.010	Locate and Reference Property Corners	EACH

Payment is full compensation for furnishing all survey work necessary to locate and reference the landmark, and for resetting damaged monumentation.

All survey notes and computations used in referencing property corners shall be given to the engineer within 21 days of completing work under the above item and must be received before final payment for the work will be made.

65. Reset Property Corners, Item SPV.0060.011.

A Description

This work consists of the setting of property corners that have been damaged or destroyed during construction operations which were unavoidable. Note that this item does not apply to items damaged due to negligence or relieve the contractor of other responsibilities as outlined in standard spec 107.11.

B Materials

Match the original monumentation requirements for Reset Property Corners to meet the minimum requirements below:

Round iron bars at least 24 inches (610 mm) long and weighing not less than 1.5 pounds per linear foot (2.23 kg/m)."

C Construction

When drive-in monuments are to be used, drive them into the ground with the top flush with the surface. In unstable soils the increase the depth as directed by the engineer to obtain a suitable foundation for the monument. No additional compensation will be made for the increased depth of monument

D Measurement

The department will measure Reset Property Corners as each individual reset property corners, 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.0060.011	Reset Property Corners	EACH

Payment is full compensation for furnishing, placing, and adjusting property corners.

66. Removing Pole Mounted Cabinet, Item SPV.0060.012.

A Description

This special provision describes removing an existing pole mounted cabinet and contents and for storing the cabinet and contents for pick up by the department.

B (Vacant)

C Construction

Remove cabinets at the locations shown on the plans, or as directed by the engineer. Salvage and store the cabinets and all contents for pick up by the department.

Do not remove the existing cabinets, or any other associated equipment until necessary, or as directed by the engineer. Carefully remove the existing cabinets from the pole or other structure, together with all components in such a manner as to safeguard all parts and wiring from damage or loss. Salvage and store the cabinet and contents for pick up by the department.

Prior to removing the existing ITS cabinets, remove all cables being terminated in the cabinet. Removal of cables will be paid for with other pay items in this contract.

D Measurement

The department will measure Removing Pole Mounted Cabinet by each unit, acceptably removed, salvaged, and stored.

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.0060.012	Removing Pole Mounted Cabinet	EACH

Payment is full compensation for removal and storage of the controller cabinet; disconnecting all associated wires and cables.

67. Removing Communication Vault, Item SPV.0060.013.

A Description

This special provision describes removing an existing communication vault.

B Materials

Materials include existing communication vault and restoration materials such as backfill, topsoil, seeding, mulch, and fertilizer according to the pertinent provisions of standard spec 201, 625, 627, 629, 630, 636, and 640.

C Construction

Disconnect and cap conduit entering the communication vault. Remove and dispose of the communication vault. Backfill with material similar to the material surrounding the removal and restore the disturbed area by placing 4-inches of topsoil, and fertilize, seed, and mulch all disturbed areas according to the pertinent requirements of the standard specifications.

D Measurement

The department will measure removing communication vault by each individual unit, removed from the ground, removed from the project site, and the disturbed area restored according to the contract.

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.0060.013	Removing Communication Vault	EACH

Payment is full compensation for removing and disposing of a communication vault; for backfill, topsoil, fertilizer, seed and mulch.

68. Lighting Control Cabinet, Item SPV.0060.050.

A Description

This special provision describes furnishing and installing a lighting control cabinet with all electrical components and wiring assembled.

B Materials

Furnish Grade A, A-WR, A-FA, or A-IP concrete masonry conforming to the requirements of standard spec 501. Conduit cast within the bases shall be Schedule 40 polyvinylchloride (PVC)

B.1 Contactors

Furnish an open type, multi-pole, 30 Amp, 600V electrically held contactor with 120V control coil as required for each proposed circuit.

B.2 Photocell

Furnish a button type photocell and install as shown on the detail. Apply silicone caulk to maintain the watertight integrity of the enclosure. The photocell shall be rated for 120V, 1500W with 30-60 second delay between "on-off" operations.

B.3 Panel

Furnish a 120/240-volt, 100A main lugs only, single-phase, 20-circuit panel board in a 14-inch (approximate) wide NEMA 1 enclosure. Provide copper ground and split neutral bus bars in addition to copper bus bars. Provide bolt-on, thermal-magnetic circuit breakers that clearly indicate ON, OFF, or TRIPPED position in the panel.

B.4 Selector Switches

Furnish "Hand-Off-Auto" switches to control each circuit separately. Provide a "Hand- Off-Auto" legend plate for each switch. Mount the switches adjacent to the respective contactor.

B.5 Cabinet Enclosure

Provide a NEMA 3R enclosure made from .125-inch Type 5052-H32 aluminum. The doorframe shall be double flanged and all exterior seams shall be ground smooth. Door handle shall be 3/4-inch diameter stainless steel with threepoint latching system and hasp. Main door shall be sealed with a closed-cell neoprene gasket. Main door hinge shall be continuous 0.075-inch thick stainless steel with a 0.25-inch stainless steel hinge pin. Provide an aluminum-mounting panel at back (interior) of enclosure. Provide a weatherproof pad lock with 2-3/8-inch wide body, repinnable/replacable cylinder, and five keys. There shall be no louvers or Corbin main door lock. Maintain applicable code working clearances between equipment mounted within the enclosure.

B.6 Surge Arrester

Furnish a surge suppressor to protect the panel board. The surge suppressor shall provide 6 modes of surge protection, meet UL1449 Second Edition with 32Ka per phase and 48KA system peak surge current, contain LED line indicators, and approximate dimensions of 4.54-inch X 2.58-inch X 0.22-inch. Connect the surge suppressor to the branch circuit breaker as indicated on the plans.

B.7 Field Wiring Termination Blocks

All connections from the field wiring to equipment in the lighting control cabinet shall be made through termination blocks. Provide quantity of channel mount, NEMA type single terminal blocks as indicated on plans that are capable of holding #12 to #1/0 wire with solderless box lugs, for power, neutral and grounding connections. Mount the terminal blocks on a mounting channel of appropriate length with end anchors and an end barrier. Each terminal block shall have a label indicating the appropriate circuit number, neutral ('N') or ground ('G') wire connected to block; handwritten numbers and letters are not acceptable means of identification. Make connections from the underground field wiring to the equipment in the lighting control cabinet through distribution blocks.

B.8 Convenience GFI Receptacle and Cabinet Light Fixture

Furnish a 20 ampere, 120 volt commercial grade GFI duplex receptacle within a galvanized steel outlet box with cover. 150 watt, 250 volt commercial grade lamp holder with galvanized steel box and 60 watt incandescent bulb. Furnish switch to turn on cabinet light by opening the cabinet door.

B.9 Incidental Materials

Secure all wiring using screw attachment type straps; adhesive type shall not be allowed.

C Construction

Assemble the control cabinet as shown on the plans. Pretest the cabinet prior to shipment to the site. Mount all equipment to panel in enclosure. Train the cables in straight horizontal and vertical directions and be parallel next to and adjacent to other cables whenever possible. Mount the cabinet to the concrete base per the manufacturer's requirements. The work under this bid item includes connection and termination to the feeder system wiring.

D Measurement

The department will measure Lighting Control Cabinet as each individual lighting control cabinet, 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.0060.050	Lighting Control Cabinet	EACH

Payment is full compensation for furnishing and installing photo control, contactors, panel, distribution blocks, surge arrestor, enclosure, grounding, wiring and electrical components; mounting to the concrete base.

- 69. Poles 30-FT 11 Gauge, Single Simplex, Item SPV.0060.051;
Poles 30-FT 11 Gauge, Twin Simplex, Item SPV.0060.052;
Poles 30-FT 7 Gauge, Single Simplex, Item SPV.0060.053;
Poles 30-FT 7 Gauge, Twin Simplex, Item SPV.0060.054;
Poles 20-FT 7 Gauge, Item SPV.0060.055;
Arm 10-FT, Simplex, Item SPV.0060.056;
Arm 4-FT, Simplex, Item SPV.0060.057.**

A Description

This special provision describes furnishing and installing poles and arms according to standard spec 657, the details shown on the plans, and these special provisions.

B Materials

All poles shall be round, with a base plate welded to the bottom end of the pole. All poles are to be a single section, with an eight-inch diameter shaft at the base and 0.14 inches per foot taper

Base plates shall have a slotted opening for anchor bolts.

All 30-foot poles shall be designated to withstand a 90 mile per hour sustained wind velocity and 117 mile per hour gust velocity with the bracket arm and luminaire in place.

All 20-foot 7 gauge poles will be used for supporting aluminum trombone arms holding signs and/or signal heads.

A 4-inch x 6 1/2-inch galvanized handhole shall be provided with contoured or flat cover plate joined to the reinforced handhole frame with two bolts. The handhole shall be located 90 degrees clockwise from the bracket arm side of poles as viewed when looking down from the top of the pole. The center of the handhole should be 14 inches from the bottom of the pole. A solid metal bracket, with a drilled and tapped hole, shall be provided for securing cover plate bolts. Clips for holding these bolts are not acceptable. The machine bolts shall be a slotted hex-head style.

The pole shaft shall be fabricated from the herein specified manufacturer's best grade, hot rolled basic open hearth, or basic oxygen process steel. The shaft shall have only one longitudinal, electrically welded joint, with the strength rated at not less than 100 percent of the yield strength of the steel and shall have no intermediate horizontal joints or welds. Only one length of steel sheet shall be used, and it shall be formed into a continuously tapered shaft, having a taper of approximately 0.14 inches per foot. The weld shall be smooth, allowing the specified taper to be constant. The pole shall be within 1/4" in 10 feet of being straight and centered on its longitudinal axis.

A grounding nut or nut holder for accommodating a 1/2 inch x 13 UNC threaded bolt or stud shall be provided on the inside of the shaft immediately opposite the center of the handhole. The nut shall be completely free of any metal residue that would prevent a bolt from easily screwing entirely into the nut.

Single-member bracket arms shall conform to the attached drawings and the following specifications. The pole end of the arm shall have a steel fitting welded to it, which will permit the positioning of the arm on the plate of the pole held only by gravity, while the arm is secured to the pole by two cap screws. The bracket shall provide a weather-resistant connection and smooth wiring raceway. (See detail sheet for sketch.) The bracket arm shall attach to the pole approximately 6 inches below the top of the pole.

All bracket arms shall be made to accept a luminaire with a 2 inch slip fitter.

Required simplex arms shall be single-member, with 2-foot rise for 4-foot arms and 2.5-foot rise for 10-foot arms.

All light poles that require more than one bracket arm shall have the simplex fittings located as close as possible to 6 inches down from the top of the pole. If the simplex fittings are located in such a position that it is not possible to weld them to the pole at the specified location, the attachment shall be as follows: The simplex fittings shall be located so that the bottom of the simplex fitting which is at 90° counter-clockwise to the handhole is at the specified distance down from the top of the pole. The other simplex fitting shall be placed with the top of the fitting as close as possible to the specified distance down from the top of the pole

A pole-top cover and four nut covers shall be furnished and installed for each pole.

Each steel pole shall have a permanent imprinted metal label attached with rivets midway between the base plate and the handhole. The label shall state the overall pole height, shaft gauge, and year of manufacture. The label shall conform to the curvature of the pole and not have any sharp edges or corners. All rivets shall be smooth inside and outside of the pole.

After all welding has been completed, the exterior surface of the pole, arm, and hardware shall be thoroughly cleaned and shall be free of all loose rust, mill scale, dirt, oil, grease, and other foreign substances. The poles and arms shall be hot-dipped galvanized according to the requirements of ASTM Designation A123. The hardware shall be hot-dipped galvanized according to ASTM designation A153. The galvanized finish shall be bright, shiny, and uniform. Matted or dull pole sections will not be accepted.

Furnish non-shrink commercial grout from approved products list.

C Construction

Metal poles shall be set and plumbed with the use of leveling nuts furnished with the anchor bolts. Luminaries shall be leveled after erecting and leveling the metal standards with bracket arms. The proper leveling method may be obtained from the manufacturer's

instruction manual. Nuts on anchor and transformer bolts shall be torqued to 175-200 foot pounds or as directed by the engineer. Rust, corrosion, and anti-seize protection shall be provided at all threaded assemblies by coating and mating surfaces with Markal (hightemp – E-Z Break), Never-Seez (Marine Grade), LPS 100, Lubriplate, or approved equal.

The stranded copper ground wire that is installed as a part of base construction shall be attached with an approved connector (Fargo GC 202 or approved equal) to a ground nut located inside the pole opposite the handhole.

When transformer bases are not installed, grout shall be troweled between the pole and concrete base and finished at an angle from the edge of the pole base to the outer edge of the foundation. A ½ inch slot for drainage shall be left through the grouting on the street side at the top of the concrete base.

D Measurement

The department will measure Poles (Description) and Arm (Description) as each individual poles (description) and arm (description), 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.0060.051	Poles 30-FT 11 Gauge, Single Simplex	EACH
SPV.0060.052	Poles 30-FT 11 Gauge, Twin Simplex	EACH
SPV.0060.053	Poles 30-FT 7 Gauge, Single Simplex	EACH
SPV.0060.054	Poles 30-FT 7 Gauge, Twin Simplex	EACH
SPV.0060.055	Poles 20-FT 7 Gauge	EACH
SPV.0060.056	Arm 10-FT, Simplex	EACH
SPV.0060.057	Arm 4-FT, Simplex	EACH

Payment is full compensation for furnishing and installing all materials, including poles, all hardware and fittings necessary to completely install the pole; for corrosion prevention when required; for installing identification plaques when required.

- 70. Electrical Pullbox, Type I, Item SPV.0060.058;
Electrical Pullbox, Type III, Item SPV.0060.059
Electrical Pullbox, Type V, Item SPV.0060.060;
Electrical Pullbox, Type VII, Item SPV.0060.061.**

A Description

Furnish and install electrical pull boxes according to standard spec 653, the plan details, and as hereinafter provided.

B Materials

Electrical Pullbox, Type I shall be gray-colored polymer-concrete construction. Box dimensions for Type I shall be 19" wide X 32" long X 24" deep. The Type I box and cover shall be rated to withstand 15,000 lbs over a 10" square with a minimum test load of 22,568 lbs.

Electrical Pullbox, Type III shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type III shall be 12" wide X 12" long X 12" deep. The Type III box and polymer cover shall be rated to withstand 20,000 lbs.

Electrical Pullbox, Type V shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type V shall be 24" wide X 36" long X 24" deep. The Type V box and polymer cover shall be rated to withstand 20,000 lbs.

Electrical Pullbox, Type VII shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type VII shall be 30" wide X 50" long X 36" deep. The Type VII box and polymer cover shall be rated to withstand 20,000 lbs.

Each cover shall have the logo "TRAFFIC SIGNAL" imprinted from the manufacturer.

C Construction

Install Electrical Pullbox (Type) according to the pertinent provisions of standard spec 653.3 and the plan details.

D Measurement

The department will measure Electrical Pullbox (Type) as each individual electrical pullbox (type), 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.0060.058	Electrical Pullbox, Type I	EACH
SPV.0060.059	Electrical Pullbox, Type III	EACH
SPV.0060.060	Electrical Pullbox, Type V	EACH
SPV.0060.061	Electrical Pullbox, Type VII	EACH

Payment is full compensation for furnishing and installing all materials, including crushed aggregate; and for excavation, backfill, and disposal of surplus materials.

71. Electrical Utility Access Structure, Item SPV.0060.062.

A Description

Furnish and install electrical utility access structure according to standard spec 611, the plan details, and as hereinafter provided.

B Materials

Conform to standard spec 611 and plan details.

C Construction

Conform to standard spec 611 and plan details.

D Measurement

The department will measure Electrical Utility Access Structure as each individual electrical utility access structure, 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.0060.062	Electrical Utility Access Structure	EACH

Payment is full compensation for providing and installing all materials, including all masonry, reinforcement, conduit connections, steps, and other fittings; frame and casting; for furnishing all excavating, backfilling, disposing of surplus material, and for cleaning out and restoring the work site.

72. Concrete Base Type G, Item SPV.0060.063; Concrete Base Type LB-3, Item SPV.0060.064; Concrete Base Type LB-8, Item SPV.0060.065; Concrete Base Type P, Item SPV.0060.066; Concrete Base Type M, Item SPV.0060.067.

A Description

Construct concrete foundations, including furnishing and installing necessary hardware, as shown on the plans, according to the pertinent provisions of standard spec 654, and as hereinafter provided.

B Materials

Concrete masonry shall be Grade A, A-WR, A-FA, or A-IP conforming to the requirements of standard spec 501.

Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of standard spec 652.

Anchor bolts for Type G bases shall be made from high-strength steel 50 KSI minimum yield strength, ASTM A36, and each shall be fitted with a hard washer and heavy hex nut. Each bolt shall have approximately 3 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bolts shall be $\frac{3}{4}$ " x 24".

Anchor bolts for Type LB-3 and Type LB-8 bases shall be made from high strength steel (50 KSI minimum yield strength), ASTM A36, and each shall be fitted with two hard washers and two heavy hex nuts. Each bolt shall have approximately 6 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bolts for the LB-8 base shall be 1.25 inch by 48 inch, including 4-inch L-bend at the bottom. Bolts for the LB-3 base shall be 1.00 inch by 40 inches including 4-inch L-bend at the bottom.

The Type P and M bases shall include a concrete maintenance platform. The Type P and bases shall generally be constructed according to the Concrete Control Cabinet Base Standard Detail. The location of the conduits in the base shall be confirmed with the City of Madison. Anchor bolts, nuts, and washers for Concrete Controller Base, Type P, will be provided and installed by the City of Madison when installing signal control cabinets. Bar steel reinforcement shall conform to the requirements of standard spec 505.

C Construction

Place the bases with one side parallel to the centerline of the street.

Provide forms of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. Construct the top surface of the base with a 3/4 inch bevel on the edges with a rubbed finish.

Cast anchor bolts into the base as shown on the plans. Verify bolt circle diameters before constructing the bases.

Furnish and install manufactured elbows in all bases, except as noted on the details. Install elbows that permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted. Extend existing conduit into the bases. Install an extra elbow as directed by the engineer at each base at the end of a run. Install extra elbows in any new base as directed by the engineer.

Erect poles on the concrete bases until the bases after the concrete has cured for at least seven days.

Provide a rubbed finish down to finished grade for all concrete bases.

D Measurement

The department will measure Concrete Base (Type) as each individual concrete base (type), 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.0060.063	Concrete Base Type G	EACH
SPV.0060.064	Concrete Base Type LB-3	EACH
SPV.0060.065	Concrete Base Type LB-8	EACH
SPV.0060.066	Concrete Base Type P	EACH
SPV.0060.067	Concrete Base Type M	EACH

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

73. Concrete Base Offset, Item SPV.0060.068.

A Description

Construct concrete street light bases, including necessary hardware, according to the pertinent provisions of standard spec 654 and as hereinafter provided.

B Materials

Concrete masonry shall be Grade A, A-WR, A-FA, or A-IP conforming to the requirements of standard spec 501. Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of standard spec 652. Anchor bolts shall be made from high strength steel (50 KSI minimum yield strength), ASTM A36, and each shall be fitted with two hard washers and two heavy hex nuts. Each bolt shall have approximately 6 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bar steel reinforcement shall conform to the requirements of standard spec 505.

C Construction

Locate proposed street light bases as shown in the plans according to the Construction Staking Electrical Installations bid item. Where potential underground conflicts exist, locate the existing utility. Hand excavation may be required. Utilities may require an inspector to be present when excavating near their facilities. Refer to Utilities Article of these special provisions for additional requirements. The engineer will determine whether to adjust the base location laterally to avoid the conflict or require the use of an Offset Base.

Forms shall be of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. The top surface of the base shall be level with a 3/4 inch bevel on the edges and shall be given a rubbed finish.

Anchor bolts shall be cast into the base as shown on the plans. Bolt circle diameters shall be verified before constructing the bases.

Manufactured elbows shall be furnished and installed in all bases by the contractor, except as noted on the details. Elbows shall be installed to permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted.

Existing conduit shall be extended into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Each base at the end of a run shall have an extra elbow installed as directed by the engineer.

Extra elbows shall also be installed in any base as directed by the engineer. Poles shall not be erected on the concrete bases until the bases have cured for at least seven days.

Provide a rubbed finish down to finished grade for all concrete bases.

D Measurement

The department will measure Concrete Base Offset as each individual concrete base offset, 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.0060.068	Concrete Base Offset	EACH

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

74. Transformer Base 16-Inch Steel, Item SPV.0060.069; Transformer Base 20-Inch Steel, Item SPV.0060.070.

A Description

This special provision describes furnishing and installing steel transformer bases as shown on the plans and as follows.

B Materials

The steel transformer bases shall be hot-dipped galvanized according to ASTM designation A123. The bases shall have slotted bolt openings. Steel connecting bolts, size 1.25 inches by 4 inches, hold down lugs for 1.25-inch bolts and nuts and washers shall be furnished. Verify the bolt diameter, projection and bolt circle dimension required for each application. Ensure the concrete bases and pole bases are compatible with the transformer bases and bolts. All such material shall be hot-dipped galvanized and be of sufficient size and strength to exceed the capacity of the bases. The 16-inch base shall conform to the detail in the plan. The 20-inch base shall be Valmont M201, Union Metal 14-B2640Y2, Millerbernd 390A105, Ameron TB1316, or approved equal.

Furnish to the engineer at the time of delivery of the bases, a manufacturer's certificate of compliance that the base and hardware as furnished meets the above requirements.

C Construction

Install transformer bases according to the manufacturer's instructions, and as shown on the plans.

D Measurement

The department will measure Transform Base (Size) Steel as each individual transformer base (size) steel, 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.0060.069	Transformer Base 16-Inch Steel	EACH
SPV.0060.070	Transformer Base 20-Inch Steel	EACH

Payment is full compensation furnishing and installing transformer bases, streetlight pole wire, mechanical grounding connector and related hardware; for leveling shims when required.

75. Traffic Signal Control Cabinet, Item SPV.0060.071.

A Description

This special provision describes providing a door-in-door style, open bottom, base mounted cabinet, with exterior dimensions of 55" height, 38" width, and 26" depth. The cabinet shall be of weatherproof construction, fabricated from sheet aluminum at least

0.125-Inches thick and adequately reinforced. A heavy duty stainless steel handle (5/8 inch minimum diameter) and latch shall be provided. The door hinges shall be all stainless steel and continuous for the full height of the door. The cabinet interior shall have a zinc chromate prime coat and be finished with one coat of rust-resistant high gloss white enamel. The cabinet exterior shall be natural mill finish. Two adjustable-height shelves of 12-13 inches depth are required.

B Materials

B.1 Locks

Provide a main cabinet door with a tumbler lock keyed for a Corbin No. 2 key. Equip the auxiliary (Police Panel) door with a lock for a standard police key. Furnish a key for each lock. When the door is closed and latched, with the key removed, the door shall lock. The locking bar shall be a solid non-rusting metal with a square cross-section, equipped with a double roller on each end.

B.2 Door Stop

Equip the cabinet with a door stop assembly to hold the door open at approximately 90° and 150°.

B.3 Weather Protection and Incandescent Light

Equip the cabinet with an electric fan assembly with a minimum capacity of 100 cubic feet per minute. Mount the fan in the top of the cabinet in a manner to prevent rain from entering the cabinet. The fan shall be thermostatically controlled and shall be manually adjustable to turn on between 80 degrees F and 150 degrees F. The cabinet fan circuit shall have fuse protection at 125% of the capacity of the fan motor.

Air intake near the bottom of the cabinet via louvered vents shall have a removable filter, including a gasketed aluminum filter replacement for use in the winter to prevent entrance of snow.

Mount an incandescent light socket in the upper front part of the cabinet.

B.4 Grounding

Provide a copper equipment grounding bus in each cabinet to accept up to #4 stranded wire. Ground the ground bus to the cabinet and provide at least 14 terminals of the tubular clamp type. Connect all ground bus together with a minimum #8 green copper wire.

B.5 Solid State Flasher

Furnish the cabinet with two 6 pin, 20 amp, double circuit solid state flashers, fully connected and operating.

B.6 Flash Transfer Relays

Provide electromechanical relays for opening and closing traffic signal field circuits. Furnish the cabinet supplied under this specification with four 2-pole transfer relays wired to transfer the vehicle phases. Cover relays used for this purpose, insulate, or locate so that electrically alive parts are not readily exposed. All relays shall be next to each other and mounted on the back panel.

All contact points which make, break, and carry current to the signal lamps shall be of silver-cadmium, coin silver or equivalent material. Contact shall be capable of making, breaking, and carrying a current of 10 amperes, 120 volts, without undue pitting. Relay coils shall have a power consumption of 10 volt amperes or less and shall be designed for continuous duty. Contact points which make, break, and carry current to the solid state switchpacks shall be capable of carrying 40 amperes of 120 volts without undue pitting.

The transfer relay shall withstand a potential of 1500 volts at 60 Hertz between insulated parts, and between current carrying parts and grounded and non-current carrying parts. Each transfer relay shall have a one cycle surge rating of 175 amperes RMS (247.5 amperes peak). Each transfer relay shall be unaffected by electrical noise, having a rise time of up to 200 volts per microsecond. Each relay shall be unaffected by the 500 volt power noise transient test.

The flash transfer relay shall energize the flasher and transfer field signal light circuit from the controller to flasher and shall permit flashing lights as programmed on the main street or highway and on the cross street or streets. Operation of the flash transfer relay circuit shall not prohibit the operation of the controller but shall prohibit operation of the field signal light circuits by the controller.

The flash transfer relay shall be provided with a connector for the following pin assignments:

Pin Function

1. Relay Coil
2. Relay coil
3. NC Ckt. #1
4. NC Ckt. #2
5. Relay Common Ckt. #1
6. Relay Common Ckt. #2
7. No. Ckt. #1
8. No. Ckt. #2

Wire the flash circuit in a fail-safe manner so that the intersection will revert to and remain in the flashing mode whenever and for as long as either the controller or the monitor is disconnected. Support the relays with a rack at least 8 1/2 inches out from each socket.

B.7 Flash Sequence Programming

A programming means shall be provided to determine if flashing yellow or red appears on the output field terminals to the signal heads. Accomplish programming with simple tools such as a screwdriver. Conform the sequence timing for flash by automatic call-up with the MUTCD.

B.8 Load Switches

Furnish eight 3-circuit load switches, discrete type, with each cabinet. The load switch panel shall have a bracket support for its full length and extending out 8 1/2 inches from the panel socket. The bracket support is intended to reduce switch loosening from vibrations and to prevent switches from falling down if disengaged from the socket.

B.9 Harness Wiring

The wiring and cabinet panel arrangement shall provide for full dual ring eight phase actuated operation. A 12-channel conflict monitor harness shall be supplied and wired in each cabinet. All cabinet wiring harnesses shall be neat, firm and routed to minimize crosstalk and electrical interference. Loop harnesses shall be routed to the right (hinge) side of the cabinet and attached up to shelf level to avoid harnesses dangling in front of the door.

Wiring containing AC shall be routed and bundled separately from all low voltage control circuits. Fuses and surge protection shall be furnished for all interconnect circuits. All conductors and live terminals or parts, which could be hazardous to maintenance personnel, shall be covered with suitable insulating material.

B.10 Terminal Blocks

Terminal block connections shall be a minimum of 8 inches from the bottom of the cabinet. The terminal blocks provided shall be two-position barrier type. Terminal blocks shall be so arranged that they shall not upset the entrance, training and connection of incoming field conductors. All terminals shall be clearly identified and shall be permanently associated with the terminal block.

Terminal blocks used for field wiring connections (field terminals) shall be capable of securing conductors with 10-32 or larger nickel or cadmium plated brass binder head screws.

Terminal blocks used for the applied AC power shall be capable of securing conductors with a 10-32 nickel or cadmium plated brass binder head screws.

There shall be field terminal blocks provided for the connection of all loop detectors. Where a card rack is required, terminal blocks to accommodate 16 detector channels shall be provided.

B.11 Detectors Card Rack

The detector card rack shall provide four slots for four-channel detectors (a total of 16 detector channels) and a power supply slot. The card rack shall have flanges turned out. The card rack shall be fully wired and connected to cabinet terminals 1 through 16. Terminals 1 through 8 shall be associated with vehicle phases 1 through 8, respectively. A four-channel power supply shall be supplied with per-channel fusing and output indicators for each channel. The card rack shall be mounted on the top shelf, left side as one looks into the cabinet.

B.12 Detectors

The cabinet shall contain four 4 channel digital loop detector amplifiers approved for use by City of Madison Traffic Engineering and shall have at the minimum the following characteristics: Rack mount design, 2" maximum width for front panel. User selection for the following must be available on the front panel without requiring auxiliary devices:

1. Pulse or presence
2. Sensitivity, minimum of 6 levels
3. Sequentially scan channels or other suitable means to reduce crosstalk
4. Display detection and faults for each channel
5. Self-tuning

B.13 Power Panel

The cabinet shall have a power distribution panel containing the following elements:

1. Surge protection provided by use of a varistor or other suitable equipment.
2. Two 30-amp Radio Interference Suppressors.
3. 50-amp single pole Main Breaker followed by dual 30-amp Main Circuit Breakers with single common trip.
4. 15-amp Auxiliary Equipment Circuit Breaker.
5. Two 30-amp Power Relays (Mercury Contactors).
6. Neutral Bus Bar Isolated from Cabinet Ground.
7. Ground Bus Bar.
8. EDCO SHP 300-10 Power Line Surge Protector.

The mercury contactor shall be normally open and capable of switching 30 amperes at 120 volts AC.

A neutral bus terminal shall be provided with at least 14 terminals of the tubular clamp type able to accept up to #4 stranded wire.

B.14 Police Panel

The main door of the cabinet shall have a police panel door. Behind this door shall be a panel with a minimum of a toggle switch labeled "SIGNALS ON-OFF" and a toggle switch labeled "SIGNALS FLASH-AUTO." The signals on-off switch shall cause all intersection displays to be turned off and the controller AC power to be removed when placed in the off position.

In the flash position, the signals flash switch shall cause the intersection to be placed in flashing position and the controller shall stop time.

B.15 Maintenance Panel

Provide a maintenance panel on the inside of the main door containing the following:

1. GFCI duplex convenience outlet.
2. Stop time switch.
3. Controller on/off switch.
4. Vehicle and pedestrian detector actuation test push buttons.
5. Incandescent light switch.

The stop time switch shall be a three-position toggle switch labeled ON, OFF, and AUTO. In the ON position, stop timing power shall be applied to the controller. In the OFF position, stop timing shall be removed from the controller if it has been applied by the conflict monitor or other auxiliary device. The AUTO position shall be the normal operating position and allow auxiliary devices to apply stop timing inputs to the controller. The conflict monitor shall be wired through the stop time switch such that when in the AUTO setting and a conflict is detected, stop timing shall be applied to the controller.

The controller switch shall be a two-position toggle switch labeled ON and OFF. In the OFF position, the intersection shall be placed in flashing operation and the controller turned off.

There shall be a detector test push button or toggle switch for each vehicle and pedestrian phase. These shall be located to preclude accidental activation when the door is closed.

B.16 Pedestrian Button Wiring

Pedestrian push button logic shall be opto-isolated such that there will be no logic common carried out to each individual push button. The AC- from the field pedestrian push button shall activate the opto-isolated pedestrian push button relays when the field button is activated.

B.17 Testing, Labeling and Wiring Diagram

The vendor shall thoroughly test the cabinet wiring and auxiliary devices with a controller and monitor (if the harness is to be furnished by the vendor) in place.

All equipment furnished in the cabinet shall be clearly and permanently labeled.

A good reproducible 24 inch by 26 inch mylar wiring diagram shall be supplied to the city.

B.18 Warranty

The vendor shall warrant the performance and construction of the fully-wired cabinet to meet the requirements of this specification, and shall warrant all wiring parts, components, and appurtenances against defects in design, material and workmanship for a period of one year from the date of installation. In the event defects and failures become apparent during this time, the vendor shall repair and/or replace all defective parts or appurtenances at no additional expense to the city. This specification is to construe that any part, or parts, that fail to function properly shall be replaced at no charge to the department.

B.19 Cabinet Design for City Review Before Manufacturing.

The vendor shall supply the city with a complete set of plans for the cabinet for review before manufacturing the cabinet. After city approval of the design as received or as modified by joint agreement between the city and the vendor, the cabinets shall be wired according to the approved design and specifications. The city will complete its review within five work days from receipt of the cabinet design.

C (Vacant)

D Measurement

The department will measure Traffic Signal Control Cabinet as each individual traffic signal control cabinet, 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.0060.071	Traffic Signal Control Cabinet	EACH

Payment is full compensation for furnishing and delivering all materials to the City of Madison, 1120 Sayle Street.

76. Traffic Signal Controller, Item SPV.0060.072.

A Description

This special provision describes furnishing a traffic signal controller with auxiliary equipment to the City of Madison.

B Materials

Furnish the following:

1. Econolite Cobalt controller with HTR, data key, and Ethernet.
2. FSK TLM 25 pin for this controller.
3. Econolite TIO board with harness.
4. D connector interface harness and board.

C Construction

Traffic signal controller will be installed by City of Madison personnel.

D Measurement

The department will measure Traffic Signal Controller as each individual traffic signal controller, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.072	Traffic Signal Controller	EACH

Payment is full compensation for furnishing and delivering the signal controller, and all auxiliary equipment, to the City of Madison, 1120 Sayle Street.

77. Malfunction Management Unit (MMU), Item SPV.0060.073.

A Description

This special provision describes furnishing a shelf-mountable, 16-Channel, solid-state MMU with Ethernet capability to the City of Madison.

The City of Madison will install this item as part of the construction of this project.

B Materials

Provide one shelf-mountable, 16 channel, solid-state MMU with Ethernet capability. The MMU shall meet the requirements of Section 4 of the NEMA TS2 Standard. The MMU shall be capable of the following:

- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.
- Determining if the field signal input states detected as active or inactive by the MMU correspond with the data provided by the Controller Unit.
- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.

- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).
- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.
- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special programs cards.
- A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction.

The MMU shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

C (Vacant)

D Measurement

The department will measure Malfunction Management Unit (MMU) as each individual malfunction management unit (MMU), 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.0060.073	Malfunction Management Unit (MMU)	EACH

Payment is full compensation for furnishing and delivering the signal controller, and all auxiliary equipment, to the City of Madison, 1120 Sayle Street.

78. Traffic Signal Ethernet Switch, Item SPV.0060.074.

A Description

This special provision describes furnishing and installing an ethernet switch in an existing traffic signal cabinet, as specified in standard spec 651, 655, 670, 674, and 675, as shown on the plans, and as provided hereinafter.

B Materials

Furnish Cisco IE-2000-4TS-B Ethernet switches as shown in the plans.

Provide all necessary cables between the ethernet switch and device or devices as shown in the plans.

C Construction

Install the traffic signal ethernet switch in an existing traffic signal cabinet. Connect it to devices as shown on the plans, according to the manufacturer's recommendation, and as directed by the engineer.

Contact Mike Christoph at the City of Madison Traffic Engineering shop at (608) 266-9031 a minimum of 7 working days in advance to coordinate installing equipment in existing traffic signal cabinet.

D Measurement

The department will measure Traffic Signal Ethernet Switch as each individual traffic signal ethernet switch, 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.0060.074	Traffic Signal Ethernet Switch	EACH

Payment is full compensation for furnishing and installing an ethernet switch, all necessary incidental wiring and hardware, making all necessary connections.

- 79. Traffic Signal Trombone Arms Aluminum 12-Foot, Item SPV.0060.075;
Traffic Signal Trombone Arms Aluminum 15-Foot, Item SPV.0060.076;
Traffic Signal Trombone Arms Aluminum 18-Foot, Item SPV.0060.077;
Traffic Signal Trombone Arms Aluminum 22-Foot, Item SPV.0060.078.**

A Description

This special provision describes furnishing and installing trombone mast arms and all necessary miscellaneous hardware needed to complete the installation of the trombone mast arm as shown on the plans, in the standard specifications, and as hereinafter provided.

B Materials

The traffic signal trombone arm shall be designed to withstand loadings resulting from a 12" 3-section aluminum signal with backplate and an 18" x 90" aluminum street name sign mounted on the arm as shown on the drawing. Design factors according to the AASHTO Specifications for the Design and Construction of Structural Supports for Traffic Signals, Signs, and Highway Lighting, together with a wind pressure resulting from a wind velocity of 80 miles per hour plus gust factor, shall be applied to these arms, with the above signals attached.

Certification of compliance with these stated AASHTO performance requirements shall be furnished with submission of the material list.

Shop drawings shall be submitted and shall include dimensions of width, depth, length and thickness of all members and ASTM designation and alloy designation of aluminum members.

The trombone arm shall be aluminum and shall consist of round or oval upper and lower members joined by one or more tubular vertical struts welded to them. The pole end of the mast arm shall have a mounting clamp welded to it which will permit the attachment of the mast arm to a round pole of varying diameter. The lower clamp shall be 5-7/8" I.D. and the upper clamp shall be 5-1/2" I.D. The design of the clamps shall accommodate some variation in pole diameter while still attaining full contact between the clamp and the pole. The surface area of the clamp contacting the pole shall be sufficiently large and designed to prevent horizontal rotation in windy conditions. The bolts connecting the arm bracket to the back bracket shall be galvanized steel; stainless steel bolts are not acceptable. The vertical strut, which has provision for mounting the signal head, shall also provide for horizontal adjustability along the main mast arm members so that signal heads of various lengths with backplates, up to and including 5-section 12" heads, can be accommodated within the confines of the mast arm. The cross tees for signal heads shall each have two slots on the threaded hubs that face each other.

The wiring raceway entrance shall be through the lower mounting bracket.

The mast arm shall have a uniform natural aluminum finish and shall be clean. No painting or other corrosion preventive maintenance will be required.

The portion of the main members of the arm to which the arm attachment bands are welded shall be one-piece seamless tapered aluminum tubes.

The main arm member shall be attached to the pole using extruded aluminum clamps fastened with continuously threaded stainless-steel bolts with nuts and washers meeting the requirements of ASTM Designation A-320. Strength and/or grade specification ratings shall be listed on the shop drawings. Stiffeners or gussets shall be provided at the joints between the main arm tubes and arm clamps to provide adequate strength to resist side loads.

Shims shall be made of an aluminum alloy.

A permanent imprint of the "Type" and "Year of Manufacture" shall be made on the underside of the lower member of each arm.

C (Vacant)

D Measurement

The department will measure Traffic Signal Trombone Arms Aluminum (Length) as each individual traffic signal trombone arms aluminum (length), 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.0060.075	Traffic Signal Trombone Arms Aluminum 12-Foot	EACH
SPV.0060.076	Traffic Signal Trombone Arms Aluminum 15-Foot	EACH
SPV.0060.077	Traffic Signal Trombone Arms Aluminum 18-Foot	EACH
SPV.0060.078	Traffic Signal Trombone Arms Aluminum 22-Foot	EACH

Payment is full compensation furnishing and installing all materials including all hardware, fittings, mounting clamps, shims and attachments necessary to completely install the arm.

80. Traffic Signal Heads 12-Inch, 3-Section, Item SPV.0060.079; Traffic Signal Heads 12-Inch, 4-Section, Item SPV.0060.080; Traffic Signal Heads 16-Inch Pedestrian with Countdown, Item SPV.0060.081.

A Description

This special provision describes furnishing and installing vehicle and pedestrian signals with LED indications according to the standard specifications and these special provisions.

B Materials

Furnish circular bicycle and arrow LED modules from the department's approved product list and conforming to ITE VTCSH-LED.

Furnish state approved 16-Inch Pedestrian LED Full Hand/Full Man Overlay Module with Countdown conforming to ITE VTCSH-LED.

Provide all pedestrian signals with tunnel visors in place of z-grate specified by the department.

Provide all vehicle signals with cutaway visors.

Provide snow-shedding shield on each signal indication on all signals mounted on monotube arms or trombone arms. The shield shall be impact resistant polycarbonate, designed and installed specifically to reduce snow accumulation, while not allowing water to enter or reside in the signal unit. If there are not any far side signals on monotube arms or trombone arms, then install snow-shedding shields on each signal indication of the far-right signal.

Pedestrian countdown timers shall have a control wire so that when 120V AC current is applied, the timer will immediately go dark. This control wire shall be wired back to the signal control cabinet.

Make all vehicle and pedestrian signal heads with polycarbonate material, UV stabilized, with color impregnated in the material. All features and performance shall meet the requirements outlined in the latest revision of the Institute of Transportation Engineers' publication, "Adjustable Face Vehicular Traffic Control Signal Heads" The front face and all visors (inside and outside) shall be flat or semi-gloss black. All other exterior parts shall be Federal Highway yellow. Use only exterior hardware made of stainless steel.

C Construction

Construct according to standard spec 658.

D Measurement

The department will measure Traffic Signal Heads (Type) as each individual traffic signal heads (type), 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.0060.079	Traffic Signal Heads 12-Inch, 3-Section	EACH
SPV.0060.080	Traffic Signal Heads 12-Inch, 4-Section	EACH
SPV.0060.081	Traffic Signal Heads 16-Inch, Pedestrian with Countdown	EACH

Payment is full compensation furnishing and installing all materials including all hardware.

**81. Backplates Signal Face, 3-Section 12-Inch, Item SPV.0060.082;
Backplates Signal Face, 4-Section 12-Inch, Item SPV.0060.083.**

A Description

This special provision describes furnishing and installing backplates for signal faces.

B Materials

Furnish Backplates Signal Face (Size) according to the pertinent requirements of standard spec 658 and these special provisions.

Backplates for 12-inch signal heads shall provide a 5-inch wide black band around the signal head. The backplates shall be an approved black rigid material, such as vacuum formed ABS plastic. The backplates shall match the signal heads being furnished under this bid, equipped with all necessary holes, mounting devices. All mounting hardware shall be stainless steel.

C Construction

Install the backplates according to standard spec 658.3, the manufacturer's instructions, and as shown on the plans.

D Measurement

The department will measure Backplates Signal Face (Size) as each individual backplates signal face (size) 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.0060.082	Backplates Signal Face, 3-Section 12-Inch	EACH
SPV.0060.083	Backplates Signal Face, 4-Section 12-Inch	EACH

Payment is full compensation furnishing and installing all materials including all hardware.

82. Utility Line Opening (ULO), Item SPV.0060.100.

A Description

Excavate and uncover utilities for the purposes of determining elevation and potential conflicts, as shown on the plans or as directed by the engineer, and as hereinafter provided.

B (Vacant)

C Construction

The excavation will be done in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.

The utility line openings will be performed as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Where utilities are within 5 feet of each other at a potential conflict location, only one utility line opening will be called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings will include a trench up to 5 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Coordinate all utility line openings with the engineer. Do not perform ULOs without engineer's approval. Notify the utility engineers or their agents of this work a minimum of 3 days prior to the work so they may be present when the work is completed. Verify the need for performing ULOs with the engineer since some of the utilities may have been relocated prior to the start of construction.

Replace pavement open to traffic within 24 hours of the excavation.

D Measurement

The department will measure Utility Line Opening (ULO) by the unit, acceptably completed. Where utilities are within 5 feet of each other at a potential conflict location, only one utility line opening will be measured.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.100	Utility Line Opening (ULO)	EACH

Utility Line Opening, measured as provided above, will be paid for at the contract unit price each, which will be full compensation for the excavation required to expose the utility line, backfilling with existing material removed from the excavation, compacting the backfill material, restoring the site, and cleanup.

83. Sewer Electronic Markers, Item SPV.0060.101.

A Description

Work under this item includes installing Sewer Electronic Markers according to Article 503.2 of the City Standard Specifications. These sewer electronic markers will be installed where called for on the plan set above sanitary sewer.

B Materials

All materials are described in Article 503.2(f) of the City Standard Specifications. Markers will be provided by the City of Madison.

C Construction

Install Sewer Electronic Markers (sanitary) according to Article 503.2(f) of the City Standard Specifications.

Notify the engineer when marker balls are installed. Each marker ball will be tested by the city before completion of final pavement surface to confirm that it is installed and functioning properly. If it is not installed or functioning, excavate to expose the existing marker ball or lateral and place a new marker ball. No additional compensation will be provided for this work.

D Measurement

The department will measure Sewer Electronic Markers as each individual sewer electronic marker, 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.0060.101	Sewer Electronic Markers	EACH

Payment for Sewer Electronic Markers is full compensation for furnishing all work required to complete the installation and all associated work to provide a complete functioning system. The department will not pay for replacing those marker balls that are non-functional. Marker balls will be provided by the City of Madison.

84. Sanitary Lateral Reconnect, Item SPV.0060.102.

A Description

This special provision describes sanitary sewer lateral connections encountered during the course of this project that connect to the sanitary sewer main.

B Material

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

Provide sanitary sewer pipe and fittings having a standard dimension ratio of 26 or 35 depending on the depth of the pipe. Sewer lateral pipe and fittings deeper than 12 feet will have ASTM D3034 SDR 26 pipe.

Provide fittings conforming to the requirements of the American National Standard for Ductile-Iron and Gray-Iron fittings for Water and other liquids, ASA A21.10 (AWWA C110) where the sewer main being installed is Pressure Sanitary Sewer Pipe.

Both long body and short body wye ductile iron fittings are acceptable for PVC Pressure Sanitary Sewer Pipe installations where there is less than 8 feet of horizontal separation from water main measured from center of each pipe. AWWA C900 fittings are acceptable if the horizontal separation between sewer and water is over 8 feet. The entering sewer main (SAS to SAS) shall have the same type of wye fitting.

Furnish elastomeric or solvent cement joints made as recommended by the manufacturer.

C Construction

Install risers, where necessary, according to Standard Detail Drawing 5.3.1 of the City Standard Specifications. Risers five feet in length are included in the bid item Sanitary Lateral Reconnect. Backfill and compaction according to Article 202.3(b) of the City Standard Specifications using select fill.

D Measurement

The department will measure Sanitary Lateral Reconnect as each individual sanitary sewer reconnect, acceptably completed.

Sanitary sewer lateral pipe exceeding 5 feet in length will be paid under bid item Sanitary Sewer Lateral.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.102	Sanitary Lateral Reconnect	EACH

Payment is full compensation for furnishing all materials, including fill material; plugging the ends of all existing sewer laterals; excavation; trimming and chipping; cutting, protecting or removing reinforcing steel; disposal of surplus materials from the structure or excavation; excavation and compaction of the backfill material; restoring the site.

85. Sanitary Sewer Tap, Item SPV.0060.103.

A Description

Work under this item includes the connection of a new lateral or main to an existing structure and the connection of an existing lateral or main to a new structure.

B Materials

Provide Kor-n-Seal, PSX Press Seal, or approved equal, in the tapped hole, according to Standard Detail Drawing 5.7.31 of the City Standard Specifications.

C Construction

C.1 New Pipe to Existing Structure

Use a portable coring drill to produce a pipe opening that is round, clean and free of any pitting of the concrete.

Make a watertight connection of the pipe to the sewer access structure with a Kor-n-Seal, PSX Press Seal, or approved equal, according to Standard Detail Drawing 5.7.31 of the City Standard Specifications.

C.2 Existing Pipe to New Structure

Provide a flexible connector to connect the existing pipe to any new pipe which is required to make the connection to the structure.

Provide PVC (SDR-26, SDR-35, AWWA C900) that matches the existing pipe's diameter, or the next larger diameter, to reconnect the existing sewer main or lateral. The PVC (SDR-26, SDR-35, AWWA C900) sanitary sewer pipe is considered incidental to this bid item.

The pouring and construction of concrete benches and flowlines in new sewer access structures for the inlet or outlet pipes is not included in this bid item and is considered incidental to the bid item Sanitary Sewer Access Structure (4-Foot Diameter).

The downstream pipe connection to a Sewer Access Structure (4-Foot Diameter) is considered incidental to the Sewer Access Structure (4-Foot Diameter).

D Measurement

The department will measure Sanitary Sewer Tap as each individual sanitary sewer tap, 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.0060.103	Sanitary Sewer Tap	EACH

Payment is full compensation for providing all connectors and for coring.

86. Sanitary Sewer Access Structure (4-Foot Diameter), Item SPV.0060.104; Sanitary Sewer Access Structure (5-Foot Diameter), Item SPV.0060.105.

A Description

Work under this item includes installing Sewer Access Structures at the depths and locations shown on the plan.

B Materials

Provide precast concrete Sanitary Sewer Access Structure (Size) meeting the requirements of Standard Detail Drawing 5.7.2, 5.7.15, and Article 507.3 of the City Standard Specifications.

Furnishing and installing Sewer Access Structure Frames and Covers, according to Standard Detail Drawing 5.7.16 of the City Standard Specifications, will be paid for separately under the Manhole Covers Type J, bid item.

C Construction

Install Sanitary Sewer Access Structure (Size) according to Article 507.3 of the City Standard Specifications. Maintain the normal flow of wastewater at all times during installation of the new sanitary sewer access structure and when connecting pipes to the new structure. All bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout construction, is incidental to this bid item.

Construct concrete benches and flow lines as directed by the engineer.

D Measurement

The department will measure Sanitary Sewer Access Structure (Size) as each individual sanitary sewer access 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.0060.104	Sanitary Sewer Access Structure (4-Foot Diameter)	EACH
SPV.0060.105	Sanitary Sewer Access Structure (5-Foot Diameter)	EACH

Payment is full compensation for installing sanitary sewer access structures, constructing benches and flow lines; for furnishing and installing all bypass or temporary piping and connections.

87. External Sewer Access Structure Joint Seal, Item, SPV.0060.106.

A Description

Furnish and install sealed barrel joints on all sanitary sewer structures around the outside circumference of the Sewer Access Structure.

B Materials

Provide barrel joint seals consisting of flexible rubberized seal conforming to ASTM C923 held in place with stainless steel compression bands or butyl adhesive tape conforming to ASTM C877 or heat shrink sleeve over visco-elastic adhesive sealant. Manhole joint seals shall be a minimum of nine (9) inches wide. Acceptable products and manufacturers are the following: 1. Mac Wrap, Mar Mac Manufacturing Company, Inc. 2. NPC External Joint Seal, NPC, Inc. 3. EZ-Wrap, Press-Seal Gasket Corporation 4. Riser-Wrap, Pipeline Seal and Insulator, or equal.

C Construction

Install sealed barrel joints according to the manufacturer's instructions.

D Measurement

The department will measure External Sewer Access Structure Joint Seal as each individual external sewer access structure joint seal 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.0060.106	External Sewer Access Structure Joint Seal	EACH

Payment is full compensation for the installation of the external sewer access structure joint seal.

88. Sanitary Sewer Internal Chimney Seal, Item SPV.0060.107.

A Description

Furnish and install an internal chimney seal on all sanitary sewer access structures located within 100 feet of a street low point, in greenways, and where indicated on the plan.

B Materials

Provide an internal chimney seal consisting of either rubber with metal bands or a low-density polyethylene insert conforming to the Standard Detail Drawing 5.7.17–SAS Internal Chimney Seal of the City Standard Specifications or other equivalent chimney seal products as approved by the engineer.

C Construction

Install internal chimney seals according to the manufacturer's instructions.

D Measurement

The department will measure Sanitary Sewer Internal Chimney Seal as each individual sanitary sewer internal chimney seal, 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.0060.107	Sanitary Sewer Internal Chimney Seal	EACH

Payment is full compensation for the installation of the sanitary internal chimney seal.

89. Remove Sanitary Sewer Access Structure, Item SPV.0060.108.

A Description

This special provision describes removing sanitary sewer access structures as shown on the plans. The work includes salvaging and disposing of the resulting materials and backfilling the trenches with select fill.

B Materials

Provide select fill meeting the requirements of Article 202.2 of the City Standard Specifications; furnishing and placing select fill in the void created by the structure removal is included with this bid item.

C Construction

Remove sanitary sewer access structures according to Article 203.2(a) of the City Standard Specifications. Plugging of sewer mains and laterals that are connected to a removed Sanitary Sewer Access Structure with a concrete plug are incidental to this item. Payment for Concrete Slurrying of an entire sewer main will be paid for separately under Abandon Sanitary Sewer–Slurry.

D Measurement

The department will measure Remove Sanitary Sewer Access Structure as each individual remove sanitary sewer 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.0060.108	Remove Sanitary Sewer Access Structure	EACH

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site.

90. Adjust Sanitary Sewer Access Structure Special, Item SPV.0060.109.

A Description

Work under this item includes adjusting Sanitary Sewer Access Structure (SAS) castings as called for on the plan set to the final proposed grades. This bid item is required because the casting adjustment is greater than 9 inches of vertical adjustment to set the casting to the final grade or the chimney was determined to be in poor condition. Manhole adjustments less than 9 inches will be paid for separately under Bid Item Adjusting Manhole Covers. Installation of offset cone and casting as called for on the plan will be considered incidental to this bid item. Rotation of an existing cone sections will be considered incidental to this bid item.

B Materials

Provide precast concrete barrel sections and manhole adjustment rings meeting the requirements of Article 507.3, as well as SDD 5.7.2 and 5.7.15 of the City Standard Specifications.

C Construction

Complete adjust SAS Special according to Article 507.3 of the City Standard Specifications. This bid item will require adjustment rings to be removed and concrete barrel sections to be installed. The maximum allowed adjustment on the Sewer Access Structure will not exceed 9 inches and the final configuration of the structure will be in accordance of SDD 5.7.2 and 5.7.15 of the City Standard Specifications. If the sewer access structure being adjusted is a poured in place structure (4 x 4, 5 x 5, or 6 x 6), install a 4-foot diameter barrel section on the poured in place manhole rooftop and place a concrete collar where the barrel section connects to the manhole rooftop. Center the barrel section over the casting opening. If the existing casting is offset, sawcut the manhole rooftop to create an opening centering the barrel section on the manhole rooftop.

D Measurement

The department will measure Adjust Sanitary Sewer Access Structure Special as each individual adjust sanitary sewer access 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.0060.109	Adjust Sanitary Sewer Access Structure Special	EACH

Payment is full compensation for adjusting sanitary sewer access structure, sawcutting the roof, and installing mastic and concrete collars.

91. Abandon Sanitary Sewer Access Structure, Item SPV. 0060.110.

A Description

This work consists of abandoning sanitary sewer access structure as shown in the plans and hereinafter provided.

B Materials

Provide select fill meeting the requirements of Article 203.2(e) of the City Standard Specifications; furnishing and placing select fill in the void created by the structure abandonment is included with this bid item.

C Construction

Abandon the sanitary sewer access structures according to Article 203.2(c) of the City Standard Specifications. Plug sewer mains that are connected to an abandoned sanitary sewer access structure with a concrete plug paid for by separately under Abandon Sanitary Sewer–Pipe Plug. Concrete slurring of an entire sewer main will be paid for separately under Abandon Sanitary Sewer–Slurry.

D Measurement

The department will measure Abandon Sanitary Sewer Access Structure as each individual abandon sanitary sewer access 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.0060.110	Abandon Sanitary Sewer Access Structure	EACH

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site.

92. Abandon Sanitary Sewer–Pipe Plug, Item SPV.0060.111.

A Description

This work consists of plugging pipes as shown in the plans and hereinafter provided.

B Material

Provide concrete conforming to Article 301 of the City Standard Specifications.

C Construction

Abandon sanitary sewer pipe with a plug according to Article 203 of the City Standard Specifications.

Provide replacement sanitary sewers and laterals or appropriate bypass pumping prior to abandoning sanitary sewer pipe.

Saw cut end of existing pipe and clean interior of pipe to create a good bonding surface. Form and pour a minimum 1-foot deep concrete plug completely filling the opening of the pipe.

Where structures are called out for removal or abandonment, plug pipes at the structure will be considered incidental to removal or abandonment of the manhole

Any plugs required to abandon the existing sanitary main where laterals are being extended will be considered incidental to sanitary sewer lateral bid item. Concrete Slurrying of an entire sewer main will be paid for separately under Abandon Sanitary Sewer–Slurry.

D Measurement

The department will measure Abandon Sanitary Sewer–Pipe Plug as each individual pipe 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.0060.111	Abandon Sanitary Sewer–Pipe Plug	EACH

Payment is full compensation for all work in abandoning sanitary sewer-pipe plug as specified herein.

93. Sanitary Sewer Cleanout, Item SPV.0060.112.

A Description

Work under this special provision includes installing sanitary sewer cleanouts on laterals in the locations as called for by the engineer. This bid item will be necessary when sewer laterals cannot be routed around an obstruction in the right-of-way with 22.5 degree bends or if called out for on the plan set.

B Materials

Provide a lateral cleanout conforming to the requirements called for in Article 507.2 of the City Standard Specifications.

C Construction

Install sanitary sewer cleanout according to Article 507.3 of the City Standard Specifications.

Maintain the normal flow of wastewater at all times during installation of the new sanitary cleanout. All bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout construction, is incidental to this bid item.

Obtain prior approval of the engineer to install a Cleanout and selected location of the Cleanout if it is not shown on the plans. It is anticipated that the vast majority of laterals will be installed according to the sanitary sewer lateral (Bid Item SPV.0090.101 Sanitary Sewer Lateral) where bends of 45 degrees will be made with two 22.5 degree bends with two feet of straight pipe between the bends.

D Measurement

The department will measure Sanitary Sewer Cleanout as each individual sanitary sewer cleanout, 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.0060.112	Sanitary Sewer Cleanout	EACH

Payment is full compensation for all work in installing sanitary sewer cleanout as specified herein.

94. Furnish and Install Hydrant, Item SPV.0060.113.

A Description

This work shall consist of furnishing and installing new fire hydrants as shown on the plans according to section 704.7 of the City Standard Specifications.

B Materials

Furnish materials according to section 702.4 of the City Standard Specifications.

Furnish hydrants with permanently plugged drain ports or hydrants without drain ports where identified the plans.

C Construction

Install all hydrants according to Hydrant Detail and Section 703.8 of the City Standard Specifications, unless otherwise shown or specified.

Install hydrants with permanently plugged drain ports or hydrants without drain ports where identified on the plans.

D Measurement

The department will measure Furnish and Install Hydrant by each hydrant that is 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.0060.113	Furnish and Install Hydrant	EACH

Payment is full compensation for all work in furnishing and installing the hydrant as specified herein.

95. Cut Off Existing Water Main, Item SPV.0060.114.

A Description

The work under this section consists of abandoning the existing water mains at the locations shown or as designated by the engineer according to section 704.14 of the City Standard Specifications.

B Materials

Furnish all materials as appropriate per section 702 of the City Standard Specifications.

C Construction

After a safe sample on the new water main section has been obtained and all water service laterals have been reconnected, abandon the existing water main where indicated or where designated by the Madison Water Utility. Comply with Section 703.15 of the City Standard Specifications.

D Measurement

The department will measure Cut Off Existing Water Main as each complete individual cut off made, 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.0060.114	Cut Off Existing Water Main	EACH

Payment is full compensation for all work in cutting off the water main as specified herein.

96. Abandon Water Valve Box, Item SPV.0060.115.

A Description

Abandon Water Valve Box consists of abandoning all water valve boxes within the project limits that serve valves no longer in service, indicated in the plans, or directed by the engineer according to section 704.15 of the City Standard Specifications. This item includes placing the valve in the closed position prior to abandoning the box and completely removing the valve box whenever possible.

B Materials

Provide materials conforming with section 702 of City Standard Specifications.

C Construction

Conform all associated work to the requirements of section 703 of the City Standard Specifications. Perform work after the existing water main has been abandoned. Remove the top casting to a point three feet below the existing elevation, then backfill the opening with select fill and compact.

D Measurement

The department will measure Abandon Water Valve Box as each abandon water 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.0060.115	Abandon Water Valve Box	EACH

Payment is full compensation for all work in abandoning the water valve box as specified herein.

97. Abandon Hydrant, Item SPV.0060.116.

A Description

Abandon Hydrant consists of abandoning and salvaging all fire hydrants identified on the drawings per section 704.16 of the City Standard Specifications.

B Materials

Provide materials conforming to section 702 of the City Standard Specifications.

C Construction

Complete work according to section 704.16 of the City Standard Specifications only after the existing water main section has been abandoned. If the hydrant is a screw type hydrant, unscrew the hydrant with chain tongs (or like) and remove high stock and salvage for the Madison Water Utility. Remove frost case and salvage for the Madison Water Utility. If the hydrant is not a screw type hydrant, excavate to the bottom of the hydrant and disassemble from the hydrant lead. Remove the hydrant and salvage for the Madison Water Utility. Backfill the opening with existing material and compact. Use select fill as additional backfill material if there is not enough existing material.

D Measurement

The department will measure Abandon Hydrant as each abandon 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.0060.116	Abandon Hydrant	EACH

Payment is full compensation for all work in abandoning and salvaging the hydrant as specified herein.

98. Adjust Water Valve Box, Item SPV.0060.117.

A Description

Adjust Water Valve Box consists of adjusting all existing water valve boxes within the project limits to between 1/4-inch to 1/2-inch below finished grade according to section 704.18 of the City Standard Specifications. Adjustment of new valve boxes is incidental to water main construction and will not be paid under this item.

B Materials

Provide all materials according to section 702 of the City Standard Specifications.

C Construction

Perform all work according to section 703 of the City Standard Specifications. Excavate and expose the existing water valve boxes to the depth needed to adjust the valve boxes to finished grade. Extensions may be required. Backfill and compact according to the City Standard Specifications. Leave all valve boxes centered over the valve operating nut and free of dirt and debris.

D Measurement

The department will measure Adjust Water Valve Box as each individual adjust water 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.0060.117	Adjust Water Valve Box	EACH

Payment is full compensation for all work adjusting the water valve box as specified herein.

**99. Furnish & Install 4-Inch Water Valve, 4-Inch, Item SPV.0060.118;
Furnish & Install 4-Inch Water Valve,6-Inch; Item SPV.0060.119;
Furnish & Install 4-Inch Water Valve, 8-Inch, Item SPV.0060.120;
Furnish & Install 4-Inch Water Valve, 12-Inch, Item SPV.0060.121.**

A Description

This work consists of furnishing and installing all valves as identified on the plan and as required to complete the installation of the proposed water main according to section 704.27 of the City Standard Specifications and as hereinafter provided.

Proposed valves associated with pressure taps, as indicated on the plans, are not included in these items.

B Materials

Furnish materials according to section 702 of the City Standard Specifications. These items include furnishing all materials and fittings; bedding the valves; excavating, dewatering and compacting the trenches; installing valves, valve boxes and any necessary extensions; adjustments of valve boxes; installing and removing sheeting and bracing; restraint, polyethylene encasement, thrust restraint and any other appurtenances required to furnish and install valves as required.

C Construction

Install valves according to section 703 of the City Standard Specifications. Furnish and install valve box extensions where needed. All valve box extensions are incidental to the installation of the valve.

D Measurement

The department will measure Furnish & Install (Size) Water Valve as each individual water valve, 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.0060.118	Furnish & Install 4-Inch Water Valve	EACH
SPV.0060.119	Furnish & Install 6-Inch Water Valve	EACH
SPV.0060.120	Furnish & Install 8-Inch Water Valve	EACH
SPV.0060.121	Furnish & Install 12-Inch Water Valve	EACH

Payment is full compensation for all work in furnishing and installing all water valves of specific size as specified herein.

**100. Reconnect Water Service Laterals, 1-inch, Item SPV.0060.122;
Reconnect Water Service Laterals, 1.5-Inch, Item SPV.0060.123.**

A Description

This work consists of connect-to and extend existing water service laterals otherwise cut off and shorten, existing copper water service laterals and connect the lateral to the new water main. Restore any disturbed terrace areas, as necessary.

B Materials

Provide materials according to section 702 of the City Standard Specifications.

C Construction

Complete all associated work according to section 703, 704.9, and 704.11 of the City Standard Specifications.

D Measurement

The department will measure Reconnect Water Service Lateral (size) as each reconnect water service lateral, acceptably completed.

E Payment

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

ITEM	DESCRIPTION	UNIT
SPV.0060.122	Reconnect Water Service Laterals, 1-Inch	EACH
SPV.0060.123	Reconnect Water Service Laterals, 1.5-Inch	EACH

Payment is full compensation for all work in reconnecting water service laterals by extending and reconnecting lateral or disconnecting and reconnecting lateral as specified herein. This work includes, but is not necessarily limited to; all excavation including hand digging necessary to expose the existing piping, reconnecting the existing service, backfilling the excavation, compacting the backfill material, maintaining the ditches and all other work incidental to restoring and maintaining the site. Any insulation needed between the water service lateral and storm sewer at a crossing listed on the plans is incidental to the cost of reconnecting the water service lateral.

101. Cut-In Connection, Item SPV.0060.124.

A Description

Cut-In Connections consists of all means and methods, equipment, tools, labor, etc. necessary for making a cut-in connection to the existing water main or sanitary sewer where designated on the drawings according to Section 703.7 or 503.3 of the City Standard Specifications. Any associated concrete capping pipe, mechanical joint capping, plugging, or compression coupling required due the cut-in connection is incidental to this work and must provide a water-tight seal.

B Materials

Conform all materials used for this work to the requirements of section 702 or 503 of the City Standard Specifications for water main cut in connection or sanitary sewer cut-in connection respectively. For any location where the existing main is cut and capped, either permanently or temporarily, the location of the cap shall be such that no more than one foot of dead end main is created unless shown or called out as such on the plans or approved by the engineer or Water Utility inspector.

C Construction

Conform all work associated with Cut-In Connections to section 703 or 503.3(f) of the City Standard Specifications.

D Measurement

The department will measure Cut-In Connections as each cut-in connection, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.124	Cut-In Connection	EACH

Payment is full compensation for all work to make the cut-in connections, the excavation required to expose the utility line, imported select fill, backfilling and compacting the excavation, and restoring and maintaining the site.

102. Clay Trench Plug, Item SPV.0060.125.

A Description

This work consists of furnishing and installing clay trench plugs as specified below and as shown in the plans.

B Materials

Use select clay fill classified as CL or CH according to the Unified Soil Classification System. Allow a maximum clump size of 6 inches capable of being broken down with normal construction equipment to a size of 2 to 3 inches prior to compaction. Fifty percent or more of the soil particles by weight must pass the Number 200 sieve. Remove rocks, stones, sticks, and other foreign objects greater than 2 inches prior to placement.

C Construction

Maintain proper moisture content to achieve specified compaction. Make water available on site for clay conditioning.

Provide select clay fill in lift thicknesses as required to obtain the specified levels of compaction. Do not exceed maximum lift thicknesses of 4 to 6 inches after compaction. Compact select clay fill using penetrating foot -type compaction equipment having protrusions greater in length than the lift thickness of clay being compacted. Use compaction equipment of sufficient weight to compact clay with reasonable amount of effort in order to achieve the specified levels of compaction.

Place overburden material as soon as practical after completion of select clay fill placement to avoid drying and desiccation of select clay fill.

Provide each layer of fill to the degree that no further appreciable consolidation is evidence under the action of the compaction equipment. Engineer may require that the compaction of the material be to a dry density of 90 percent of the maximum dry density as determined by the Modified Proctor test, or 95 percent of the Standard Proctor maximum dry density. Attain the required compaction for each layer before placing any material for the succeeding layer.

D Measurement

The department will measure Clay Trench Plug as each clay trench 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.0060.125	Clay Trench Plug	EACH

Payment is full compensation for all work to install the clay trench plug, including materials and compaction.

103. Reconstruct MMSD Sanitary Sewer Structure, Item SPV.0060.126.

A Description

Work under this item includes the removal and/or replacement of the existing sewer access structure barrel sections and/or rotating flat manhole top, drilling new steps and removing existing steps to better align with improvements as indicated in the drawings or as required by MMSD.

B Materials

Manhole sections will be precast reinforced concrete, constructed according to ASTM C-478.

Match the thickness of the new manhole sections to the thickness of the existing manholes.

Place steps, M.A. Industries or equal, every 16-inches on center in all manholes and install per manufacturers recommendations.

C Construction

Reconstruct each manhole as described below. Rubber adjustment rings provided by MMSD are required for the top adjustment ring in roadways.

Station 98+73, 65' RT MMSD MH01-002

Existing manhole is 6-foot square with an offset opening in a 6-foot square flat top. The manhole was built in 1937 and is believed to be cast-in-place. Sawcut around the barrel section and remove the barrel section and manhole top. Install a new manhole top. Place mastic between the top of the remaining barrel section and the manhole top and dowel the new manhole top to the existing barrel section. Place the manhole top 18-inches below finished grade to allow for 9-inches of adjustment rings and a new 9-inch casting. Casting will be provided by MMSD.

Station 99+68, 21' RT MMSD MH01-601

Existing manhole is 6-foot in diameter with an offset opening in a 6-foot diameter flat top. Rotate top of existing manhole so the location of the casting is outside the proposed concrete curb and gutter. Place mastic between manhole barrel section and manhole top. Remove and replace adjusting rings as necessary to adjust the casting to finished grade.

Station 11+33 FI, 34' RT MMSD MH01-304

Existing manhole is 6-foot in diameter with a center opening in a 6-foot diameter flat top. Remove and discard the existing manhole top and then either remove existing 5-foot barrel section and replace with a 2-foot 6-inch barrel section or sawcut existing barrel section so new manhole top is 18-inches below finished grade to allow for 9-inches of adjustment rings and a new 9-inch casting. Casting will be provided by MMSD. Install a new manhole top with an offset opening and rotate opening so the location of the casting is outside the proposed concrete curb and gutter.

D Measurement

The department will measure Reconstruct MMSD Sanitary Sewer Structure as each reconstruct MMSD sanitary sewer 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.0060.126	Reconstruct MMSD Sanitary Sewer Structure	EACH

Payment is full compensation for removing and adding barrel sections or manhole tops to existing sanitary sewer manhole; for rotating manhole sections or tops on existing sanitary sewer structures; drilling new steps to align with realigned top section and removing existing steps that do not line up with realigned cone section; for furnishing all materials; for excavation, dewatering, backfilling with granular backfill, compaction, bracing and shoring; for disposal of surplus excavated material, protection and support of existing utilities, and cleanup.

- 104. Concrete Curb & Gutter 18-Inch Type A Special, Item SPV.0090.001;
Concrete Curb & Gutter 24-Inch Type A Special, Item SPV.0090.002;
Concrete Curb & Gutter 24-Inch Type D Special, Item SPV.0090.003;
Concrete Curb & Gutter 30-Inch Type A Special, Item SPV.0090.004;
Concrete Curb & Gutter 30-Inch Type D Special, Item SPV.0090.005;
Concrete Curb & Gutter 30-Inch Type D Mountable Special, Item SPV.0090.006;
Concrete Curb & Gutter 30-Inch Type AX Special, Item SPV.0090.007;
Concrete Curb & Gutter 30-Inch Type DX Special, Item SPV.0090.008.**

A Description

Construct concrete curb and gutter as shown in the plans, and according to standard spec 601.

B Materials

Conform to standard spec 601 and as the plans show.

C Construction

Conform to standard spec 601 and as the plans show.

D Measurement

The department will measure Concrete Curb & Gutter (Type) Special by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Concrete Curb & Gutter 18-Inch Type A Special	LF
SPV.0090.002	Concrete Curb & Gutter 24-Inch Type A Special	LF
SPV.0090.003	Concrete Curb & Gutter 24-Inch Type D Special	LF
SPV.0090.004	Concrete Curb & Gutter 30-Inch Type A Special	LF
SPV.0090.005	Concrete Curb & Gutter 30-Inch Type D Special	LF
SPV.0090.006	Concrete Curb & Gutter 30-Inch Type D Mountable Special	LF
SPV.0090.007	Concrete Curb & Gutter 30-Inch Type AX Special	LF
SPV.0090.008	Concrete Curb & Gutter 30-Inch Type DX Special	LF

Payment is full compensation conforming to standard spec 601.

105. Sign Post, Item SPV.0090.009; Reflective Sign Post, Item SPV.0090.010.

A Description

This special provision describes furnishing and installing new signposts, reflective signposts, and or powder coated signposts for signs. All signposts shall be round tubular steel and installed as shown in the plans.

B Materials

All materials shall conform to the standard specifications for hot rolled carbon sheet steel, commercial quality, ASTM A-570-GR-33 for zinc coated tubing to resist corrosion. The tube shall be 2-inch, Schedule-40. Reflective signpost shall have two sheets of engineer grade yellow sheeting completely around pipe as shown in the plans.

C Construction

Install the signposts at the locations shown on the plans and approved by the engineer. If the finished grade cannot be determined, ask the engineer to identify the final grade. All signs shall be in a true vertical position. Install all signs to conform to the latest edition of the Manual on Uniform Traffic Control Devices. Also, locate all underground utilities prior to placing signposts. Cut off excess length of post in the field to provide the desired sign clearance.

Notify the City of Madison within three working days of placing the sign post for signs the city will install. Contact Phil Nehmer, City of Madison Traffic Engineering at (608) 267-1960.

D Measurement

The department will measure Sign Post and Reflective Sign Post by the linear foot, acceptably completed, measured from the top of the thread to the end of the sign post rounded up to the nearest foot.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.009	Sign Post	LF
SPV.0090.010	Reflective Sign Post	LF

Payment is full compensation for furnishing, hauling, and installing the posts; threading; treating cut post ends; providing and installing a water tight top end cap; providing hardware and anchors; and for reflective sheeting. Replace all materials damaged during construction with new items at no cost to the department.

- 106. Marking Line Epoxy 6-Inch, Item SPV.0090.011;
Marking Crosswalk Epoxy Transverse Line 12-Inch, Item SPV.0090.012;
Marking Crosswalk Epoxy Transverse Line 18-Inch, Item SPV.0090.013;
Marking Crosswalk Epoxy Ladder Pattern 18-Inch, Item SPV.0090.014;
Marking Stop Line Epoxy 24-Inch, Item SPV.0090.015.**

A Description

Perform the work under this item as shown in the plans and according to the applicable provisions of standard spec 646 and as detailed.

B Materials

Conform to standard spec 646 and as the plans show.

C Construction

Conform to standard spec 646 and as the plans show.

D Measurement

The department will measure Marking (Type) by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.011	Marking Line Epoxy 6-Inch	LF
SPV.0090.012	Marking Crosswalk Epoxy Transverse Line 12-Inch	LF
SPV.0090.013	Marking Crosswalk Epoxy Transverse Line 18-Inch	LF
SPV.0090.014	Marking Crosswalk Epoxy Ladder Pattern 18-Inch	LF
SPV.0090.015	Marking Stop Line Epoxy 24-Inch	LF

Payment is full compensation conforming to standard spec 646.

- 107. Concrete Curb Type A Special, Item SPV.0090.016.**

A Description

Construct concrete curb as shown in the plans, and according to standard spec 601.

B Materials

Conform to standard spec 601 and as the plans show.

C Construction

Conform to standard spec 601 and as the plans show.

D Measurement

The department will measure Concrete Curb Type A Special by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.016	Concrete Curb Type A Special	LF

Payment is full compensation conforming to standard spec 601.

- 108. Fiber Optic Cable 144-Count, Item SPV.0090.050.**

A Description

This special provision describes furnishing and installing 144-count according to standard spec 651, 655, 670, and 678, as shown on the plans, and as provided hereinafter.

B Materials

Furnish single mode (SM), It armored, loose-tube 72 count fiber optic cable rated for outdoor use.

All fiber optic cable glass shall be supplied by the same manufacturer and shall be part of a fiber optic cable utilizing loose tube construction with the following properties:

Parameters	Single Mode
Type	Step Index
Core Diameter	8.3 μm (nominal)
Cladding Diameter	125 \pm 1.0 μm
Core to Cladding Offset	<0.8 μm
Coating Diameter	245 \pm 10 μm
Cladding Non-Circularity	\leq 1.0%
Proof Tensile Test	0.7 GPa
Attenuation	@ 1310 nm \leq 0.4 dB/km, @ 1550 nm \leq 0.3 dB/km
Chromatic Dispersion Zero Dispersion	1310 \pm nm (centered on a nominal operating wavelength of 1310)
Zero Dispersion Slope	\leq 0.092 ps/nm ² /km
Maximum Dispersion	\leq 2.8 ps/nm/km at 1285 – 1330 nm
Cut-Off Wavelength	1260 nm

C Construction

Follow all manufacturer's recommended installation procedures.

Contact Mike Benzschawel at the City of Madison Traffic Engineering shop at (608) 266-9031 a minimum of 7 working days in advance to coordinate installing equipment in existing traffic signal cabinet.

D Measurement

The department will measure Fiber Optic Cable 144-County by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.050	Fiber Optic Cable 144-Count	LF

Payment is full compensation for furnishing and installing the fiber optic cable.

109. Electrical Wire Lighting 14-3 UF Grounded, Item SPV.0090.051.

A Description

This special provision describes furnishing and installing electrical wire lighting, 14-3 type UF cable according to standard spec 655 and these specifications.

B Materials

Furnish type UF cable with ground including the number and size of conductors as the plans show. Use cable conforming to ANSI/UL 493.

C Construction

Furnish and install one cable to each LED luminaire from base of pole to the luminaire.

D Measurement

The department will measure Electrical Wire Lighting 14-3 Grounded by the linear foot acceptably completed, measured from the splice with the system lighting circuit in the pole base to the connection terminals in the luminaire.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.051	Electrical Wire Lighting 14-3 Grounded	LF

Payment is full compensation for furnishing and installing all materials.

110. Loop Detector Lead-In Cable Special, Item SPV.0090.052.

A Description

This special provision describes furnishing and installing loop detector lead in cable according to standard spec 655.

B Materials

Furnish 0.25-inch diameter, 4-conductor, #18 AWG, waterproof, shielded, polypropylene insulation cable, with HDPE outer jacket. Meeting IMSA specifications. Provide loop detector lead in cable to be smooth on the outside without any ripples or ribbing from cable wires.

C Construction

Furnish and install one cable for every two loops from each loop handhole to the intersection control cabinet via the most direct route, without intermediate splicing. Most of the loops will be new and are shown on the plan. Install cable for some existing loops. Verify cable needs with the City of Madison Traffic Engineering staff before completing intersection wiring.

D Measurement

The department will measure Loop Detector Lead-In Cable Special by the linear foot, acceptably completed, measured from the splice with the loop lead in wire along the centerline of the conduit to its connection with terminals in the control cabinet.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.052	Loop Detector Lead-In Cable Special	LF

Payment is full compensation for furnishing and installing all materials.

111. Water Main 24-Inch Casing Pipe, Item SPV.0090.100.

A Description

This special provision describes installing water main with engineered spacers within steel casing pipe by trenchless technology.

B Materials.

Provide Water Main 24-in Casing Pipe meeting the requirements of standard spec 704.5 and Article 702 of the City Standard Specifications.

C Construction

Place Water Main 24-in Casing Pipe meeting the requirements of standard spec 704.5 of the City Standard Specifications.

D Measurement

The department will measure Water Main 24-Inch Casing Pipe as each 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.0090.100	Water Main 24-Inch Casing Pipe	LF

Payment is full compensation for furnishing and installing water main in casing pipe by trenchless technology and all water main testing.

112. Sanitary Sewer Lateral, Item SPV.0090.101.

A Description

This work consists of excavating required trenches, connecting the lateral to the mainline pipe, placing bedding material, connecting the new lateral to the existing lateral, all required fittings, couplings, and bends, backfilling and compacting the trenches and restoring the work site as provided by the plans,

specifications and contract. This work also consists of locating, identifying, and abandoning “inactive” laterals.

B Materials

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

Provide sanitary sewer pipe and fittings having a standard dimension ratio of 26 or 35.

Furnish elastomeric or solvent cement joints made as recommended by the manufacturer.

Sewer laterals deeper than 12 feet will be required to be ASTM D3034 SDR-26. Install AWWA C900 Class 150, DR-18 Pipe type will be installed for laterals where the sewer main being installed is Sanitary Sewer Pressure Pipe (C900).

Install compression coupling connections to the existing sewer laterals in conformance to Standard Detail Drawing 5.3.3, Coupling detail, from the City Standard Specifications.

C Construction

Install laterals according to Article 503.3 of the City Standard Specifications.

The use of 45-degree bends is not permitted except with connecting to a wye at the sanitary sewer main. Bends of 22.5 degrees or less may be used, provided they are separated by at least two feet of straight pipe. Provide new lateral pipe having a minimum diameter of six inches that is also greater than or equal to the diameter of the adjoining lateral. Connecting a new lateral pipe to an existing lateral having a smaller diameter than the existing lateral is not permitted.

Per the City of Madison Standard Specifications for sanitary sewer lateral construction on street reconstruction projects, contractors are encouraged to begin installation of sanitary lateral pipe at the proposed sewer main. If contractor starts excavation for the lateral at the property line, it will be at the contractor's risk. If tree conflicts are encountered during the sanitary lateral replacement process, contractors are instructed to follow the new policy set in the City Standard Specifications. No Utility Line Openings (ULOs) will be granted for the inability to locate the sanitary lateral at the property line. Any extra sidewalk removal will not be compensated to the contractor looking for an existing sanitary lateral at the property line.

Contractors will be required to have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal. Each sanitary lateral will have a maximum of 4 sidewalk squares removed and replaced. No additional compensation will be awarded beyond this amount for the replacement of a sewer lateral. If laterals called for reinstatement on the plans are to be plugged under the direction of the engineer, contractors are required to use a sonde device to confirm that the laterals that are called abandonment are not active, Couple the junction of a new lateral pipe to an existing lateral pipe as required in the field by the engineer. Saw cut the existing main to accommodate a clean joint for the installation of the compression couplings. Placed the coupling as directed by the City of Madison and per Standard Detail Drawing 5.3.3, Coupling Details, from the City Standard Specifications.

D Measurement

The department will measure Sanitary Sewer Lateral, by the linear foot, acceptably completed.

The quantity to be paid will be measured from the connection of the mainline sewer pipe to the connection of the existing sanitary lateral along the centerline of the pipe.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.101	Sanitary Sewer Lateral	LF

Payment is full compensation for determining whether laterals are “active”, “inactive”, or abandoned, and the exact location and size of “active” lateral reconnections.

Connection of lateral to the proposed sewer main and the first 5 feet of lateral pipe associated with the connection is paid under bid item Sanitary Lateral Reconnect.

Select fill for sanitary sewer lateral is paid under bid item Select Fill For Sanitary Sewer. The quantity for this item may be increased or decreased beyond the limits set forth in Article 104 of the City Standard Specifications.

113. Sanitary Sewer Pipe PVC, 12-Inch, Item SPV.0090.102.

A Description

This special provision describes installing Sanitary Sewer Pipe PVC (Size) at the alignment and grades shown on the plan. All sections of the sewer mainline are required to pass a low pressure air test, mandrel test, and a visual inspection via televising as specified in Article 501.3(b) of the City Standard Specifications. Testing of the gravity main is included in this item.

Maintain the normal flow of wastewater at all times during replacement of the existing sanitary sewer main with the new sanitary sewer main. Payment for furnishing all bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout the sewer construction, is under the bid item for Wastewater Control.

B Materials

Provide solid-wall Poly (Vinyl Chloride) (PVC) sanitary sewer pipe and fittings meeting the requirements for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, ASTM D 3034.

Provide pipe and fittings having a standard dimension ratio of 26 or 35 as called out on the plan set. Furnish elastomeric or solvent cement joints as recommended by the manufacturer.

The assembled joint will be required to pass the performance tests as required in ASTM D3212. Sewer mains deeper than 12 feet will be required to meet the standards or ASTM D3034 SDR-26.

C Construction

Install the sanitary sewer pipe according to all applicable provisions of the City Standard Specifications.

Remove all abandoned or existing material located within 3 feet of the new sanitary sewer alignment. Removal of material (including existing sanitary sewer/water main/etc.) is incidental to this bid item.

Use manufactured wye fittings to install new laterals to the new main as called for on the plans; provide and place according to standard spec 503 for City Standard Specifications. Do not install saddle type wyes without prior approval from the City of Madison.

Complete testing and televising of new sewer lines according to Article 501 of the City Standard Specifications.

D Measurement

The department will measure Sanitary Sewer Pipe PVC, (Size) in length by the linear foot, acceptably completed.

Sanitary Sewer Pipe PVC, (Size) will be measured through sanitary sewer structures, from the center of sanitary sewer casting to center of sanitary sewer casting. Sanitary Sewer Pipe PVC (Size) not terminating at a sanitary sewer structure will be measured to the end of pipe. Deductions from the measure length will not be made for wye installations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.102	Sanitary Sewer Pipe PVC, 12-Inch	LF

Payment is full compensation for excavation of the trench, except tunneling and jacking; installation and removal of sheeting and bracing; removal of water from the trench; disposal of surplus material from the trench; backfilling the trench and compaction of the backfill material; embankment over the sewer using surplus material from the excavation of the trench; bedding the pipe; laying the pipe and installing the fittings and accessories; jointing and sealing of joints in pipe, fittings and accessories; encasement, where specified; connections to existing structures; cleaning out the sewer; and restoring the site.

**114. Sanitary Sewer Pressure Pipe (C900), 8-Inch, Item SPV.0090.103;
Sanitary Sewer Pressure Pipe (C900), 10-Inch, Item SPV.0090.104;
Sanitary Sewer Pressure Pipe (C900), 12-Inch, Item SPV.0090.105.**

A Description

Work under this item will include installing pressure sewer pipe at the alignment and grades shown on the plan set.

Conduct a low-pressure air test as specified in Article 501.3(b) of the City Standard Specifications on all sections of the sewer mainline. A passing test is required in order to be acceptable. Include all costs associated with the testing of the gravity main in this item.

Maintain the normal flow of wastewater at all times during replacement of the existing sanitary sewer main with the new sanitary sewer main. Payment for furnishing all bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout the sewer construction, is under the bid item Wastewater Control.

B Materials

Provide all sewer pipe and fittings of solid-wall Poly (Vinyl Chloride) (PVC) conforming to the requirements of the Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, AWWA C900 Class 150, DR-18.

Provide fittings conforming to the requirements of the American National Standard for Ductile- Iron and Gray-Iron fittings for Water and other liquids, ASA A21.10 (AWWA C110) payable separately under the Sanitary Lateral Reconnect item.

Provide joints with integral bell with elastomeric gaskets, or couplings with elastomeric gaskets. Make solvent cement as recommended by the manufacturer.

C Construction

Install sewer pipe according to all applicable provisions of the City Standard Specifications.

Remove all abandoned or existing material located within 3 feet of the new sanitary sewer alignment. Removal of material (including existing sanitary sewer/water main/etc.) is incidental to this bid item.

Use Ductile Iron Wye pressure rated fittings to install new laterals to the new main as called for on the plans; provide and place according to Article 503 of City Standard Specifications.

D Measurement

The department will measure Sanitary Sewer Pressure Pipe (C900), 12-Inch by the linear foot, acceptably completed, to the nearest whole foot of each of the various types, classes and sizes of pipe installed at the various depths, measured along the centerline of the pipe center to center of junctions and fittings. The quantity to be paid for includes construction through Sewer Access Structures, from center of Sewer Access Structure casting to center of Sewer Access Structure casting. Main extensions continuing through Sewer Access Structures will be measured from center of Sewer Access Structure casting to the end of pipe. The depths of installation will be measured in feet from the invert of the sewer pipe to the elevation of the existing ground. There will be no deductions from the measured lengths for wye installations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.103	Sanitary Sewer Pressure Pipe (C900), 8-Inch	LF
SPV.0090.104	Sanitary Sewer Pressure Pipe (C900), 10-Inch	LF
SPV.0090.105	Sanitary Sewer Pressure Pipe (C900), 12-Inch	LF

Payment is full compensation for furnishing all materials, except wyes, necessary to perform the work; excavation of the trench, except tunneling and jacking; installation and removal of sheeting and bracing; removal of water from the trench; disposal of surplus material from the trench; backfilling the trench and compaction of the backfill material; embankment over the sewer using surplus material from the excavation of the trench; bedding the pipe; laying the pipe and installing the fittings and accessories; jointing and sealing of joints in pipe, fittings and accessories; encasement, where specified; connections to existing structures; cleaning out the sewer; and restoring the site.

115. Select Fill for Sanitary Sewer, Item SPV.0090.106.

A Description

This special provision describes furnishing and placing select fill over the sanitary sewer main and laterals along the entire length of the pipe.

B Materials

Provide select fill meeting the requirements of Article 202.2(b) of the City Standard Specifications for select fill for sanitary sewer mains and laterals.

C Construction

Install select fill for sanitary sewer according to all applicable provisions of Article 502.1(e) of the City Standard Specifications.

D Measurement

The department will measure Select Fill for Sanitary Sewer in length by the linear foot, acceptably completed. Measurement will be completed along the centerline of the installed sanitary sewer pipe and includes the length through Sewer Access Structures.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.106	Select Fill for Sanitary Sewer	LF

Payment is full compensation for furnishing and placing select fill for sanitary sewer.

116. Furnish and Install Watermain Pipe & Fittings, 4-Inch, Item SPV.0090.107; Furnish and Install Watermain Pipe & Fittings, 6-Inch, Item SPV.0090.108; Furnish and Install Watermain Pipe & Fittings, 8-Inch, SPV.0090.109; Furnish and Install Watermain Pipe & Fittings, 12-Inch, SPV.0090.110.

A Description

Furnish and install watermain pipe and fittings of the size and type specified in the plans, these specifications and according to section 704.3 of the City Standard Specifications.

B Materials

Furnish restrained joint ductile iron pipe manufactured according to the requirements of ANSI/AWWA C151/A21.51. Push-on joints for such pipe must be according to ANSI/AWWA C111/A21.11 "Rubber-Gasket Joints for Ductile-Iron Pipe and Fittings." Pipe must be designed according to ANSI/AWWA C150/A21.50 "Thickness Design of Ductile-Iron Pressure Pipe." Use thickness class 52 pipe.

Cement mortar lining and seal coating for pipe and fittings, where applicable, must be according to ANSI/AWWA C104/A21.4. Asphaltic outside coating shall be according to ANSI/AWWA C151/A21.51 for pipe and ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53 for fittings. Restrained push-on joints for pipe must be designed for a working pressure of 350 psi.

Furnish mechanical joint ductile iron pipe fittings according to section 702 of the City Standard Specifications.

Furnish nitrile gaskets in place of rubber gaskets where shown on the plans.

C Construction

Install water main pipe and fittings according to manufacturer's recommendations and sections 703 and 704.21(3) of the City Standard Specifications. Maintain all required clearances with other facilities.

Install nitrile gaskets in place of rubber gaskets where shown on the plans.

D Measurement

The department will measure Furnish & Install Watermain Pipe & Fittings (Size) by the linear foot, acceptable completed.

All fittings and gaskets, including nitrile gaskets, shown on the plan set and those required on hydrant leads per the General Provisions for City of Madison Water Main are included in the linear foot price for Water Pipe and Fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.107	Furnish and Install Watermain Pipe & Fittings 4-Inch	LF
SPV.0090.108	Furnish and Install Watermain Pipe & Fittings 6-Inch	LF
SPV.0090.109	Furnish and Install Watermain Pipe & Fittings 8-Inch	LF
SPV.0090.110	Furnish and Install Watermain Pipe & Fittings 12-Inch	LF

Payment is full compensation for furnishing and installing watermain piping and fittings; all watermain testing, and any temporary flushing hydrants required for traffic staging.

117. Select Fill for Water Main, Item SPV.0090.111.

A Description

This special provision describes furnishing and placing select fill backfill over the water main along the entire length of the pipeline according to section 704.8 of the City Standard Specifications.

B Materials

Provide Select Fill for Water Main meeting the requirements of section 202.2 (b) and section 703 of the City Standard Specifications.

C Construction

Place Select Fill for Water Main according to section 703 of the City Standard Specifications.

D Measurement

The department will measure Select Fill for Water Main 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.0090.111	Select Fill for Water Main	LF

Payment is full compensation for furnishing and placing select fill for water main.

**118. Temporary Traffic Signals East Johnson Street-Fordem Avenue, Item SPV.0105.001;
Temporary Traffic Signals East Johnson Street-First Street, Item SPV.0105.002.**

A Description

This special provision describes installing temporary traffic signals for intersections, using overhead electrical wiring to temporary traffic signal poles and temporary supports, and providing non-intrusive vehicle detection according to standard spec 661 and as amended herein.

B Materials

Furnish and use materials according to standard spec 661.2 and as amended herein.

B.1 Signal Poles and Signal Faces

Furnish new or used poles and traffic signal standards for use in temporary signals conforming to the pertinent requirements of standard spec 657 and 661. Furnish signal faces according to standard spec 661.2.2.2.

B.2 Signal Cabinet

Furnish new or equivalent to new materials as specified in standard spec 661.2 and as follows:

B.2.1 Controller

Furnish a new or equivalent to new Econolite ASC3-2100 controller with Telemetry Module. The controller shall be compatible with the City of Madison closed loop system (CLS).

B.2.2 Conflict Monitor

Furnish a new or equivalent to new NEMA+ 12-Channel Signal Conflict Monitor, with LCD display, and an Ejector Tab card release on side of card.

Provide keys to the temporary signal control cabinet to the City of Madison in addition to other required keys according to standard spec 661.2.1.

B.3 Luminaires

Furnish luminaire arms and luminaries conforming to the pertinent requirements of standard spec 657 and 659. The luminaries shall be 250-watt, full cutoff, LED and shall be furnished with photo electric cells to turn the luminaire on and off.

B.4 Pre-emption Hardware, Cable, and Equipment

Furnish and install Optical signal preempt for the temporary signals. All approach directions each need to be detected and brought back individually to the signal control cabinet.

B.5 Vehicle Detection Hardware, Cable, and Equipment

The contractor, with prior approval of the engineer and the City of Madison, shall select the vehicle detection technology best suited for the site conditions and the anticipated construction work zones and activities. The engineer reserves the right to request a demonstration of any or all temporary vehicle detection technologies prior to said approval. Vehicle detection technologies considered shall include; but are not limited to, temporary inductive loops, microwave detection, or video detection. Detection technology shall provide for true presence detection.

Damage to new pavement for temporary detection loops will not be allowed. Any pavement damaged during installation shall be replaced at the contractor's expense.

C Construction

C.1 General

Revise standard spec 661.3.1(2) as follows.

Request a signal inspection of the complete temporary traffic signal installation. Make this request to the engineer at least 5 working days before the requested inspection. The City of Madison traffic signal personnel will perform the traffic signal inspection.

The City of Madison will load the timing programs into the controller. Do not use new permanent signal conduit for temporary signal wiring. Provide horizontal and vertical clearance between sidewalks and guy wires.

Arrange for all required electrical service modifications with the utility. Pay all utility company installation costs for modifications required to maintain the Temporary Traffic Signal.

Locate and avoid all underground and aboveground utilities and structures. Install temporary supports as required to avoid conflicts with proposed curb and gutter, sidewalk, and traffic signal poles. The engineer will approve the final location of wood poles prior to installation.

Use of self-supporting poles will likely be required due to limited right-of-way limitations and depending on contractor operations.

Maintain temporary signals throughout the construction of the project, until such time that the new signals are operational and have been accepted by and turned over to the city.

C.2 Signal Heads

Install signal heads for the same vehicle travel direction at a minimum of 11 feet from each other. Move signal heads as necessary or as directed by the engineer.

C.3 Cabinet

Require a representative from the cabinet supplier on-site at the time of the turn on. Install equipment in the cabinet as follows:

C.3.1 Controller

Install the controller and ensure that it is operational as part of the City of Madison closed loop system.

C.4 Luminaires

Install luminaire arms and luminaries conforming to the pertinent requirements of standard spec 657 and 659.

C.5 Pre-emption Hardware, Cable, and Equipment

Install detector cards, sensors, cables, and all required ancillary equipment, appurtenances and mounting hardware at the temporary signals to provide a fully functioning pre-emption system. Arrange testing of the pre-emption system with Mike Christoph, (608) 395-1975, before turn-on of the temporary signal.

Maintain railroad preemption at all times. Coordinate with the engineer, City of Madison Traffic Engineering, and the Wisconsin and Southern Railroad regarding preemption for the railroad. Maintaining the preemption will require temporary aerial cable and temporary poles to maintain the interconnect cable/connection between the Fordem Avenue and First Street temporary signals

C.6 Vehicle Detection Hardware, Cable and Equipment

Install detector cards, sensors, cables and all required ancillary equipment, appurtenances and mounting hardware at the temporary signals to provide a fully functioning vehicle detection system for all approaches. The desired vehicle detection zones and temporary signal phasing are shown on the plans.

Arrange testing of the temporary detection system with Mike Christoph, (608) 395-1975, before turn-on of the temporary signal.

Adjust, relocate, add, or remove temporary vehicle detection equipment for each traffic control stage or sub stage as shown in the plans, requested by the engineer, or as modified by the contractor's operations to maintain the required traffic and complete the proposed work. Damage to new pavement for temporary detection loops will not be allowed. Any pavement damaged during installation shall be replaced at the contractor's expense.

C.7 Maintenance

When a signal installation or signal head is not in operation, hood, turn, or take down the signal head(s) to clearly indicate that the signal is not in operation. (See MUTCD 4D-1).

Provide immediate response, 24-hour/7 days per week, to maintain any aspect of the temporary vehicle detection that is defective, completing repairs or adjustment the same day as notification.

C.8 Contractor Qualifications

Demonstrate the ability to operate all required traffic signal equipment listed in this special provision for the engineer and the City of Madison prior to starting work. Provide proof of the ability to obtain all required traffic signal equipment listed in this special provision to the engineer and the City of Madison prior to starting work.

D Measurement

The department will measure Temporary Traffic Signals (Location), completed according to the contract and accepted, as a single complete lump sum unit of work, and according to standard spec 661.4.

If repairs or adjustments to restore vehicle detection to full function are not made the same day as notification, the associated pay item will be reduced by the following amounts:

- First instance: No deduct if repaired within 24 hours.
- Each subsequent instance: 5% deduct for each day or partial day of non-compliance.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.001	Temporary Traffic Signals East Johnson Street-Fordem Avenue	LS
SPV.0105.002	Temporary Traffic Signals East Johnson Street-First Street	LS

Payment for the Temporary Traffic Signals bid item is full compensation for providing, operating, maintaining, and repairing the complete temporary installation; and for removal of the temporary installation. Payment also includes the following:

1. Providing replacement equipment.
2. All utility charges for installation and disconnection. The City of Madison will pay for energy costs.
3. The cost of delivery and pick-up of the cabinet assemblies for department testing.

119. Temporary Lighting, Item SPV.0105.003.

A Description

This special provision describes furnishing, installing, maintaining, and removing wood poles, guy wires, luminaires, arms and aerial cable to maintain 100% of the existing lighting system, including the existing lighting within Structure C-13-147.

Work for temporary wood poles and guy wires shall be according to standard spec 661.

B Materials

Furnish aerial cable consisting of an assembly of three No. 4 XLP insulated power conductors with an ACSR messenger (grounding) wire. Provide the quantity of parallel cable assemblies necessary to maintain lighting circuits.

Furnish Type 4 wood poles, 35' long.

Protect any cable that extends from grade to 10 feet above grade by a plastic cable guard.

C Construction

Maintain existing, temporary and proposed lighting within the construction limits for the duration of the project. Maintenance includes but is not limited to replacement of burned out lamps, replacement of knocked down poles and maintaining continuous lighting.

The contractor shall keep streetlights in operation throughout the construction project until new lights are installed and operational as follows:

1. Maintain a similar location and same number of lights as existing (except at the Fordem-Johnson and First-Johnson intersections where a minimum of four lights is required).
2. The distance between adjacent street lights shall be no greater than 250 feet
3. If new streetlights are installed by the contractor to temporarily replace existing lights, each one shall be 250 watt HPS or equivalent lumen output, full cutoff.

Provide off-hours contact name(s) and phone number(s) for the city and police department for repair purposes and be able to respond within 2 hours to the project site for knockdowns or other work that must be completed in a timely manner. All other maintenance needs shall be completed within 24 hours of notification. It is also the contractor's responsibility to continuously monitor the existing and proposed lighting systems operation.

Coordinate work with the city's forces. Existing lighting contains 120 volt circuits. New lighting may need to be temporarily wired from existing circuits to maintain street lighting. Arrange for all required electrical service modifications with the utility. Pay all utility company installation costs for modifications required to maintain the Temporary Traffic Signal. The City of Madison will pay for energy costs.

D Measurement

The department will measure Temporary Lighting, completed according to the contract and accepted, as a single complete lump sum unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.003	Temporary Lighting	LS

Payment is full compensation for furnishing, installing and removing wood poles, aerial cable, luminaires, arms, guy wires, maintaining lighting units, replacement of burned out lamps; replacement of knockdowns, and for furnishing and installing splice connectors.

120. Temporary Traffic Signal Pole East Johnson Street-Baldwin Street, Item SPV.0105.004.

A Description

This special provision describes providing a temporary traffic signal pole for the Baldwin Street intersection, using a temporary traffic signal pole and temporary support according to standard spec 661 and as amended herein.

B Materials

Furnish and use materials according to standard spec 661.2 and as amended herein.

B.1 Signal Poles

Furnish new or used poles for use by the City of Madison for temporary signals at the Baldwin Street intersection conforming to the pertinent requirements of standard spec 657 and 661.

C Construction

Provide a temporary signal base and pole at the Baldwin Street intersection as shown on the plans for use by the City of Madison. Provide a minimum of 7 working days' notice to Contact Michael Christoph at the City of Madison Traffic Engineering Shop, (608) 266-9031 prior to beginning each construction stage. The existing signal poles, conduit and structures at the Baldwin Street intersection will remain in service and be maintained by the City of Madison throughout the construction project.

Move the temporary signal base and pole as required for each construction stag.

D Measurement

The department will measure Temporary Traffic Signal Pole East Johnson Street-Baldwin Street completed according to the contract and accepted, as a single complete lump sum unit of work, and according to standard spec 661.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.004	Temporary Traffic Signal Pole East Johnson Street-Baldwin Street	LS

Payment for the Temporary Traffic Signal Pole bid item is full compensation for providing, the temporary pole installation; moving the pole is needed for each construction stage, for removal of the temporary installation, and providing replacement equipment.

121. Optical Signal Preempt, Item SPV.0105.005.

A Description

This special provision describes furnishing and installing optical signal preempt equipment for the signalized intersections. The acceptability of alternate equipment rests solely with the City of Madison Traffic Engineering Division.

B Materials

Provide the following material:

1. Four channel discriminator for each of the two intersections.
2. Optical detectors, six total.
3. Card rack for each intersection, two total.
4. Detector cable as necessary.
5. Cables and auxiliary equipment as necessary for a complete operating system.

Provide all equipment from the same manufacturer and fully compatible. The discriminator shall detect and prioritize Tomar and Opticom brand emitters. The discriminator shall be capable of locking out non-coded emitters. The acceptability of equipment rests solely with the City of Madison Traffic Engineering Division.

C Construction

Install detectors on the top horizontal member of monotube arms, between the first and second traffic signal head, and as otherwise shown on the plan or directed by Madison Traffic Engineering.

The detectors will generally be on the far side of the intersection, and aimed at approaching traffic, as further directed by Madison Traffic Engineering staff. Install detector cable from the detector to the control cabinet at each intersection, using the shortest path.

All installation methods to be consistent with the manufacturer's instructions. Card rack and discriminator installation, as well as cabinet connections, will be made by City of Madison Traffic Engineering staff.

D Measurement

The department will measure Optical Signal Preempt completed according to the contract and accepted, as a single complete lump sum unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.005	Optical Signal Preempt	LS

Payment is full compensation furnishing and installing detectors and cable; for furnishing and delivering discriminators, card racks, cables and miscellaneous materials to the city Traffic Engineering Field Office, 1120 Sayle Street.

**122. Project Dewatering ID 5992-09-14, Item SPV.0105.101;
Project Dewatering ID 5992-09-15, Item SPV.0105.102;
Project Dewatering ID 5992-09-16, Item SPV.0105.103.**

A Description

This section describes dewatering the site during construction or working with the water on site in a manner that allows the project to be constructed according to the plans and specifications. This item includes removal of any water entering a trench or excavation including but not limited to groundwater, surface water runoff and/or trench dewatering, both clean and potentially contaminated.

Groundwater is expected to be encountered during excavation. Provide and maintain ample means and devices with which to promptly remove all water entering excavations, trenches, and other parts of the work and keep said excavations dry until the structures to be built therein are completed.

Installation of concrete or masonry structures will not be acceptable if placed in water or if water is allowed to rise over masonry or concrete and there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

The contractor is responsible for all work, materials and equipment required to comply with permit conditions to dewater the site. At a minimum, pump water into a settling tank, or alternate method approved by the engineer, to settle solids prior to discharge into the storm sewer for clean water and into the designated sanitary sewer for potentially contaminated water.

Potentially contaminated zones of groundwater are present east of the Yahara River. Conform with the requirements of standard spec 205 and with pertinent parts of Chapters NR 100-299 of the Wisconsin Administrative Code as shown on the construction plan set, and as supplemented herein. Contaminated groundwater generated from dewatering activities within the potentially contaminated zones may exceed the surface water discharge limits specified in the DNR's "General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System" for "Contaminated Groundwater from Remedial Action Operations" (WPDES Permit No. WI-0046566-6), Table 3.1. Comply with all permit requirements and applicable regulations and monitor the discharge volume of potentially contaminated water generated as necessary to meet the permit requirements. This bid item is intended for all sub-surface utility work for which dewatering may be necessary including sanitary sewer, water main, storm sewer, electrical and traffic signal construction.

B General

Discharge clean water (of any type or from any source) to the storm sewer system. For the purposes of this project suspended solids will not be considered a type of contamination.

Provide all equipment and personnel necessary to conduct dewatering operations as required for the proper completion of the work. Prepare a dewatering plan and submit it to the engineer for review and approval prior to starting dewatering operations. The plan shall include a description of the proposed dewatering methods and maps or drawings indicating the location of the dewatering facilities and points of surface discharge of the water.

The contractor is solely responsible for choosing a method of water control that is compatible with the constraints defined. The contractor is responsible for the adequacy of the water control system and will take all necessary measures to ensure that the water control operation will not endanger or damage any existing adjacent utility or structure.

Design, install and operate the method or methods of water control in such a manner as to provide satisfactory working conditions and to maintain the progress of work. Design the methods and systems so as to avoid settlement or damage to adjacent property according to the applicable legislative statutes and judicial decisions of the State of Wisconsin. All required pumping, drainage and disposal of water will be done without damage to adjacent property or structures, or to the operations of other contractors and without interference with the access rights of public or private parties.

Review and approval of the dewatering plan does not relieve the contractor of the dewatering requirements stated in these specifications. The engineer assumes no liability for the performance or safety of the dewatering system.

Comply with all local ordinances and state statutes for the disposal of water from dewatering operations. Further, it is the contractor's responsibility to contact the Wisconsin Department of Natural Resources Private Water Supply Section prior to construction for dewatering discharge requirements and permits and to comply with all conditions of the Department of Natural Resources. According to Paragraph

144.025(2)(e), Wisconsin Statutes, permits are required for all groundwater control wells that singly or in aggregate produce 70 or more gallons per minute. All wells shall be drilled and sealed according to requirements of the WDNR for installing and abandoning wells. The contact for obtaining well permits is:

Wisconsin Department of Natural Resources
Private Water Supply Section
Box 7921
Madison, Wisconsin 53707
(608) 261-6421
<http://dnr.wi.gov/topic/Wells/dewatering.html>

File a copy of the permit with the owner 48 hours prior to commencement of any dewatering.

Discharge potentially contaminated water from all areas east of the Yahara River or as directed by the engineer to the sanitary sewer. For the purposes of this project suspended solids shall not be considered a type of contamination. Do not discharge contaminated groundwater without prior approval from the City of Madison.

Obtain a *City of Madison Permit to Discharge to the Sanitary Sewer* compliant with all local ordinances and state statutes. The permit will require that the contractor monitor the volume of total water discharged into the sanitary sewer and will determine the necessary reporting frequency. The contact for obtaining this permit is:

Megan Eberhardt
City of Madison Engineering
(608) 266-6432
meberhardt@cityofmadison.com

The City of Madison will be responsible for obtaining the necessary approvals from the Madison Metropolitan Sewerage District (MMSD) for disposal of potentially contaminated groundwater. This approval will be issued at the same time as the *Permit to Discharge to the Sanitary Sewer*. Submit a dewatering plan to the City of Madison for approval with the application for *Permit to Discharge to the Sanitary Sewer*.

The City of Madison contact for coordination with MMSD is also Megan Eberhardt.

C Construction

Supplement standard spec 205.3 with the following:

Water shall not be allowed in trenches while pipe is being laid.

No masonry shall be installed in water nor shall water be allowed to rise over masonry or concrete if there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

Dewater in such a manner that assures safe working conditions and provides stable trench side slopes and trench bottom for adequate support of the pipe and appurtenances. Dewater sufficiently to minimize or eliminate groundwater pressures below the proposed trench bottom which otherwise may tend to cause boiling or a "quick" condition at the trench bottom. Where silty sands or other impervious soils are encountered at and/or below the pipe zone, the dewatering equipment must be adequate to relieve the groundwater pressure below the impervious soil layer and accomplish sufficient drainage of the impervious soils to provide a stable trench bottom.

Pump water from the dewatering operations directly to a minimum 1,500 gallon holding tank, or alternate method approved by the engineer, to allow for settlement of large solids. Periodically pump clean water from the top of the settling tank into the storm sewer system. Periodically pump potentially contaminated water from the top of the settling tank into the approved sanitary sewer. Provide a meter to measure the volume of potentially contaminated water discharged to the sanitary sewer system.

If free phase petroleum product, such as gasoline floating on the water, is observed during dewatering activities, terminate dewatering activities and notify the engineer.

Notify the engineer at least three days in advance of any proposed changes to the dewatering plan.

Any flooding or erosion damage caused by dewatering operations is the responsibility of the contractor. If flooding or erosion damage occurs, take immediate steps to eliminate those conditions and to correct any damage. The control of all surface and subsurface water, ice, and snow are considered part of the

dewatering. Erosion control shall be exercised at all times, including the placement of silt fences, sedimentation basins and any other devices necessary for proper control.

Dispose of all water removed so as not to endanger public health, private and public property or completed work. Use only electrically driven pumps for dewatering operations. Comply with local requirements for noise control for all equipment utilized as part of the dewatering system (Madison General Ordinance 24.08). Provide sufficient mufflers or other noise reduction devices necessary to minimize the noise of the equipment. If ordered by the engineer, reduce noise to an acceptable level (as determined by the engineer) or supply an alternate system capable of meeting the noise requirements. This applies to any equipment utilized as part of the dewatering system.

Provide stand-by equipment to maintain continuous dewatering in the event of mechanical breakdown to part of the system.

The contractor is responsible for removal and/or abandonment of dewatering wells. Removal and/or abandonment shall conform to all state and local regulations.

D Measurement

The department will measure Project Dewatering as a single complete lump sum unit of work, completed according to the contract and accepted.

Measure dewatering of potentially contaminated water and provide this information to the engineer at the frequency determined by the *Permit to Discharge to the Sanitary Sewer*. This information will not be used as a basis of payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.101	Project Dewatering ID 5992-09-14	LS
SPV.0105.102	Project Dewatering ID 5992-09-15	LS
SPV.0105.103	Project Dewatering ID 5992-09-16	LS

Payment is considered full compensation for furnishing all work necessary for pumping, measuring of potentially contaminated water, settling and discharging water, both clean and potentially contaminated; for paying permit fees required; for eliminating and correcting all flooding or erosion damage caused by dewatering operations.

No disposal fees are required by the City of Madison for discharge to the storm sewer system. The City of Madison will pay for any disposal fees required by MMSD for the discharge of water to the sanitary sewer system.

123. Wastewater Control, Item SPV.0105.105.

A Description

Work under this item includes controlling or diverting sanitary sewer flows during reconstruction of the sanitary sewer.

B (Vacant)

C Construction

Provide a pump with a capacity of 400 gallons per minute and all associated equipment required to maintain a functioning sanitary sewer system during construction. It is not acceptable, at any time, to disrupt normal flow of wastewater in sanitary sewer service laterals without prior approval from the City of Madison. This condition also holds at the time of connection of an existing lateral to the new sewer main.

If the contractor elects to use bypass pumping as a means of wastewater control, the methods, equipment, type of hose, etc. are subject to approval by the engineer. Ramp any hoses crossing streets, driveways, parking areas, etc., to prevent damage to hoses. Contain spillage of wastewater to be within the utility trench and dispose of spillage into existing sewer downstream to previously installed sewer piping. Spillage of wastewater to adjacent streets, lawns, etc. will not be tolerated. Should spillage occur, cease all construction operations immediately and begin cleanup operations. Clean site thoroughly prior to the resumption of any construction operations.

D Measurement

The department will measure Wastewater Control as a single complete lump sum unit of work, completed according to the contract and accepted.

E Payment

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

ITEM	DESCRIPTION	UNIT
SPV. 0105.105	Wastewater Control	LS

Payment is full compensation for controlling or diverting all sanitary sewer flows during construction of sanitary sewer.

124. Construction Staking Sanitary Sewer, Item SPV.0105.106.

A Description

Perform work according to the applicable provisions of standard spec 650.

B (Vacant)

C Construction

Set and maintain construction stakes or marks as necessary to achieve the required accuracy and to support the method of operations. Set and maintain a minimum of two construction stakes to establish location and grade of sanitary sewer structures according to the plans and details for sanitary sewer structures. Set and maintain construction stakes to establish location and grade of sanitary sewer main. Provide stakes that establish the horizontal and grade elevation of sanitary main at intervals of 25 feet for a minimum of 100 feet from each structure and at intervals of 50 feet thereafter. Determine offsets in conjunction with contractor requirements. Verify the invert elevations of existing structures which are to remain and be connected into. Locate all stakes included in this bid item to within 0.02 feet horizontally and establish the grade elevation to within 0.01 feet vertically.

Place additional intermittent stakes as necessary to provide staking information at critical areas such as utility, driveway, roadway, and structure crossings.

D Measurement

The department will measure Construction Staking Sanitary Sewer as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM	DESCRIPTION	UNIT
SPV.0105.106	Construction Staking Sanitary Sewer	LS

Payment is full compensation for locating and setting all construction stakes; and for relocating and resetting damaged or missing construction stakes.

125. Construction Staking Water Main, Item SPV.0105.104.

A Description

Perform the work according to the applicable provisions of standard spec 650.3.2 and 650.3.6.

B (Vacant)

C Construction

Set and maintain construction stakes and marks as necessary to achieve the required accuracy and to support the method of operations. Set and maintain construction stakes to establish location of water main. Provide stakes at 25-foot intervals to 100 feet from valves, the 50-foot intervals at any bends that are to be constructed. Locate all stakes include in this bid item to within 0.02 feet horizontally to 0.01 feet vertically.

Place additional intermittent stakes as necessary to provide staking information at critical areas such as utility, driveway, roadway, and structure crossing.

D Measurement

The department will measure Construction Staking Water Main as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.104	Construction Staking Water Main	LS

Payment for Construction Staking Water Main is full compensation for locating and setting all construction stakes; and for relocating and resetting damaged or missing construction stakes.

126. Water for Seeded Areas, Item SPV.0120.001.

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

When watering seeded areas, use clean water, free of impurities or substances that might injure the seed.

C Construction

If rainfall is not sufficient, keep all seeded areas thoroughly moist by watering or sprinkling. Water for 30 days after seed placement or as the engineer directs. Apply water in a manner to preclude washing or erosion. Do not leave the 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 is considered the minimum.

D Measurement

The department will measure Water for Seeded Areas by volume by the 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.0120.001	Water for Seeded Areas	MGAL

Payment is full compensation for furnishing, hauling, and applying the water.

127. Colored Crosswalk, Item SPV.0165.001.

A Description

This work consists of furnishing and applying a high friction surfacing system according to this Section and in conformity with the lines and details shown on the plans. The locations on the plans are noted as "Colored Crosswalk." The field installed system consists of a specially formulated two-component epoxy binder that is applied to the roadway surface and then covered with a durable aggregate to provide high friction resistance and the desired color. Colored Crosswalk shall be red in color.

The manufacturer's technical representative shall come to the construction site to train the engineer and contractor personnel prior to surface treatment and shall be available during application as necessary.

B Materials

General: Use a two part cold applied modified exothermic epoxy resin binder treatment containing epoxy binder capable of retaining an aggregate topping under vehicular traffic conditions.

Epoxy Binder: Use a 100% solids, two part, self leveling, epoxy binder consisting of a thermosetting modified epoxy compound, which holds the aggregate firmly in position. The epoxy binder shall meet the following requirements:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Tensile Strength @ 7 days, psi, minimum	2000	ASTM D 638
Hardness, Shore D, minimum	70	ASTM D 2240
Compressive Strength, psi, minimum 1	600	ASTM D 695
Gel Time, minutes, minimum	10	ASTM D 2471
Cure Rate, hours, maximum	3	Film @ 75°F
Water Absorption @ 24 hours, %, max.	0.25	ASTM D 570

Aggregate: The aggregate shall be high friction crushed Bauxite, Granite, or gravel. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter. The aggregate shall meet the following requirements:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Aggregate Abrasion Value, maximum	20	LA Abrasion
Aggregate Grading,		
No 6 Sieve Size, minimum passing, %	95	
No 16 Sieve Size, maximum passing, %	5	
Aggregate Color	Red	

Two-part epoxy materials, which are not exothermic in curing and do not meet the viscosity requirements, will not be allowed. The contractor shall provide an independent laboratory report which documents that the epoxy binder meets the requirements of this section.

Certification: Finished surface shall have a minimum 60 FN40R according to ASTM E274 of aggregate bonded to a vehicular bearing surface using the modified epoxy binder.

C Construction

General: Do not apply the two-part modified epoxy binder on a wet surface, when the ambient and/or surface temperature is below 45°F or above 100°F, or when the anticipated weather conditions would prevent the proper application of the surface treatment, as determined by the manufacturer's representative and the engineer. All components shall have a temperature greater than 45°F immediately before mixing and placement.

Preparation: Prepare surfaces so that they are clean, dry, and free of all dust, oil, debris and any other material that might interfere with the bond between the epoxy binder material and existing surfaces. The manufacturer's representative will determine if all surfaces have been adequately cleaned.

Protect utilities, drainage structures, curbs and any other structure within or adjacent to the treatment location against the application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the application surfaces as directed by the engineer. Remove by grinding any pavement markings that conflict with the surface application and thoroughly sweep or vacuum the surface clean prior to the epoxy binder application.

Pre-treat joints and cracks greater than 1/4 inches in width and depth with the mixed epoxy specified herein or by using an alternative procedure proposed by the manufacturer and agreed upon by the engineer. Proceed with the epoxy binder and aggregate topping installation once the epoxy, in the pre-treated areas, has gelled or once the alternative procedure has been accomplished.

For applications on new pavements, install the high friction epoxy binder and aggregate topping a minimum of 20 days after the placement of the underlying and adjacent pavement.

Mixing and Application of Epoxy Binder and Aggregate Wearing Course: Utilize one of the following methods for the application of the epoxy binder and aggregate wearing course, as applicable.

- (1) **Hand mixing and application:** Proportion the two-part modified epoxy base binder components, Part A and Part B, to the correct ratio, as recommended by the manufacturer, and mix using a low speed, high torque drill fitted with a helical stirrer. Hand-apply the mixed components onto a prepared pavement surface at a thickness of the mixed epoxy shall be 50 to 100 mils. Uniformly spread hand-applied base binder onto the substrate surface by means of a serrated edge squeegee. Immediately, spread the high friction surfacing aggregate onto the two-part modified epoxy base binder.
- (2) **Mechanical mixing and application:** Apply the two-part modified epoxy base binder by a truck mounted application machine onto the pavement section to be treated in varying widths at a uniform application thickness. Proceed with operations in such a manner that will not allow the epoxy base binder material to separate in the mixing lines, cure, dry, or otherwise impair retention bonding of the high friction surfacing aggregate. Apply the mixed components mechanically onto the prepared pavement surface with a uniform thickness of 50 to 100 mils. Immediately, mechanically apply the high friction surfacing aggregate in a uniform, continuous manner.

For either of the above methods, do not use vibratory or impact type compaction on the aggregate after placement. Use only lightweight rollers to seat the aggregate topping without crushing the aggregate. Complete coverage of the "wet" epoxy binder with aggregate is necessary to achieve a uniform surface. No exposed wet spots shall be visible once the aggregate is placed.

Curing: Allow the high friction aggregate topped epoxy binder to cure according to manufacturer recommendations. Protect treated surfaces from traffic and environmental effects until the area has cured.

Removal of Excess Aggregate: Remove the excess aggregate by hand brooms, mechanical sweeping, or vacuum sweeping before opening to traffic. Excess aggregate can be reused on the following day's installation, provided the aggregate is clean, uncontaminated, and dry.

The engineer may require additional mechanical or vacuum sweeping as necessary after the system fully cures and the treated surface is open to traffic.

PERFORMANCE REQUIREMENTS

Raveling and Delamination: Remove and replace high friction surface treatment that ravel, delaminates, or wears off within 90 days after placement, unless approved to remain in place by the engineer. The limits of removal and replacement must be approved by the engineer. The replaced high friction surface treatment shall meet the requirements of this sub-article.

The two-part modified epoxy material shall be installed per plans and specification. The engineer will notify the contractor within 48 hours of installation regarding any of the two-part modified epoxy material that is installed not to specification or to the satisfaction of the engineer. Non-conforming two part modified epoxy material shall be removed at no charge to the city and replaced with conforming product.

D Measurement

The department will measure Crosswalk Special by the square foot, acceptably completed. No deduction will be made for the areas occupied by manholes, inlets, drainage structures, pavement markings or by any public utility appurtenances within the area.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.001	Colored Crosswalk	SF

Payment is full compensation for furnishing and installing all materials including any re-application or repair required under the Performance Requirements as provided herein.

128. Pavement Cleanup, Item SPV.0170.001.

A Description

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site.

B Materials

Utilize vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified herein or approved by the engineer.

C Construction

Keep all pavements, curb lanes and gutters both closed and open to public traffic within the job-site boundaries free of dust and debris generated from any activity under the contract. Keep all pavements, curb lanes and gutters adjacent to the project free of dust and debris that are affected by land disturbing, dust generating activities, as defined in the contractor's dust control implementation plan.

Conduct sweepings as the engineer directs or approves, to deal with dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Respond to emergency sweeping requests within 4 hours.

If the vacuum-type sweeper breaks down, a mechanical broom sweeper may be substituted for no more than 24 hours total elapsed time. Repair the vacuum-type sweeper within that 24 hours or substitute a vacuum-type sweeper.

Skid steers with mechanical power brooms may only be utilized on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer.

D Measurement

The department will measure Pavement Cleanup by the full 100-foot station, acceptably completed, measured along the roadway centerline or reference line with each full 100-foot station starting and ending at a +00 station. If two or more roadways occur, the department will measure along the centerline or reference line of each roadway. For divided highways, the department will extend measurement units for each roadway, in width, from 5 feet outside the grading limit of that roadway to a line mid-way between the reference lines or centerlines for each roadway.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.001	Pavement Cleanup	STA

Payment is full compensation for surveillance, mobilization, sweeping, and disposing of materials.

129. Asphaltic Surface Temporary Wedging, Item SPV.0180.001.

A Description

This special provision describes providing Asphaltic Surface Temporary Wedging conforming to standard spec 465 and as shown in the plans, including its removal conforming to standard spec 204.

B Materials

Provide Asphaltic Surface Temporary Wedging meeting the requirements of standard spec 465.2.

C Construction

Place Asphaltic Surface Temporary Wedging as specified under standard spec 465.3.1 and as shown in the plans.

For locations where Asphaltic Surface Temporary Wedging is placed for manholes or other utility features within the traveled roadway, delineate the limits of the wedging with yellow temporary marking line paint conforming to standard spec 649.

Maintain work done under Asphaltic Surface Temporary Wedging until the material is removed for placement of HMA Pavement. Remove Asphaltic Surface Temporary Wedging as specified under standard spec 204.3.2.2.1(4).

D Measurement

The department will measure Asphaltic Surface Temporary Wedging 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.0180.001	Asphaltic Surface Temporary Wedging	SY

Payment is full compensation for preparing the foundation; furnishing and placing asphaltic surface temporary; maintenance; and milling off the temporary wedging to remove it prior to placing the surface layer of HMA pavement.

130. Shredded Hardwood Bark Mulch, 3-Inch Depth, Item SPV.0180.002.

A Description

This special provision describes furnishing and installing Shredded Hardwood Bark Mulch, 3-Inch Depth according to the applicable sections of standard spec 627 and as hereinafter provided.

B Materials

Provide Shredded Hardwood Bark Mulch, 3-inch Depth that is finely shredded hardwood bark mulch and the product of a mechanical chipper, hammermill, or tub grinder.

Provide fibrous wood mulch, uniformly dark brown in color, free of large wood chunks, and substantially free of mold, dirt, sawdust, and foreign material. Ensure that no portion of the material is in an advanced state of decomposition.

Provide fibrous wood mulch not containing manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. Ensure that the material does not contain bark of black walnut trees.

Provide air dried mulch, passing a 4-inch screen, with no more than 20 percent by mass passing a 0.10-inch sieve. Ensure that unattached bark or greenleaf composition, either singly or combined, do not exceed 20 percent each by mass. The maximum length of individual pieces cannot exceed 4 inches.

C Construction

Install mulch according to standard spec 632.3.9 to a depth of 3 inches over entire area of bed disturbed by construction activities.

Provide an additional 1-inch topdressing of mulch for all adjacent landscape planting beds to ensure uniform appearance of all beds, both disturbed and undisturbed, at the conclusion of the landscape restoration. This additional topdressing is considered incidental to the Shredded Hardwood Bark Mulch, 3-Inch Depth item.

Do not use any weed barrier fabric in mulch areas.

Do not damage plants, structures, and/or other materials already in place, when placing the mulch.

D Measurement

The department will measure Shredded Hardwood Bark Mulch, 3-Inch Depth 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.0180.002	Shredded Hardwood Bark Mulch, 3-Inch Depth	SY

Payment is full compensation for furnishing and installing all materials.

131. Reinforced Concrete Pavement 9-Inch, Item SPV.0180.003.

A Description

This special provision describes constructing Reinforced Concrete Pavement 9-Inch according to the pertinent provisions of standard spec 415, the plan details and as hereinafter provided.

B Materials

Provide dowel and tie bars conforming to standard spec 505.2.6.

Provide coated high-strength bar steel reinforcement as shown in the plans and conforming to standard spec 505.2.3.

C Construction

Use construction methods conforming to standard spec 415.3.

D Measurement

The department will measure Reinforced Concrete Pavement 9-Inch 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.0180.003	Reinforced Concrete Pavement 9-Inch	SY

Payment is full compensation for providing concrete, dowel bars, tie bars, preparing foundation, placement of concrete and all bar steel reinforcement.

132. Excavating, Loading, Hauling, and Landfill Treatment or Disposal of Contaminated Soil, Item SPV.0195.001.

A Description

A.1 General

Excavated contaminated soil and historic fill shall be reused on the project, under pavement, as fill or backfill in trenches and excavations to the maximum extent practicable. Excavated contaminated soil and historic fill shall be placed back in the trench or excavation from where it was excavated, if the material is suitable for reuse as fill or back fill. Only excess excavated contaminated soil and historic fill that cannot be reused on the project shall be considered for off-site treatment or disposal.

This special provision describes excavating, loading, hauling, and landfill treatment or disposal of excess excavated contaminated soil at a DNR-licensed facility. The closest DNR-licensed landfill and bioremediation facility that can treat or dispose of this soil is:

Waste Management Madison Prairie Landfill
6002 Nelson Road
Sun Prairie, WI
(608) 837-9031

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

A.2 Notice to the Contractor – Contaminated Soil Locations

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

1. Station 89+90 to 90+70, reference line to project limits left, from the bottom of the roadway base course material to the maximum excavation depth shown on the plans. Excess excavated soil from this area will require landfill treatment or disposal. The estimated volume of excess excavated soil at this location is 170 CY (approximately 290 tons using a conversion factor of 1.7 tons per CY).
2. Station 99+00 to 100+00, reference line to project limits left, from the bottom of the roadway base course material to the approximate depth of 6 feet. Excess excavated soil from this area will require landfill treatment or disposal. The estimated volume of excess excavated soil at this location is 270 CY (approximately 455 tons using a conversion factor of 1.7 tons per CY).
Transport excess excavated soil to a DNR-licensed treatment/disposal facility.

Fill material containing potential cinders was observed at environmental soil borings B-7, B-8, and B-9. Cinders were also reported at geotechnical borings B5, B6, B7, and B8, located in the same general area as environmental borings B-7, B-8, and B-9, in the vicinity of the railroad right of way. Coordinate excavations in this area with the project's environmental specialist. The environmental specialist will evaluate potential suspect soils and historic fill in this area. Excavated suspect soils and historic fill materials shall be reused on the project, under pavement, as fill or backfill in trenches and excavations to the maximum extent practicable. Only excess excavated suspect soils and historic fill materials that cannot be reused on the project shall be considered for off-site treatment or disposal. The excavated suspect soils and historic fill materials shall be reused under pavement at locations at or near the

locations where these materials were encountered. The excavated suspect soils and historic fill materials shall be reused as fill to depths not to exceed the approximate found depth and not to exceed the depth of the high-water table (approximately 6 feet below ground surface).

If suspect or potentially contaminated soils or historic fill materials are encountered elsewhere on the project, terminate excavation activities in the area and notify the environmental specialist and engineer. Suspect or potentially contaminated soils or historic fill materials might include material that exhibits odors or staining, material that is solid waste/debris, ash, cinders, or material that is a mix of soil with these types of waste materials.

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

If dewatering is required at the above locations, conduct the dewatering in accordance with Section C below.

A.3 Notice to the Contractor – Contaminated Soil Beyond the Construction Limits

A review of available information for the construction corridor indicates that historic fill and contaminated soil is or may be present beyond the construction limits at various locations along corridor.

Historic fill and contaminated soil is expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations to ensure that they do not extend beyond the excavation limits indicated in the plans.

If historic fill or contaminated soil are encountered elsewhere on the project, terminate excavation activities in the area and notify the environmental consultant and engineer.

A.4 Coordination

Coordinate work under this contract with the City of Madison:

Name: Brynn Bemis, Hydrogeologist
Address: City of Madison Engineering Division
Room 115 City/County Building
210 Martin Luther king Jr. Blvd.
Madison, WI 53703
Phone: (608) 267-1986
E-mail: bbemis@cityofmadison.com

The role of the City will be limited to hiring an environmental specialist to be on site during excavation near and within the contaminated soils sites. The role of the environmental specialist will be limited to:

1. At contaminated soil locations, assist contractor with identifying excess contaminated soils to be hauled to the DNR-licensed treatment/disposal facility. The evaluation will be based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
3. Obtaining the necessary approvals for treatment or disposal of excess contaminated soil from the selected DNR-licensed facility.

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

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

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

A.5 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

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

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

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

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

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

Load and haul excess material from the defined contaminated soil areas, or material designated by the environmental consultant for off-site treatment or disposal, to the DNR-approved facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site treatment or disposal so as not to contain free liquids.

It is anticipated that dewatering water can be discharged to the storm sewer. If dewatering water is found to contain contaminants and requires special handling and disposal, such water may, with approval of the City of Madison, be discharged to the sanitary sewer as follows:

1. Meet all applicable requirements of the City of Madison, including the control of suspended solids. Perform all necessary monitoring to document compliance with the City of Madison's requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with the City of Madison's requirements.
2. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.
3. Notify the engineer of any dewatering activities and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

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

Limit excavation in the locations described above in A.2 to minimize the handling of soil and groundwater. Notify the engineer of any dewatering activities and obtain any permits necessary to discharge or dispose of dewatering water. It is anticipated that dewatering water can be discharged to the storm sewer. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities. Meet any requirements and pay any costs for obtaining and complying with such permit use.

D Measurement

The department will measure Excavating, Loading, Hauling, and Landfill Treatment or Disposal of Contaminated Soil in tons of contaminated soil accepted by the DNR-approved facility as documented by weight tickets generated by the facility. Excavation, loading, and on-site reuse of contaminated soils is incidental to the associated roadway items.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.001	Excavating, Loading, Hauling, and Landfill Treatment or Disposal of Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment or disposal of contaminated soil; tipping fees including applicable taxes and surcharges; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

133. Construct Outside Drop, 8-Inch, Item SPV.0200.100.

A Description

This special provision describes constructing outside drop structures on sanitary sewer structures where shown in the drawings, or as directed by the City of Madison. Outside Drops are required if the elevation difference between the flow line of the incoming pipe and the springline of the outgoing pipe is greater than 2 feet.

B Materials

Provide all materials associated with this item according to Standard Detail Drawing 5.7.2 and Article 507.3(d)1 of the City Standard Specifications.

C Construction

Construct Outside Drop according to Article 507.3(d)1 of the City Standard Specifications.

Maintain the normal flow of wastewater at all times during installation of the sanitary sewer access structure, construction of the outside drop structure, and when connecting new and existing pipes to the structure.

Complete any necessary temporary wastewater control according to the City Standard Specifications, and as described under bid item Wastewater Control item.

Core connections (taps) to sewer access structure associated with the outside drop connection are included with the Outside Drop and not paid for separately as sanitary taps.

D Measurement

The department will measure Construct Outside Drop (Size) by the vertical foot, measured from the invert of the entry Tee to the springline of the outgoing sewer according to City of Madison Standard Detail Drawing 5.7.2 (Detail A).

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0200.100	Construct Outside Drop, 8-Inch	VF

Payment is full compensation for excavating, backfilling, and disposing of surplus materials for making tap connections and construction of outside drop.

134. Construct Inside Drop, 6-Inch, Item SPV.0200.101.

A Description

This special provision describes constructing inside drop structures on sanitary sewer structures where shown in the drawings or as directed by the City of Madison. Inside Drops are required if the elevation difference between the flow line of the incoming pipe and the springline of the outgoing pipe is greater than 2 feet.

B Materials

Provide all materials associated with this item according to Standard Detail Drawing 5.7.30 and Article 507.3(d)1 of the City Standard Specifications.

C Construction

Construct Inside Drop according to Article 507.3(d)1 of the City Standard Specifications.

Maintain the normal flow of wastewater at all times during installation of the sanitary sewer access structure, construction of the outside drop structure, and when connecting new and existing pipes to the structure.

Complete any necessary temporary wastewater control according to the City Standard Specifications and as described under bid item Wastewater Control item.

Core connections (taps) to sewer access structure associated with the inside drop connection are included with the Inside Drop and not paid for separately as sanitary taps.

D Measurement

The department will measure Construct Inside Drop (Size) by the vertical foot, measured from the invert of the entry Tee to the springline of the outgoing sewer according to City of Madison Standard Detail Drawing 5.7.30.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0200.101	Construct Inside Drop, 6-Inch	VF

Payment is full compensation for excavating, backfilling, and disposing of surplus materials for making tap connections and construction of inside drop.

**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 2 (number) TrANS Graduate(s) be utilized on this contract.

- 2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 2 (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 underrepresentation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE [DBE] PROGRAM IMPLEMENTATION

1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
 - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
 - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance.
<https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>
 - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
 - i. Produce accurate and complete quotes.
 - ii. Understand highway plans applicable to their work.
 - iii. Understand specifications and contract requirements applicable to their work.
 - iv. Understand contracting reporting requirements.
 - (2) Wisconsin DOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
 - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:
<https://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

2. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- e. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- f. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

a. Department's DBE Evaluation Process

WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.

b. Documentation Submittal

The contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at DBE_Alert@dot.wi.gov (DBE_Alert@dot.wi.gov) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

(1) **Bidder Meets DBE Goal**

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

(2) **Bidder Does Not Meet DBE Goal**

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

c. **Bidder Fails to Submit Documentation**

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

5. Department's Criteria for Good Faith Effort

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

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

- a. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

b. Prime Contractors should:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT- approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
- (2) Prime contractors may request assistance with DBE outreach and follow-up by contacting the department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Requesting assistance with outreach is not a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: DOTDBESupportServices@dot.wi.gov.
- (3) Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
 - i. Solicit quotes from certified DBE firms who match 'possible items to subcontract' using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which you are seeking quotes to DOTDBESupportServices@dot.wi.gov.
 - ii. SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
 - (a) Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
 - (b) Solicit quotes at least 10 calendar days prior to the letting date, at least two Fridays before the letting, to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
 - (c) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up solicitation.
 - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
 - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit or insurance if requested.
 - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - (a) Email to all prospective DBE firms in relevant work areas.
 - (b) Phone call log to DBE firms who express interest via written response or call.
 - (c) Fax/letter confirmation
 - (d) Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

c. Evaluate DBE quotes Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.

- (1) Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
- (2) In striving to meet an assigned DBE contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

- (3) **Special Circumstance** - Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
- i. Compare bid items common to both quotes, noting the reasonableness in the price comparison.
 - ii. Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- d. Immediately after notification of contract award, the prime submits all **'Commitment to Subcontract'** forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
- (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
 - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
 - (3) Photocopies or electronic copies of all written solicitations to DBE's. A printed copy of SBN solicitation is acceptable.
 - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
 - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

6. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE, a prime contractor and the regular dealer of materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE in cases where the prime has submitted the DBE and material for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
 - (1) Request should be made when the DBE Commitment form or Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
 - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
 - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
 - (4) The joint check for supplies must be strictly for the cost of supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following.
 - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
 - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor,
 - (1) The prime agrees to furnish the check used for the payment of materials/supplies under the contract.
 - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractors negotiated unit price.

7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 5 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

8. Department's Criteria for DBE Participation

Directory of DBE firms

- a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:
<https://wisconsin.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

9. Counting DBE Participation

Assessing DBE Work

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE certified firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he is committing/contracting the DBE to do. Note that the department encourages the prime contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE is performing a commercially useful function if the following conditions are met:
 - (1) For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
 - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

11. Credit Evaluation for Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at <https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

12. Credit Evaluation for Manufacturers, Suppliers, Brokers

The department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The department will count the material and supplies that a DBE provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, count **100%** percent of the cost of the materials or supplies toward DBE goals.

b. Regular Dealers of Material and/or Supplies

- (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
 - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

c. Brokers, Transaction Expeditors, Packagers, Manufacturers Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit; however, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives or other persons who arrange or expedite transactions.
- (2) Brokerage fees have historically been calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site.
- (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.

When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and documentation of the calculations used as the basis for the purchase agreement, subcontract or invoice.

WisDOT recognizes that the amount on the Attachment 'A' form may be more or less than the amount on the invoice. Please respond to the following questions and submit with your DBE Commitment Form.

1. What is the product or material?
2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
3. Which contract line items were referenced to develop this quote?
4. What is the amount of material or product used on the project?

13. Credit Evaluation for DBE Primes

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

14. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces for DBE credit.

15. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be evaluated and confirmed by the DBE Office for any contracts on which the mentor protégé team identifies itself to the DBE Office as a current participant of the Mentor Protégé Program.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

16. DBE Replacement or Termination

Contractual Requirement

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

Contractor Considerations

- a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason or is terminated from a contract, the prime contractor is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
 - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
 - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
 - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent* to request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
 - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
 - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days to respond, in writing. **EXCEPTION:** The prime contractor must provide a verifiable reason for a response period shorter than five days. For example a WisDOT project manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
 - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

The Request to Replace or Terminate a DBE

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

1. Contract ID number.
2. Wisconsin DOT Contract Project Manager name and contact information.
3. DBE name and work type and/or NAICS code.
4. Contract's progress schedule.
5. Reason(s) for requesting that the DBE be replaced or terminated.
6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

Examples of Good Causes to Replace a DBE according to the federal DBE program guidelines {49 CFR part 26.53}

- The listed DBE subcontractor fails or refuses to execute a written contract.
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor.
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Evaluation and Response to the Request

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at DBE_Alert@dot.wi.gov or by calling 608-267-3849.

17. DBE Utilization beyond the approved DBE Commitment Form DT1506

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- a. Send an email to the DBE Engineer at DBE_Alert@dot.wi.gov describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally.
If the scope change added work for a participating DBE; list the date and reason for the scope change.
- b. Forward a complete, signed Attachment 'A' form to the DBE Office at DBE_Alert@dot.wi.gov. A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.
The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

18. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

19. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A

Sample Contractor Solicitation Letter Page 1

This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS
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 <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. **Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.** We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

All questions should be directed to:

Project Manager, John Doe,

Phone: (000) 123-4567

Email: Joe@joetheplumber.com

Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- .. Yes, we will be quoting on the projects and items listed below
- .. No, we are not interested in quoting on the letting or its items referenced below
- .. Please take our name off your monthly DBE contact list
- .. We have questions about quoting this letting. Please have someone contact me at this number

Prime Contractor 's Contact Person

DBE Contractor Contact Person

Phone: _____

Fax: _____

Email: _____

Phone _____

Fax _____

Email _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B

BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Ø Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Ø Participate in speed networking and mosaic exercises as arranged by DBE office.
- Ø Host information sessions not directly associated with a bid letting.
- Ø Participate in a formal mentor protégé or joint venture with a DBE firm.
- Ø Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Ø Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods.
- Ø Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Ø Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Ø Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Ø Participate in DBE office assessment programs.
- Ø Participate on advisory and mega-project committees.
- Ø Sign up to receive the DBE Contracting Update.
- Ø Consider membership in relevant industry or contractor organizations.
- Ø Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C

Types of Efforts considered in determining GFE

This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities.
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively.
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal.
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract.
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D

Good Faith Effort Evaluation Guidance

Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
 - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - D.
 - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a

contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
 - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
 - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E

Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription.

Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request.
 - d. Add attachments to sub-quotes.
3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
 - c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
 - c. Add attachments to a sub-quote.
 - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime.
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to www.bidx.com and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588.

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

107.17.1 General

Replace paragraph seven with the following effective with the December 2018 letting:

- (7) Have a professional engineer registered in the state of Wisconsin sign and seal the shop drawings. At least 30 calendar days before starting falsework, form, or shoring construction; submit a PDF file of shop drawings to the railroad's chief engineering officer and to the engineer. The engineer and the railroad may review the shop drawings. If the engineer or the railroad finds the shop drawings unsatisfactory, the contractor shall make the required changes. A satisfactory shop drawing review does not relieve the contractor of responsibility and liability for the structural integrity and proper functioning of the falsework, forms, or shoring.
-

305.2.1 General

Replace paragraph two with the following effective with the December 2018 letting:

- (2) Where the contract specifies or allows 1 1/4-inch base, do not place reclaimed asphalt, reprocessed material, or blended materials below virgin aggregate materials unless the contract specifies or the engineer allows in writing. The department will allow virgin aggregate above reclaimed asphalt, reprocessed material, or blended materials in shoulder areas adjacent to concrete pavement.
-

420.3.2.1 General

Replace paragraph one with the following effective with the December 2018 letting:

- (1) Use self-propelled grinding machines with depth, grade, and slope controls designed for grinding and texturing concrete. Equip grinding machines with diamond blades and a vacuuming system capable of removing liquid and solid residue from the ground surface. Shroud the machine to prevent discharging loosened material into adjacent work areas or live traffic lanes. Provide the specified effective wheelbase, defined as the center of the front to center of the rear main support wheels.
-

420.3.2.2 Continuous Grinding

Replace paragraph one with the following effective with the December 2018 letting:

- (1) Under the Continuous Diamond Grinding Concrete Pavement bid item, ensure that the grinding machine, including the grinding head, weighs 35,000 pounds or more, will grind a strip at least 4 feet wide, and has an effective wheel base of 25 feet or more. For pavements with a design speed less than 40 miles per hour and areas difficult to access, the contractor may use equipment with an effective wheel base of 12 feet or more.
-

450.3.2.8 Jointing

Replace paragraphs three through five with the following effective with the December 2018 letting:

- (3) Construct notched wedge longitudinal joints for mainline paving if the pavement thickness conforms to the minimums specified in 460.3.2, unless the engineer directs or allows an alternate joint. Construct the wedge using a slope no steeper than 3:1. Extend the wedge 12 inches beyond the normal lane width, or as the engineer directs. Ensure that the wedge for all layers directly overlaps and slopes in the same direction.
- (4) Locate the joint at the pavement centerline for 2-lane roadways, or at lane lines if the roadway has more than 2 lanes. Construct a vertical notch 1/2-inch to 3/4-inch high on the centerline or lane line at the top of each wedge. Place a 1/2-inch to 3/4-inch notch at the outside bottom edge of the wedge after compacting each layer. Align the finished longitudinal joint line of the upper layer with the centerline or lane line.
- (5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted

steel side roller wheel the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.

455.2.4.3 Emulsified Asphalts

Replace paragraph two with the following effective with the December 2018 letting:

- (2) The bill of lading for emulsified asphalts shall indicate the asphalt content of the original emulsion and dilution rate of the additional water added to the original emulsion. If undiluted samples are not available, test the diluted material and modify AASHTO M140, M208, or M316 to reflect properties resulting from dilution of the asphalt.
-

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the December 2018 letting:

- (3) The department will perform testing conforming to the following standards:
 - Bulk specific gravity (G_{mb}) of the compacted mixture according to AASHTO T166.
 - Maximum specific gravity (G_{mm}) according to AASHTO T209.
 - Air voids (V_a) by calculation according to AASHTO T269.
 - VMA by calculation according to AASHTO R35.
 - Asphalt content by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164, or Asphalt Analyzer™ according to manufacturer recommendations.
-

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2018 letting:

- (1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:
 - V_a is within a range of 2.0 to 4.3 percent. For SMA, V_a is within a range of 2.7 to 5.3 percent.
 - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.
 - Asphalt content is within minus 0.3 percent of the JMF.
-

460.2.8.3.1.7 Dispute Resolution

Replace paragraph one with the following effective with the December 2018 letting:

- (1) When QV test results do not meet the specified limits for 100 percent pay, the bureau's AASHTO accredited laboratory and certified personnel will referee test the retained portion of the QV sample and the retained portion of the required forward and backward QC retained samples according to CMM 8-36.
-

460.5.2.1 General

Replace paragraphs five and six with the following effective with the December 2018 letting:

- (5) The department will reduce pay for nonconforming QMP HMA mixtures as specified in 460.2.8.2.1.7, starting from the stop point to the point when the running average of 4 is back inside the warning limits. The engineer will determine the quantity of material subject to pay reduction based on the testing data and an inspection of the completed pavement. The department will reduce pay as follows:

PAYMENT FOR MIXTURE^{[1] [2] [3]}

ITEM	PRODUCED WITHIN WARNING BANDS	PRODUCED OUTSIDE JMF LIMITS
Gradation	90%	75%
Asphalt Content ^[4]	—	—
Air Voids	70%	50%
VMA	90%	75%

^[1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.

^[2] Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. If the quantity of material subject to pay adjustment based on the running average of 4 is also subject to pay adjustment resulting from dispute resolution in accordance with 460.2.8.3.1.7, the department will apply the single pay adjustment resulting in the lowest percent pay.

^[3] In addition to any pay adjustment listed in the table above, the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.

^[4] The department will not adjust pay based on a running average of 4 asphalt content tests; however, corrective action will be applied to nonconforming material according to 460.2.8.2.1.7.

- (6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:
- Va greater than 5.0 or less than 1.5.
 - VMA more than 1.0 below the minimum allowed in table 460-1.
 - AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

506.3.2 Shop Drawings

Replace paragraph four with the following effective with the December 2018 letting:

- (4) Ensure that the fabricator submits a PDF file of shop drawings for railroad structures to the railroad company's chief engineering officer upon contract completion.

650.3.1 General

Replace the entire text with the following effective with the December 2018 letting:

- (1) Department and contractor responsibilities for construction staking are specified in 105.6. Conform to 105.6 and the additional requirements specified here in 650.3 for the individual contractor-staking bid items the contract includes.
- (2) Protect and preserve known property and survey marks and land monuments as specified in 107.11.3. The contract may require related work under the 621 bid items.
- (3) Obtain or calculate benchmark data, grades, and alignment from plan information. The engineer will furnish data for the horizontal and vertical control points, control point ties, horizontal alignments, profiles, and elevations. Reestablish, set additional, and maintain the horizontal and vertical control points and control point ties, as needed for bid items.
- (4) Check horizontal and vertical information including but not limited to alignments, locations, elevations, and dimensions, that either the plans show or the engineer provides, for compatibility with existing field conditions. Conduct similar compatibility checks and accuracy checks of horizontal and vertical positions either the department or the contractor establishes in the field.
- (5) Perform survey work using conventional methods, or AMG methods capable of achieving the lines and grades the plans show for the work in question. Establish additional benchmarks and control points as necessary to support the method of operation.

650.3.1.1 Staking

- (1) Furnish, set, reference, and maintain stakes and markings necessary to establish the alignment, location, benchmarks, elevations, and continuous profile-grades for road and structure work as needed for bid items. Supervise and coordinate construction staking.
- (2) Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. Make the survey notes and computations available to the engineer within 24 hours, upon request, as the work progresses.
- (3) Furnish surveying equipment, stakes, flags, pins, lath, whiskers, and other materials necessary to perform this work, subject to the engineer's approval.

650.3.1.2 Automated Machine Guidance**650.3.1.2.1 General**

- (1) The contractor may substitute AMG for conventional staking on all or part of the work under the individual staking bid items. Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Revert to conventional staking methods for all or part of the work at any point during construction if AMG is producing unacceptable results.

650.3.1.2.2 AMG Work Plan

- (1) Submit a comprehensive written AMG work plan for department review at least 5 business days before the preconstruction conference. In that plan discuss how AMG technology will be integrated into other technologies employed on the project. List the staking bid items that will have work performed using AMG and, for each bid item listed, include the following:
 1. Designate which portions of the contract will be done using AMG and which portions will be done using conventional staking.
 2. Designate a single staff person as the primary contact for AMG technology issues.
 3. List and map the primary and secondary control points required under 105.6.2 enveloping the site.
 4. Describe the contractor's quality control procedures. Include the frequency and type of checks performed to ensure that the work conforms to the contract plans.
- (2) The engineer will review the plan to determine if it conforms to the contract. Do not perform AMG work until the engineer approves the governing portion of the AMG workplan. Perform the work as the contractor's AMG work plan provides. Update the plan as necessary.

650.3.1.2.3 Geometric and Surface Information**650.3.1.2.3.1 Department Responsibilities**

- (1) At any time after the contract is awarded the contractor may request the contractor data packet. The department will provide the packet within 5 business days of receiving the contractor's request.

650.3.1.2.3.2 Contractor Responsibilities

- (1) Develop and maintain a contractor construction model for areas of the project employing AMG. Confirm that the resulting model agrees with the contract plans.
- (2) If the engineer requests, provide the construction model to the department in LandXML or other engineer-approved format.

650.3.1.2.4 Managing and Updating Information

- (1) Notify the department of any errors or discrepancies in department-provided information. The department will determine what revisions may be required. The department will revise the contract plans, if necessary, to address errors or discrepancies that the contractor identifies. The department will provide the best available information related to those contract plan revisions.
- (2) Revise the construction model as required to support construction operations and to reflect any contract plan revisions the department makes. Perform checks to confirm that the revised construction model agrees with the contract plan revisions. If the engineer requests, provide construction model updates to the engineer. The department will pay for costs incurred to incorporate contract plan revisions as extra work.

650.3.1.2.5 Construction Checks

- (1) Check the work against the plan elevation at randomly selected points on cross-sections located at stations evenly divisible by 100 at the frequency the engineer approved as a part of the AMG work plan. Submit the results of these random checks to the engineer daily. Notify the engineer immediately if a check exceeds the tolerances specified in 650.3.1.2.6 below.
- (2) Check the work at additional points as the engineer directs. The department may conduct periodic independent checks.

650.3.1.2.6 Construction Tolerances

- (1) Ensure that the finished work vertically matches existing or other completed features. Ensure that the work conforms to revised plan elevations as follows:
 - Subgrade : +/- 0.10 feet.
 - Base : within the tolerance specified in 301.3.4.1(2).

650.3.3 Subgrade

Retitle and replace the entire text with the following effective with the December 2018 letting:

650.3.3 Subgrade Staking

- (1) Set construction stakes or marks at intervals of 100 feet, or more frequently, for rural sections and at intervals of 50 feet, or more frequently, for urban sections. Include additional stakes at each cross-section as necessary to match the plan cross-section, achieve the required accuracy, and to support construction operations. Also set and maintain stakes as necessary to establish the horizontal and vertical positions of intersecting road radii, auxiliary lanes, horizontal and vertical curves, and curve transitions. Locate stakes to within 0.25 feet horizontally and establish the grade elevation to within 0.03 feet vertically.

Errata

520.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

- (5) Provide joint ties on the upstream and downstream ends of circular and horizontal elliptical concrete culvert and concrete cattle pass installations. Tie the next 3 pipe joints or, if using apron endwalls, the endwall joint and the last 2 pipe joints. Ties are not required on culverts with masonry endwalls unless the plans show otherwise.

608.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

- (5) Provide joint ties on concrete storm sewer system infall and outfall pipes. Tie the last 3 pipe joints or, if using apron endwalls, the endwall joint and the next 2 pipe joints. Ties are not required on installations with masonry endwalls unless the plans show otherwise.

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.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll 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:

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, including 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 Paul Ndon at (414) 438-4584 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 contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<https://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses*. “Use of United States-flag vessels:”

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”

(b) *Contractor and Subcontractor Clauses*. “Use of United States-flag vessels: The contractor agrees—”

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS
FOR PROJECTS WITH FEDERAL AID**

I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH_Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

- a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

General Decision Number: WI180010 10/12/2018 WI10

Superseded General Decision Number: WI20170010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	05/18/2018
2	05/25/2018
3	06/15/2018
4	06/22/2018
5	07/20/2018
6	08/03/2018
7	08/31/2018
8	09/28/2018
9	10/12/2018

BRWI0001-002 06/01/2017

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.03	22.40

BRWI0002-002 06/01/2017		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.07	20.67

BRWI0002-005 06/01/2017		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 34.87	21.46

BRWI0003-002 06/01/2017		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.41	22.02

BRWI0004-002 06/01/2017		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 36.79	22.99

BRWI0006-002 06/01/2017		

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.25	21.18

BRWI0007-002 06/01/2017		

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.77	22.37

BRWI0008-002 06/01/2017		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 37.25	22.10

BRWI0011-002 06/01/2016		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.22	20.57

BRWI0019-002 06/01/2017		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.17	22.26

BRWI0034-002 06/01/2017		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.74	22.40

CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39

CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except

area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00

CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

ELEC0014-002 06/04/2018

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPLEALEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.21	20.46

ELEC0014-007 06/05/2018

REMAINING COUNTIES

Rates	Fringes
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Teledata System Installer
Installer/Technician.....\$ 26.25 13.92

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2017

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 38.50	30%+10.57

ELEC0158-002 06/04/2018

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausaukee and area South thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.50	19.68

ELEC0159-003 06/01/2018

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
Electricians:.....	\$ 39.04	21.56

ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under \$180,000.....	\$ 30.18	18.42

ELEC0242-005 05/16/2018

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17

* ELEC0388-002 06/03/2018

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
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Electricians:.....	\$ 32.55	19.02

* ELEC0430-002 06/01/2018		
RACINE COUNTY (Except Burlington Township)		
	Rates	Fringes
Electricians:.....	\$ 38.78	21.49

ELEC0494-005 06/01/2018		
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 39.31	24.69

ELEC0494-006 06/01/2018		
CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 33.40	22.08

ELEC0494-013 06/01/2018		
DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES		
	Rates	Fringes
Sound & Communications		
Installer.....	\$ 19.56	17.74
Technician.....	\$ 28.99	19.15
<p>Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products</p>		

ELEC0577-003 06/01/2018		
CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 32.18	18.59

ELEC0890-003 06/01/2018		
DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES		

	Rates	Fringes
Electricians:.....	\$ 34.15	19.63

ELEC0953-001 07/01/2015

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 42.14	32% + 5.00
(2) Heavy Equipment Operator.....	\$ 40.03	32% + 5.00
(3) Equipment Operator.....	\$ 33.71	32% + 5.00
(4) Heavy Groundman Driver..	\$ 26.78	14.11
(5) Light Groundman Driver..	\$ 24.86	13.45
(6) Groundsman.....	\$ 23.18	32% + 5.00

ENGI0139-005 06/04/2018

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 40.72	22.10
Group 2.....	\$ 40.22	22.10
Group 3.....	\$ 39.72	22.10
Group 4.....	\$ 39.46	22.10
Group 5.....	\$ 39.17	22.10
Group 6.....	\$ 33.27	22.10

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" protection - \$3.00 per hour
EPA Level "B" protection - \$2.00 per hour
EPA Level "C" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender.

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2017

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 31.24	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2017

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2017

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 34.50	23.82

IRON0498-005 06/01/2016

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 36.29	30.77

IRON0512-008 05/01/2017

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEALEU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 36.50	26.45

IRON0512-021 05/01/2017

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.04	26.45

LABO0113-002 06/04/2018

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.88	21.76
Group 2.....	\$ 28.03	21.76
Group 3.....	\$ 28.23	21.76
Group 4.....	\$ 28.38	21.76
Group 5.....	\$ 28.53	21.76
Group 6.....	\$ 24.37	21.76

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LABO0113-003 06/04/2018

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.13	21.76
Group 2.....	\$ 27.23	21.76
Group 3.....	\$ 27.28	21.76
Group 4.....	\$ 27.48	21.76
Group 5.....	\$ 27.33	21.76
Group 6.....	\$ 24.22	21.76

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LABO0113-011 06/04/2018

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 26.94	21.76
Group 2.....	\$ 27.09	21.76
Group 3.....	\$ 27.29	21.76
Group 4.....	\$ 27.26	21.76
Group 5.....	\$ 27.59	21.76
Group 6.....	\$ 24.08	21.76

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LABO0140-002 06/04/2018

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 31.80	17.20
Group 2.....	\$ 31.90	17.20
Group 3.....	\$ 31.95	17.20
Group 4.....	\$ 32.15	17.20
Group 5.....	\$ 32.00	17.20
Group 6.....	\$ 28.43	17.20

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter

(Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LABO0464-003 06/04/2018

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.08	17..20
Group 2.....	\$ 32.18	17..20
Group 3.....	\$ 32.23	17..20
Group 4.....	\$ 32.43	17..20
Group 5.....	\$ 32.28	17..20
Group 6.....	\$ 28.43	17..20

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;
Demolition and Wrecking Laborer; Guard Rail, Fence, and
Bridge Builder; Landscaper; Multiplate Culvert Assembler;
Stone Handler; Bituminous Worker (Shoveler, Loader, and
Utility Man); Batch Truck Dumper or Cement Handler;
Bituminous Worker (Dumper, Ironer, Smoother, and Tamper);
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler
(Pavement); Vibrator or Tamper Operator (Mechanical Hand
Operated); Chain Saw Operator; Demolition Burning Torch
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

PAIN0108-002 06/01/2017

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 33.74	18.95
Spray & Sandblast.....	\$ 34.74	18.95

PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,
SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

PAIN0781-002 06/01/2017

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 30.60	22.80
Brush.....	\$ 30.25	22.80
Spray & Sandblast.....	\$ 31.00	22.80

PAIN0802-002 06/01/2017

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 28.25	17.72

PREMIUM PAY:
 Structural Steel, Spray, Bridges = \$1.00 additional per
 hour.

PAIN0802-003 06/01/2017

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN
LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,
MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,
OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,
WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.89	12.05

PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

PAIN1011-002 06/01/2017

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 24.86	12.23

PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

- AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES
- AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES
- AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND VERNON COUNTIES
- AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
- AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES
- AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2018		
	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 28.12	21.20
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 28.27	21.20

WELL DRILLER.....	\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: WI180008 10/12/2018 WI8
Superseded General Decision Number: WI20170008
State: Wisconsin
Construction Types: Heavy (Sewer and Water Line and Tunnel)
Counties: Wisconsin Statewide.
TUNNEL, SEWER & WATER LINE CONSTRUCTION PROJECTS
Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	05/25/2018
2	06/22/2018
3	07/20/2018
4	08/24/2018
5	08/31/2018
6	09/28/2018
7	10/12/2018

BRWI0001-002 06/01/2017
CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.03	22.40

BRWI0002-002 06/01/2017
ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.07	20.67

BRWI0002-005 06/01/2017
ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 34.87	21.46

BRWI0003-002 06/01/2017
BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
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BRICKLAYER.....	\$ 32.41	22.02

BRWI0004-002 06/01/2017		
KENOSHA, RACINE, AND WALWORTH COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 36.79	22.99

BRWI0006-002 06/01/2017		
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 33.25	21.18

BRWI0007-002 06/01/2017		
GREEN, LAFAYETTE, AND ROCK COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 33.77	22.37

BRWI0008-002 06/01/2017		
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 37.25	22.10

BRWI0009-001 06/01/2017		
GREEN LAKE, MARQUETTE, OUTAGAMIE, SHAWANO, WAUPACA, WASHARA, AND WINNEBAGO COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 32.41	22.02

BRWI0011-002 06/01/2016		
CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 32.22	20.57

BRWI0013-002 06/01/2017		
DANE, GRANT, IOWA, AND RICHLAND COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 33.74	22.40

BRWI0019-002 06/01/2017		
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 32.17	22.26

BRWI0021-002 06/01/2017		
DODGE AND JEFFERSON COUNTIES		
	Rates	Fringes
BRICKLAYER.....	\$ 34.46	21.66

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.74	22.40

CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39

CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00

CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		

Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

 CARP2337-003 06/01/2016

	Rates	Fringes
MILLWRIGHT		
Zone A.....	\$ 29.98	21.53
Zone B.....	\$ 29.98	21.53

ZONE DEFINITIONS

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON COUNTIES

ZONE B: KENOSHA & RACINE COUNTIES

 ELEC0014-002 06/04/2018

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK
 (except Maryville, Colby, Unity, Sherman, Fremont, Lynn &
 Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA
 CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST
 CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON, AND WASHBURN
 COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.21	20.46

 ELEC0127-002 06/01/2017

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 38.50	30%+10.57

 ELEC0158-002 06/04/2018

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),
 MARINETTE(Wausaukee and area South thereof), OCONTO, MENOMINEE
 (East of a line 6 miles West of the West boundary of Oconto
 County), SHAWANO (Except Area North of Townships of Aniwa and
 Hutchins) COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.50	19.68

 ELEC0159-003 06/01/2018

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and
 Emmet Townships), GREEN, LAKE (except Townships of Berlin,
 Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of
 Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK
 COUNTIES

	Rates	Fringes
Electricians:.....	\$ 39.04	21.56

 ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern,
 Florence and Homestead) AND MARINETTE COUNTY (Township of
 Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over		
\$180,000.....	\$ 32.38	18.63
Electrical contracts under		
\$180,000.....	\$ 30.18	18.42

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17

* ELEC0388-002 06/03/2018		

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.55	19.02

* ELEC0430-002 06/01/2018		

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 38.78	21.49

ELEC0494-005 06/01/2018		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 39.31	24.69

ELEC0494-006 06/01/2018		

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.40	22.08

ELEC0577-003 06/01/2018		

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.18	18.59

ELEC0890-003 06/01/2018		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.15	19.63

ENGI0139-003 06/04/2018		

REMAINING COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 40.72	21.60
Group 2.....	\$ 39.47	21.60

Group 3.....	\$ 38.17	21.60
Group 4.....	\$ 37.64	21.60
Group 5.....	\$ 35.57	21.60
Group 6.....	\$ 34.04	21.60

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" Protection: \$3.00 per hour
 EPA Level "B" Protection: \$2.00 per hour
 EPA Level "C" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers.

GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweepers; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer

GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freeze Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3"; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

 ENGI0139-007 06/04/2018

DODGE, FOND DU LAC, JEFFERSON, KENOSHA, MILWAUKEE, OZAUKEE, RACINE, SHEBOYGAN, WALWORTH, WASHINGTON, AND WAUKESHA COUNTIES

Rates

Fringes

Power Equipment Operator

Group 1.....	\$ 40.19	21.65
Group 2.....	\$ 39.41	21.65
Group 3.....	\$ 38.46	21.65
Group 4.....	\$ 37.41	21.65
Group 5.....	\$ 36.01	21.65

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" Protection: \$3.00 per hour

EPA Level "B" Protection: \$2.00 per hour

EPA Level "C" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes, and Derricks with or without attachments, with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Backhoes (Excavators) 130,000 lbs and over; Caisson Rigs and Pile Drivers

GROUP 2: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or under; or Cranes, Tower Cranes, and Derricks with boom, lead, and/or jib lengths measuring 175 feet or under; Backhoes (Excavators) under 130,000 lbs; Skid Rigs; Dredge Operator; Traveling Crane (Bridge type); Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Pumps and Boring Machines (directional)

GROUP 3: Material Hoists; Stack Hoists; Tractor or Truck mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane, 5 tons or under; Manhoist; Tractor over 40 hp; Bulldozer over 40 hp; Endloader over 40 hp; Forklift, 25 ft and over; Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Mechanic and Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Percussion Drill Operator; Rotary Drill Operator; Blaster; Air Track Drill; Trencher (wheel type or chain type having over 8 inch bucket); Elevator; Milling Machine and Boring Machine (horizontal or vertical); Backhoe Mounted Compactor

GROUP 4: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machine (road type); Roller, Rubber Tire; Concrete Batch Hopper; Concrete Conveyor System; Concrete Mixers (14S or over); Screw type Pumps and Gypsum Pumps; Grout Pumps; Tractor, Bulldozer, End Loader, under 40 hp; Pumps (well points); Trencher (chain type 8 inch or smaller bucket); Industrial Locomotives; Roller under 5 tons; Fireman (Piledrivers and Derricks); Robotic Tool Carrier with or without attachments.

GROUP 5: Hoists (Automatic); Forklift, 12 ft to 25 ft; Tamper-Compactors, riding type; A-Frame and Winch Trucks; Concrete Auto Breaker; Hydrohammer, small; Brooms and Sweepers; Hoist (Tuggers); Stump Chipper, large; Boats (Tug, Safety, Work Barges and Launch); Shouldering Machine Operator; Screed Operator; Farm or Industrial Tractor; Post Hole Digger; Stone Crushers and Screening Plants; Firemen (Asphalt Plants); Air Compressor (400 CFM or over); Augers (vertical and horizontal); Generators, 150 KW and over; Air, Electric Hydraulic Jacks (Slipform); Prestress Machines; Skid Steer Loader with or without attachments; Boiler operators (temporary heat); Forklift, 12 ft and under; Screed Operator Milling Machine; Refrigeration Plant/Freeze Machine; Power Pack Vibratory/Ultra Sound Driver and Extractor; Generators under 150 KW; Combination small equipment operator; Compressors under 400 CFM; Welding Machines; Heaters, Mechanical; Pumps; Winches, Small Electric; Oiler and Greaser; Conveyor; High pressure utility locating machine (daylighting machine).

IRON0008-002 06/01/2017

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 31.24	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2017

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2017

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 34.50	23.82

IRON0498-005 06/01/2016

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 36.29	30.77

IRON0512-008 05/01/2017

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 36.50	26.45

IRON0512-021 05/01/2017

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.04	26.45

LABO0113-004 06/04/2018

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Open Cut)		
Group 1.....	\$ 15.11	20.65
Group 2.....	\$ 17.38	20.65
Group 3.....	\$ 20.92	20.65
Group 4.....	\$ 30.29	20.65
Group 5.....	\$ 30.43	20.65
Group 6.....	\$ 30.49	20.65
Group 7.....	\$ 32.70	20.65

Group 8.....	\$ 35.52	20.65
Group 9.....	\$ 36.16	20.65

LABORERS CLASSIFICATIONS [OPEN CUT]

GROUP 1: Yard Laborer

GROUP 2: Landscaper

GROUP 3: Flag Person

GROUP 4: Paving Laborer

GROUP 5: General Laborer on Surface; Top Man

GROUP 6: Mud Mixer

GROUP 7: Mucker; Form Stripper; Bottom Digger and Misc;
Bottom Man and Welder on Surface

GROUP 8: Concrete Manhole Builder; Caisson Worker; Miner;
Pipe Layer; Rock Driller and Joint Man; Timber Man and
Concrete Brusher; Bracer in Trench Behind Machine & Tight
Sheeting; Concrete Formsetter and Shoveler; Jackhammer
Operator

GROUP 9: Blaster

LABO0113-005 06/04/2018

SEWER, TUNNEL & UNDERGROUND

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
Laborers:		
Group 1.....	\$ 21.78	20.65
Group 2.....	\$ 27.71	20.65
Group 3.....	\$ 30.27	20.65
Group 4.....	\$ 32.04	20.65

TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30
lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS

GROUP 1: Flagperson

GROUP 2: Top Man, General Laborer, Wellpoint Installation,
Wire Mesh and Reinforcement, Concrete Worker, Form
Stripper, Strike-off Work

GROUP 3: Machine and Equipment Operator, Sheeting, Form
Setting, Patch Finisher, Bottom Man, Joint Sawyer, Gunnite
Man, Manhole Builder, Welder-Torchman, Blaster, Caulker,
Bracer, Bull Float, Conduit Worker, Mucker and Car Pusher,
Raker and Luteman, Hydraulic Jacking of Shields, Shield
Drivers, Mining Machine, Lock Tenders, Mucking Machine
Operator, Motor Men & Gauge Tenders and operation of
incidental Mechanical Equipment and all Power Driven Tools

GROUP 4: Pipelayer, Miner and Laser Operator

LABO0113-008 06/04/2018

MILWAUKEE, OZAUCKEE, WASHINGTON & WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Tunnel-Free Air)		
Group 1.....	\$ 20.92	20.65
Group 2.....	\$ 30.43	20.65
Group 3.....	\$ 30.49	20.65
Group 4.....	\$ 32.70	20.65
Group 5.....	\$ 32.84	20.65
Group 6.....	\$ 35.52	20.65
Group 7.....	\$ 36.16	20.65

LABORERS CLASSIFICATIONS [TUNNEL - FREE AIR]:

GROUP 1: Flagperson

GROUP 2: General Laborer on surface; Tower Man

GROUP 3: Saw Man; Top Man

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey; Welder (rate on surface)

GROUP 6: Concrete Manhole Builder; Mucking Machine; Miner;
Mining Machine; Welder; Rock Driller; Concrete Buster; Jack
Hammer Operator; Caisson Worker; Pipelayer and Joint Man;
Bracerman

GROUP 7: Blaster

* LABO0113-009 06/04/2018

MILWAUKEE, OZAUKEE, WASHINGTON & WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Tunnel -		
*COMPRESSED AIR 0 - 15 lbs.)		
Group 1.....	\$ 20.92	20.65
Group 2.....	\$ 30.43	20.65
Group 3.....	\$ 33.24	20.65
Group 4.....	\$ 34.04	20.65
Group 5.....	\$ 34.16	20.65
Group 6.....	\$ 36.86	20.65
Group 7.....	\$ 37.48	20.65

LABORERS CLASSIFICATIONS [TUNNEL - COMPRESSED AIR]:

*Compressed Air 15 - 30 lbs add \$2.00 to all classifications

*Compressed Air over 30 lbs add \$3.00 to all classifications

GROUP 1: Flagperson

GROUP 2: General Laborer on surface

GROUP 3: Lock Tender on surface

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey

GROUP 6: Mucking Machine; Miner; Mining Machine; Welder &
Rock Driller; Lock Tender in tunnel; Concrete Buster; Jack
Hammer Operator; Caisson Worker; Pipelayer and Joint Man;
Bracerman; Nozzle Man on Gunite; Timber Man; Concrete
Brusher

GROUP 7: Blaster

NOTE: Hazardous & Toxic Waste Removal: add \$0.15 per hour.

LABO0140-005 06/04/2018

ADAMS, ASHLAND, BARRON, BROWN, BUFFALO, CALUMET, CHIPPEWA,
CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DUNN, EAU CLAIRE,
FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA,
JACKSON, JEFFERSON, JUNEAU, LACROSSE, LAFAYETTE, LANGLADE,
LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,
MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK,
PORTAGE, PRICE, RICHLAND, ROCK, RUSK, ST CROIX, SAUK, SAWYER,
SHAWANO, SHEBOYGAN, TAYLOR, TREMPPEALEAU, VERNON, VILAS,
WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD
COUNTIES

	Rates	Fringes
LABORER (SEWER & WATER)		

Group 1.....	\$ 27.41	17.20
Group 2.....	\$ 29.26	17.20
Group 3.....	\$ 29.46	17.20
Group 4.....	\$ 30.21	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00,
15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORER CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer, Wellpoint Installation; Form
Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man;
Joint Sawyer; Gunnite Man; Manhole Builder; Welder;
Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and
Car Pusher; Raker and Luteman; Hydraulic jacking of
shields, Shield Drivers; Mining Machine; Lock Tenders;
Mucking Machine Operators; Motor Men and Gauge Tenders;
Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LAB00464-002 06/04/2018

DANE AND DOUGLAS COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.31	17.20
Group 2.....	\$ 29.51	17.20
Group 3.....	\$ 29.71	17.20
Group 4.....	\$ 30.46	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0 - 15 lbs add
\$1.00, 15- 30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer; Wellpoint Installation; Concrete
Worker; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man;
Joint Sawyer; Gunnite Man; Manhole Builder; Welder;
Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and
Car Pusher; Raker and Luteman; Hydraulic jacking of
shields, Shield Drivers; Mining Machine; Lock Tenders;
Mucking Machine Operators; Motor Men and Gauge Tenders;
Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LAB01091-010 06/04/2018

BAYFIELD, BURNETT, IRON, SAWYER, AND WASHBURN COUNTIES

	Rates	Fringes
Laborers: (SEWER & WATER)		
Group 1.....	\$ 27.10	17.20
Group 2.....	\$ 29.16	17.20
Group 3.....	\$ 29.36	17.20
Group 4.....	\$ 30.11	17.20

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR:
0 - 15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add
\$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: Laborers, Wellpoint Installation; Form Stripper;
Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man;
Joint Sawyer; Gunnite Man; Manhole Builder; Welder;
Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and
Car Pusher; Raker and Luteman; Hydraulic jacking of
shields, Shield Drivers; Mining Machine; Lock Tenders;
Mucking Machine Operators; Motor Men and Gauge Tenders;
Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN
COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET,
CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE,
FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE,
LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE,
MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK,
PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR,
VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD
COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA
CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND
VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK
COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2018

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 28.12	21.20
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 28.27	21.20
WELL DRILLER.....	\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
for Federal Contractors applies to all contracts subject to the
Davis-Bacon Act for which the contract is awarded (and any
solicitation was issued) on or after January 1, 2017. If this
contract is covered by the EO, the contractor must provide
employees with 1 hour of paid sick leave for every 30 hours
they work, up to 56 hours of paid sick leave each year.
Employees must be permitted to use paid sick leave for their
own illness, injury or other health-related needs, including
preventive care; to assist a family member (or person who is

like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is

based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====
END OF GENERAL DECISION

August 2018

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	5.000 STA	_____.	_____.
0004	201.0120 Clearing	237.000 ID	_____.	_____.
0006	201.0205 Grubbing	5.000 STA	_____.	_____.
0008	201.0220 Grubbing	261.000 ID	_____.	_____.
0010	204.0100 Removing Pavement	19,571.000 SY	_____.	_____.
0012	204.0110 Removing Asphaltic Surface	1,080.000 SY	_____.	_____.
0014	204.0150 Removing Curb & Gutter	2,140.000 LF	_____.	_____.
0016	204.0155 Removing Concrete Sidewalk	2,585.000 SY	_____.	_____.
0018	204.0170 Removing Fence	70.000 LF	_____.	_____.
0020	204.0185 Removing Masonry	4.000 CY	_____.	_____.
0022	204.0195 Removing Concrete Bases	40.000 EACH	_____.	_____.
0024	204.0210 Removing Manholes	4.000 EACH	_____.	_____.
0026	204.0220 Removing Inlets	37.000 EACH	_____.	_____.
0028	204.0245 Removing Storm Sewer (size) 001. 10-Inch to 24-Inch	675.000 LF	_____.	_____.
0030	204.0245 Removing Storm Sewer (size) 002. 27-Inch to 36-Inch	10.000 LF	_____.	_____.
0032	204.0260 Abandoning Inlets	2.000 EACH	_____.	_____.



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Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	204.0291.S Abandoning Sewer	2.600 CY	_____.	_____.
0036	205.0100 Excavation Common	19,851.000 CY	_____.	_____.
0038	210.1100 Backfill Structure Type A	15.000 CY	_____.	_____.
0040	211.0100 Prepare Foundation for Asphaltic Paving (project) 001. ID 5992-09-14	LS	LUMP SUM	_____.
0042	213.0100 Finishing Roadway (project) 001. ID 5992-09-14	1.000 EACH	_____.	_____.
0044	305.0110 Base Aggregate Dense 3/4-Inch	263.000 TON	_____.	_____.
0046	305.0120 Base Aggregate Dense 1 1/4-Inch	12,344.000 TON	_____.	_____.
0048	305.0130 Base Aggregate Dense 3-Inch	9,105.000 TON	_____.	_____.
0050	310.0110 Base Aggregate Open-Graded	72.000 TON	_____.	_____.
0052	312.0110 Select Crushed Material	10,183.000 TON	_____.	_____.
0054	405.1000 Stamping Colored Concrete	95.000 CY	_____.	_____.
0056	415.0090 Concrete Pavement 9-Inch	450.000 SY	_____.	_____.
0058	415.0100 Concrete Pavement 10-Inch	4,135.000 SY	_____.	_____.
0060	415.0210 Concrete Pavement Gaps	4.000 EACH	_____.	_____.
0062	415.0410 Concrete Pavement Approach Slab	130.000 SY	_____.	_____.
0064	415.4100 Concrete Pavement Joint Filling	5,675.000 SY	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0066	415.5110.S Concrete Pavement Joint Layout 001. ID 5992-09-14	1.000 LS	_____.	_____.
0068	416.0170 Concrete Driveway 7-Inch	634.000 SY	_____.	_____.
0070	416.0610 Drilled Tie Bars	605.000 EACH	_____.	_____.
0072	416.0620 Drilled Dowel Bars	105.000 EACH	_____.	_____.
0074	450.4000 HMA Cold Weather Paving	1,947.000 TON	_____.	_____.
0076	455.0605 Tack Coat	664.000 GAL	_____.	_____.
0078	460.2000 Incentive Density HMA Pavement	3,190.000 DOL	1.00000	3,190.00
0080	460.4110.S Reheating HMA Pavement Longitudinal Joints	14,266.000 LF	_____.	_____.
0082	460.5224 HMA Pavement 4 LT 58-28 S	286.000 TON	_____.	_____.
0084	460.6223 HMA Pavement 3 MT 58-28 S	2,880.000 TON	_____.	_____.
0086	460.6424 HMA Pavement 4 MT 58-28 H	1,805.000 TON	_____.	_____.
0088	465.0120 Asphaltic Surface Driveways and Field Entrances	33.000 TON	_____.	_____.
0090	465.0125 Asphaltic Surface Temporary	520.000 TON	_____.	_____.
0092	465.0310 Asphaltic Curb	678.000 LF	_____.	_____.
0094	495.1000.S Cold patch	5.000 TON	_____.	_____.
0096	502.0100 Concrete Masonry Bridges	7.000 CY	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0098	502.3200 Protective Surface Treatment	32.000 SY	_____.	_____.
0100	502.4204 Adhesive Anchors No. 4 Bar	30.000 EACH	_____.	_____.
0102	505.0600 Bar Steel Reinforcement HS Coated Structures	310.000 LB	_____.	_____.
0104	509.0301 Preparation Decks Type 1	5.000 SY	_____.	_____.
0106	509.0302 Preparation Decks Type 2	2.000 SY	_____.	_____.
0108	509.0310.S Sawing Pavement Deck Preparation Areas	50.000 LF	_____.	_____.
0110	509.2000 Full-Depth Deck Repair	1.000 SY	_____.	_____.
0112	509.2100.S Concrete Masonry Deck Repair	1.000 CY	_____.	_____.
0114	513.2001 Railing Pipe	210.000 LF	_____.	_____.
0116	520.8000 Concrete Collars for Pipe	26.000 EACH	_____.	_____.
0118	601.0600 Concrete Curb Pedestrian	30.000 LF	_____.	_____.
0120	602.0410 Concrete Sidewalk 5-Inch	16,305.000 SF	_____.	_____.
0122	602.0420 Concrete Sidewalk 7-Inch	11,435.000 SF	_____.	_____.
0124	602.0515 Curb Ramp Detectable Warning Field Natural Patina	469.000 SF	_____.	_____.
0126	608.0110 Relaid Storm Sewer 10-Inch	6.000 LF	_____.	_____.
0128	608.0112 Relaid Storm Sewer 12-Inch	6.000 LF	_____.	_____.



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Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0130	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	542.000 LF	_____.	_____.
0132	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	1,555.000 LF	_____.	_____.
0134	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	203.000 LF	_____.	_____.
0136	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	6.000 LF	_____.	_____.
0138	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	12.000 LF	_____.	_____.
0140	611.0535 Manhole Covers Type J-Special	13.000 EACH	_____.	_____.
0142	611.0612 Inlet Covers Type C	1.000 EACH	_____.	_____.
0144	611.0624 Inlet Covers Type H	66.000 EACH	_____.	_____.
0146	611.0627 Inlet Covers Type HM	1.000 EACH	_____.	_____.
0148	611.0639 Inlet Covers Type H-S	10.000 EACH	_____.	_____.
0150	611.0642 Inlet Covers Type MS	3.000 EACH	_____.	_____.
0152	611.0666 Inlet Covers Type Z	1.000 EACH	_____.	_____.
0154	611.2004 Manholes 4-FT Diameter	3.000 EACH	_____.	_____.
0156	611.2006 Manholes 6-FT Diameter	2.000 EACH	_____.	_____.
0158	611.3003 Inlets 3-FT Diameter	1.000 EACH	_____.	_____.



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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0160	611.3004 Inlets 4-FT Diameter	11.000 EACH	_____.	_____.
0162	611.3230 Inlets 2x3-FT	67.000 EACH	_____.	_____.
0164	611.3901 Inlets Median 1 Grate	3.000 EACH	_____.	_____.
0166	611.8110 Adjusting Manhole Covers	9.000 EACH	_____.	_____.
0168	611.8115 Adjusting Inlet Covers	19.000 EACH	_____.	_____.
0170	611.8120.S Cover Plates Temporary	18.000 EACH	_____.	_____.
0172	611.9710 Salvaged Inlet Covers	4.000 EACH	_____.	_____.
0174	612.0406 Pipe Underdrain Wrapped 6-Inch	1,345.000 LF	_____.	_____.
0176	612.0902.S Insulation Board Polystyrene (inch) 001. 2-Inch	13.000 SY	_____.	_____.
0178	616.0700.S Fence Safety	2,930.000 LF	_____.	_____.
0180	618.0100 Maintenance And Repair of Haul Roads (project) 001. ID 5992-09-14	1.000 EACH	_____.	_____.
0182	619.1000 Mobilization	1.000 EACH	_____.	_____.
0184	620.0100 Concrete Corrugated Median	900.000 SF	_____.	_____.
0186	620.0300 Concrete Median Sloped Nose	916.000 SF	_____.	_____.
0188	623.0200 Dust Control Surface Treatment	23,040.000 SY	_____.	_____.
0190	624.0100 Water	403.000 MGAL	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0192	625.0100 Topsoil	7,770.000 SY	_____.	_____.
0194	627.0200 Mulching	8,700.000 SY	_____.	_____.
0196	628.1504 Silt Fence	2,210.000 LF	_____.	_____.
0198	628.1520 Silt Fence Maintenance	8,530.000 LF	_____.	_____.
0200	628.1905 Mobilizations Erosion Control	11.000 EACH	_____.	_____.
0202	628.1910 Mobilizations Emergency Erosion Control	7.000 EACH	_____.	_____.
0204	628.2006 Erosion Mat Urban Class I Type A	2,218.000 SY	_____.	_____.
0206	628.7005 Inlet Protection Type A	105.000 EACH	_____.	_____.
0208	628.7010 Inlet Protection Type B	1.000 EACH	_____.	_____.
0210	628.7015 Inlet Protection Type C	74.000 EACH	_____.	_____.
0212	628.7020 Inlet Protection Type D	43.000 EACH	_____.	_____.
0214	628.7560 Tracking Pads	13.000 EACH	_____.	_____.
0216	629.0210 Fertilizer Type B	10.500 CWT	_____.	_____.
0218	630.0140 Seeding Mixture No. 40	33.000 LB	_____.	_____.
0220	630.0200 Seeding Temporary	11.000 LB	_____.	_____.
0222	630.0300 Seeding Borrow Pit	120.000 LB	_____.	_____.
0224	631.0300 Sod Water	146.000 MGAL	_____.	_____.



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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0226	631.1000 Sod Lawn	6,375.000 SY	_____.	_____.
0228	637.2210 Signs Type II Reflective H	290.850 SF	_____.	_____.
0230	637.2220 Signs Type II Reflective SH	4.690 SF	_____.	_____.
0232	637.2230 Signs Type II Reflective F	144.030 SF	_____.	_____.
0234	638.2102 Moving Signs Type II	25.000 EACH	_____.	_____.
0236	638.4100 Moving Structural Steel Sign Supports	1.000 EACH	_____.	_____.
0238	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0240	643.0300 Traffic Control Drums	108,757.000 DAY	_____.	_____.
0242	643.0420 Traffic Control Barricades Type III	20,054.000 DAY	_____.	_____.
0244	643.0500 Traffic Control Flexible Tubular Marker Posts	334.000 EACH	_____.	_____.
0246	643.0600 Traffic Control Flexible Tubular Marker Bases	305.000 EACH	_____.	_____.
0248	643.0705 Traffic Control Warning Lights Type A	31,570.000 DAY	_____.	_____.
0250	643.0715 Traffic Control Warning Lights Type C	15,157.000 DAY	_____.	_____.
0252	643.0800 Traffic Control Arrow Boards	634.000 DAY	_____.	_____.
0254	643.0900 Traffic Control Signs	54,355.000 DAY	_____.	_____.
0256	643.0920 Traffic Control Covering Signs Type II	13.000 EACH	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0258	643.1050 Traffic Control Signs PCMS	235.000 DAY	_____.	_____.
0260	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0262	644.1410.S Temporary Pedestrian Surface Asphalt	1,000.000 SF	_____.	_____.
0264	644.1601.S Temporary Curb Ramp	9.000 EACH	_____.	_____.
0266	644.1616.S Temporary Pedestrian Safety Fence	1,535.000 LF	_____.	_____.
0268	645.0140 Geotextile Type SAS	760.000 SY	_____.	_____.
0270	646.1020 Marking Line Epoxy 4-Inch	5,026.000 LF	_____.	_____.
0272	646.3020 Marking Line Epoxy 8-Inch	3,064.000 LF	_____.	_____.
0274	646.5020 Marking Arrow Epoxy	38.000 EACH	_____.	_____.
0276	646.5120 Marking Word Epoxy	12.000 EACH	_____.	_____.
0278	646.5220 Marking Symbol Epoxy	12.000 EACH	_____.	_____.
0280	646.5305 Marking Railroad Crossing Paint	9.000 EACH	_____.	_____.
0282	646.5320 Marking Railroad Crossings Epoxy	5.000 EACH	_____.	_____.
0284	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,039.000 LF	_____.	_____.
0286	646.8020 Marking Corrugated Median Epoxy	313.000 SF	_____.	_____.
0288	646.8120 Marking Curb Epoxy	334.000 LF	_____.	_____.



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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0290	646.8220 Marking Island Nose Epoxy	20.000 EACH	_____.	_____.
0292	646.9000 Marking Removal Line 4-Inch	880.000 LF	_____.	_____.
0294	646.9010 Marking Removal Line Water Blasting 4-Inch	1,730.000 LF	_____.	_____.
0296	646.9100 Marking Removal Line 8-Inch	16.000 LF	_____.	_____.
0298	646.9110 Marking Removal Line Water Blasting 8-Inch	465.000 LF	_____.	_____.
0300	646.9200 Marking Removal Line Wide	110.000 LF	_____.	_____.
0302	646.9300 Marking Removal Special Marking	6.000 EACH	_____.	_____.
0304	646.9310 Marking Removal Special Marking Water Blasting	24.000 EACH	_____.	_____.
0306	649.0105 Temporary Marking Line Paint 4-Inch	16,496.000 LF	_____.	_____.
0308	649.0150 Temporary Marking Line Removable Tape 4-Inch	17,313.000 LF	_____.	_____.
0310	649.0205 Temporary Marking Line Paint 8-Inch	2,492.000 LF	_____.	_____.
0312	649.0250 Temporary Marking Line Removable Tape 8-Inch	2,405.000 LF	_____.	_____.
0314	649.0805 Temporary Marking Stop Line Paint 18-Inch	389.000 LF	_____.	_____.
0316	649.0850 Temporary Marking Stop Line Removable Tape 18-Inch	70.000 LF	_____.	_____.
0318	650.4000 Construction Staking Storm Sewer	88.000 EACH	_____.	_____.



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Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0320	650.4500 Construction Staking Subgrade	6,940.000 LF	_____.	_____.
0322	650.5000 Construction Staking Base	5,270.000 LF	_____.	_____.
0324	650.5500 Construction Staking Curb Gutter and Curb & Gutter	7,524.000 LF	_____.	_____.
0326	650.7000 Construction Staking Concrete Pavement	1,670.000 LF	_____.	_____.
0328	650.8500 Construction Staking Electrical Installations (project) 001. ID 5992-09-14	LS	LUMP SUM	_____.
0330	650.9000 Construction Staking Curb Ramps	38.000 EACH	_____.	_____.
0332	650.9910 Construction Staking Supplemental Control (project) 001. ID 5992-09-14	LS	LUMP SUM	_____.
0334	650.9920 Construction Staking Slope Stakes	6,940.000 LF	_____.	_____.
0336	652.0215 Conduit Rigid Nonmetallic Schedule 40 1 1/4-Inch	843.000 LF	_____.	_____.
0338	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	4,062.000 LF	_____.	_____.
0340	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	10,620.000 LF	_____.	_____.
0342	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	1,724.000 LF	_____.	_____.
0344	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	4,072.000 LF	_____.	_____.
0346	652.0800 Conduit Loop Detector	814.000 LF	_____.	_____.



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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0348	653.0905 Removing Pull Boxes	20.000 EACH	_____.	_____.
0350	654.0110 Concrete Bases Type 10	4.000 EACH	_____.	_____.
0352	655.0230 Cable Traffic Signal 5-14 AWG	2,883.000 LF	_____.	_____.
0354	655.0240 Cable Traffic Signal 7-14 AWG	511.000 LF	_____.	_____.
0356	655.0250 Cable Traffic Signal 9-14 AWG	1,392.000 LF	_____.	_____.
0358	655.0260 Cable Traffic Signal 12-14 AWG	411.000 LF	_____.	_____.
0360	655.0615 Electrical Wire Lighting 10 AWG	4,574.000 LF	_____.	_____.
0362	655.0620 Electrical Wire Lighting 8 AWG	7,540.000 LF	_____.	_____.
0364	655.0625 Electrical Wire Lighting 6 AWG	22,620.000 LF	_____.	_____.
0366	655.0800 Loop Detector Wire	2,140.000 LF	_____.	_____.
0368	656.0200 Electrical Service Meter Breaker Pedestal (location) 001. Fordem Avenue	LS	LUMP SUM	_____.
0370	656.0200 Electrical Service Meter Breaker Pedestal (location) 002. First Street	LS	LUMP SUM	_____.
0372	657.0100 Pedestal Bases	11.000 EACH	_____.	_____.
0374	657.0345 Poles Type 9	4.000 EACH	_____.	_____.
0376	657.0405 Traffic Signal Standards Aluminum 3.5- FT	2.000 EACH	_____.	_____.
0378	657.0410 Traffic Signal Standards Aluminum 9-FT	3.000 EACH	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0380	657.0420 Traffic Signal Standards Aluminum 13-FT	4.000 EACH	_____.	_____.
0382	657.0430 Traffic Signal Standards Aluminum 10-FT	3.000 EACH	_____.	_____.
0384	657.0525 Monotube Arms 25-FT	2.000 EACH	_____.	_____.
0386	657.0530 Monotube Arms 30-FT	2.000 EACH	_____.	_____.
0388	657.0609 Luminaire Arms Single Member 4-Inch Clamp 6-FT	1.000 EACH	_____.	_____.
0390	658.0500 Pedestrian Push Buttons	14.000 EACH	_____.	_____.
0392	658.5069 Signal Mounting Hardware (location) 001. Fordem Avenue	LS	LUMP SUM	_____.
0394	658.5069 Signal Mounting Hardware (location) 002. First Street	LS	LUMP SUM	_____.
0396	659.1115 Luminaires Utility LED A	21.000 EACH	_____.	_____.
0398	659.1120 Luminaires Utility LED B	18.000 EACH	_____.	_____.
0400	674.0300 Remove Cable	1,170.000 LF	_____.	_____.
0402	677.9051.S Removing 50-FT Camera Pole	1.000 EACH	_____.	_____.
0404	677.9200.S Removing CCTV Camera	1.000 EACH	_____.	_____.
0406	690.0150 Sawing Asphalt	2,608.000 LF	_____.	_____.
0408	690.0250 Sawing Concrete	6,109.000 LF	_____.	_____.
0410	715.0415 Incentive Strength Concrete Pavement	1,589.000 DOL	1.00000	1,589.00



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0412	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000	500.00
0414	715.0710 Optimized Aggregate Gradation Incentive	5,650.000 DOL	1.00000	5,650.00
0416	740.0440 Incentive IRI Ride	3,530.000 DOL	1.00000	3,530.00
0418	801.0117 Railroad Flagging Reimbursement	24,000.000 DOL	1.00000	24,000.00
0420	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	1,600.000 HRS	5.00000	8,000.00
0422	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	850.000 HRS	5.00000	4,250.00
0424	SPV.0025 Special 001. Polyester Polymer Concrete Overlay with Milling	86.000 CF	_____.	_____.
0426	SPV.0035 Special 100. Abandon Sanitary Sewer-Slurry	34.800 CY	_____.	_____.
0428	SPV.0060 Special 001. Root Pruning Trees	10.000 EACH	_____.	_____.
0430	SPV.0060 Special 002. Precast Sign Post Base	56.000 EACH	_____.	_____.
0432	SPV.0060 Special 003. Sign Post Base for Concrete Installation	9.000 EACH	_____.	_____.
0434	SPV.0060 Special 004. Erecting City Owned Signs	6.000 EACH	_____.	_____.
0436	SPV.0060 Special 005. Storm Sewer Tap	1.000 EACH	_____.	_____.
0438	SPV.0060 Special 006. Inlet Covers Type DW	6.000 EACH	_____.	_____.
0440	SPV.0060 Special 007. Slurry Backfill	12.000 EACH	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0442	SPV.0060 Special 008. Street Light Removal	26.000 EACH	_____.	_____.
0444	SPV.0060 Special 009. Pruning Tree	4.000 EACH	_____.	_____.
0446	SPV.0060 Special 010. Locate and Reference Property Corners	2.000 EACH	_____.	_____.
0448	SPV.0060 Special 011. Reset Property Corners	2.000 EACH	_____.	_____.
0450	SPV.0060 Special 012. Removing Pole Mounted Cabinet	1.000 EACH	_____.	_____.
0452	SPV.0060 Special 013. Removing Communications Vault	1.000 EACH	_____.	_____.
0454	SPV.0060 Special 050. Lighting Control Cabinet	1.000 EACH	_____.	_____.
0456	SPV.0060 Special 051. Poles 30-FT 11 Gauge, Single Simplex	20.000 EACH	_____.	_____.
0458	SPV.0060 Special 052. Poles 30-FT 11 Gauge, Twin Simplex	4.000 EACH	_____.	_____.
0460	SPV.0060 Special 053. Poles 30-FT 7 Gauge, Single Simplex	1.000 EACH	_____.	_____.
0462	SPV.0060 Special 054. Poles 30-FT 7 Gauge, Twin Simplex	1.000 EACH	_____.	_____.
0464	SPV.0060 Special 055. Poles 20-FT 7 Gauge	4.000 EACH	_____.	_____.
0466	SPV.0060 Special 056. Arm 10 FT, Simplex	29.000 EACH	_____.	_____.
0468	SPV.0060 Special 057. Arm 4 FT, Simplex	1.000 EACH	_____.	_____.
0470	SPV.0060 Special 058. Electrical Pullbox, Type I	23.000 EACH	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0472	SPV.0060 Special 059. Electrical Pullbox, Type III	5.000 EACH	_____.	_____.
0474	SPV.0060 Special 060. Electrical Pullbox, Type V	3.000 EACH	_____.	_____.
0476	SPV.0060 Special 061. Electrical Pullbox, Type VII	6.000 EACH	_____.	_____.
0478	SPV.0060 Special 062. Electrical Utility Access Structure	7.000 EACH	_____.	_____.
0480	SPV.0060 Special 063. Concrete Base Type G	8.000 EACH	_____.	_____.
0482	SPV.0060 Special 064. Concrete Base Type LB-3	29.000 EACH	_____.	_____.
0484	SPV.0060 Special 065. Concrete Base Type LB-8	12.000 EACH	_____.	_____.
0486	SPV.0060 Special 066. Concrete Base Type P	2.000 EACH	_____.	_____.
0488	SPV.0060 Special 067. Concrete Base Type M	1.000 EACH	_____.	_____.
0490	SPV.0060 Special 068. Concrete Base Offset	6.000 EACH	_____.	_____.
0492	SPV.0060 Special 069. Transformer Base 16-Inch Steel	3.000 EACH	_____.	_____.
0494	SPV.0060 Special 070. Transformer Base 20-Inch Steel	2.000 EACH	_____.	_____.
0496	SPV.0060 Special 071. Traffic Signal Control Cabinet	2.000 EACH	_____.	_____.
0498	SPV.0060 Special 072. Traffic Signal Controller	2.000 EACH	_____.	_____.
0500	SPV.0060 Special 073. Malfunction Management Unit (MMU)	2.000 EACH	_____.	_____.



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Proposal ID: 20181211011 Project(s): 5992-09-14, 5992-09-15, 5992-09-16

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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0502	SPV.0060 Special 074. Traffic Signal Ethernet Switch	2.000 EACH	_____.	_____.
0504	SPV.0060 Special 075. Traffic Signal Trombone Arms Aluminum 12-Foot	2.000 EACH	_____.	_____.
0506	SPV.0060 Special 076. Traffic Signal Trombone Arms Aluminum 15-Foot	3.000 EACH	_____.	_____.
0508	SPV.0060 Special 077. Traffic Signal Trombone Arms Aluminum 18-Foot	1.000 EACH	_____.	_____.
0510	SPV.0060 Special 078. Traffic Signal Trombone Arms Aluminum 22-Foot	2.000 EACH	_____.	_____.
0512	SPV.0060 Special 079. Traffic Signal Heads 12-Inch, 3-Section	35.000 EACH	_____.	_____.
0514	SPV.0060 Special 080. Traffic Signal Heads 12-Inch, 4-Section	5.000 EACH	_____.	_____.
0516	SPV.0060 Special 081. Traffic Signal Heads 16-Inch Pedestrian with Countdown	14.000 EACH	_____.	_____.
0518	SPV.0060 Special 082. Backplates Signal Face, 3-Section 12-Inch	34.000 EACH	_____.	_____.
0520	SPV.0060 Special 083. Backplates Signal Face, 4-Section 12-Inch	5.000 EACH	_____.	_____.
0522	SPV.0060 Special 100. Utility Line Opening (ULO)	35.000 EACH	_____.	_____.
0524	SPV.0060 Special 101. Sewer Electronic Markers	38.000 EACH	_____.	_____.
0526	SPV.0060 Special 102. Sanitary Lateral Reconnect	22.000 EACH	_____.	_____.
0528	SPV.0060 Special 103. Sanitary Sewer Tap	7.000 EACH	_____.	_____.



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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0530	SPV.0060 Special 104. Sanitary Sewer Access Structure (4-Foot Diameter)	7.000 EACH	_____.	_____.
0532	SPV.0060 Special 105. Sanitary Sewer Access Structure (5-Foot Diameter)	1.000 EACH	_____.	_____.
0534	SPV.0060 Special 106. External Sewer Access Structure Joint Seal	8.000 EACH	_____.	_____.
0536	SPV.0060 Special 107. Sanitary Sewer Internal Chimney Seal	1.000 EACH	_____.	_____.
0538	SPV.0060 Special 108. Remove Sanitary Sewer Access Structure	11.000 EACH	_____.	_____.
0540	SPV.0060 Special 109. Adjust Sanitary Sewer Access Structure Special	1.000 EACH	_____.	_____.
0542	SPV.0060 Special 110. Abandon Sanitary Sewer Access Structure	9.000 EACH	_____.	_____.
0544	SPV.0060 Special 111. Abandon Sanitary Sewer-Pipe Plug	13.000 EACH	_____.	_____.
0546	SPV.0060 Special 112. Sanitary Sewer Cleanout	1.000 EACH	_____.	_____.
0548	SPV.0060 Special 113. Furnish and Install Hydrant	6.000 EACH	_____.	_____.
0550	SPV.0060 Special 114. Cut Off Existing Water Main	17.000 EACH	_____.	_____.
0552	SPV.0060 Special 115. Abandon Water Valve Box	15.000 EACH	_____.	_____.
0554	SPV.0060 Special 116. Abandon Hydrant	5.000 EACH	_____.	_____.
0556	SPV.0060 Special 117. Adjust Water Valve Box	24.000 EACH	_____.	_____.



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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0558	SPV.0060 Special 118. Furnish & Install 4-Inch Water Valve	2.000 EACH	_____.	_____.
0560	SPV.0060 Special 119. Furnish & Install 6-Inch Water Valve	5.000 EACH	_____.	_____.
0562	SPV.0060 Special 120. Furnish & Install 8-Inch Water Valve	1.000 EACH	_____.	_____.
0564	SPV.0060 Special 121. Furnish & Install 12-Inch Water Valve	10.000 EACH	_____.	_____.
0566	SPV.0060 Special 122. Reconnect Water Service Laterals, 1-Inch	13.000 EACH	_____.	_____.
0568	SPV.0060 Special 123. Reconnect Water Service Laterals, 1.5-Inch	2.000 EACH	_____.	_____.
0570	SPV.0060 Special 124. Cut-In Connection	16.000 EACH	_____.	_____.
0572	SPV.0060 Special 125. Clay Trench Plugs	4.000 EACH	_____.	_____.
0574	SPV.0060 Special 126. Reconstruct MMSD Sanitary Sewer Structure	3.000 EACH	_____.	_____.
0576	SPV.0090 Special 001. Concrete Curb & Gutter 18-Inch Type A Special	320.000 LF	_____.	_____.
0578	SPV.0090 Special 002. Concrete Curb & Gutter 24-Inch Type A Special	2,202.000 LF	_____.	_____.
0580	SPV.0090 Special 003. Concrete Curb & Gutter 24-Inch Type D Special	2,759.000 LF	_____.	_____.
0582	SPV.0090 Special 004. Concrete Curb & Gutter 30-Inch Type A Special	275.000 LF	_____.	_____.



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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0584	SPV.0090 Special 005. Concrete Curb & Gutter 30-Inch Type D Special	4,422.000 LF	_____.	_____.
0586	SPV.0090 Special 006. Concrete Curb & Gutter 30-Inch Type D Mountable Special	47.000 LF	_____.	_____.
0588	SPV.0090 Special 007. Concrete Curb & Gutter 30-Inch Type AX Special	13.000 LF	_____.	_____.
0590	SPV.0090 Special 008. Concrete Curb & Gutter 30-Inch Type DX Special	71.000 LF	_____.	_____.
0592	SPV.0090 Special 009. Sign Post	323.000 LF	_____.	_____.
0594	SPV.0090 Special 010. Reflective Sign Post	106.000 LF	_____.	_____.
0596	SPV.0090 Special 011. Marking Line Epoxy 6-Inch	1,942.000 LF	_____.	_____.
0598	SPV.0090 Special 012. Marking Crosswalk Epoxy Transverse Line 12-Inch	155.000 LF	_____.	_____.
0600	SPV.0090 Special 013. Marking Crosswalk Epoxy Transverse Line 18-Inch	77.000 LF	_____.	_____.
0602	SPV.0090 Special 014. Marking Crosswalk Epoxy Ladder Pattern 18-Inch	545.000 LF	_____.	_____.
0604	SPV.0090 Special 015. Marking Stop Line Epoxy 24-Inch	362.000 LF	_____.	_____.
0606	SPV.0090 Special 016. Concrete Curb Type A Special	195.000 LF	_____.	_____.
0608	SPV.0090 Special 050. Fiber Optic Cable 144-Count	4,670.000 LF	_____.	_____.
0610	SPV.0090 Special 051. Electrical Wire Lighting 14-3 UF Grounded	1,044.000 LF	_____.	_____.



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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0612	SPV.0090 Special 052. Loop Detector Lead-In Cable Special	4,045.000 LF	_____.	_____.
0614	SPV.0090 Special 100. Water Main 24-Inch Casing Pipe	150.000 LF	_____.	_____.
0616	SPV.0090 Special 101. Sanitary Sewer Lateral	324.000 LF	_____.	_____.
0618	SPV.0090 Special 102. Sanitary Sewer Pipe PVC, 12-Inch	988.000 LF	_____.	_____.
0620	SPV.0090 Special 103. Sanitary Sewer Pressure Pipe (C900), 8-Inch	36.000 LF	_____.	_____.
0622	SPV.0090 Special 104. Sanitary Sewer Pressure Pipe (C900), 10-Inch	89.000 LF	_____.	_____.
0624	SPV.0090 Special 105. Sanitary Sewer Pressure Pipe (C900), 12-Inch	250.000 LF	_____.	_____.
0626	SPV.0090 Special 106. Select Fill for Sanitary Sewer	1,687.000 LF	_____.	_____.
0628	SPV.0090 Special 107. Furnish and Install Water Main Pipe & Fittings, 4-Inch	39.000 LF	_____.	_____.
0630	SPV.0090 Special 108. Furnish and Install Water Main Pipe & Fittings, 6-Inch	153.000 LF	_____.	_____.
0632	SPV.0090 Special 109. Furnish and Install Water Main Pipe & Fittings, 8-Inch	50.000 LF	_____.	_____.
0634	SPV.0090 Special 110. Furnish and Install Water Main Pipe & Fittings, 12-Inch	2,078.000 LF	_____.	_____.
0636	SPV.0090 Special 111. Select Fill for Water Main	2,320.000 LF	_____.	_____.



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Federal ID(s): WISC 2019005, N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0638	SPV.0105 Special 001. Temporary Traffic Signals East Johnson Street-Fordem Avenue	LS	LUMP SUM	_____.
0640	SPV.0105 Special 002. Temporary Traffic Signals East Johnson Street-First Street	LS	LUMP SUM	_____.
0642	SPV.0105 Special 003. Temporary Lighting	LS	LUMP SUM	_____.
0644	SPV.0105 Special 004. Temporary Traffic Signal Pole East Johnson Street-Baldwin Street	LS	LUMP SUM	_____.
0646	SPV.0105 Special 005. Optical Signal Preempt	LS	LUMP SUM	_____.
0648	SPV.0105 Special 101. Project Dewatering ID 5992-09-14	LS	LUMP SUM	_____.
0650	SPV.0105 Special 102. Project Dewatering ID 5992-09-15	LS	LUMP SUM	_____.
0652	SPV.0105 Special 103. Project Dewatering ID 5992-09-16	LS	LUMP SUM	_____.
0654	SPV.0105 Special 104. Construction Staking Water Main	LS	LUMP SUM	_____.
0656	SPV.0105 Special 105. Wastewater Control	LS	LUMP SUM	_____.
0658	SPV.0105 Special 106. Construction Staking Sanitary Sewer	LS	LUMP SUM	_____.
0660	SPV.0120 Special 001. Water for Seeded Areas	240.000 MGAL	_____.	_____.
0662	SPV.0165 Special 001. Colored Crosswalk	1,340.000 SF	_____.	_____.
0664	SPV.0170 Special 001. Pavement Cleanup	75.000 STA	_____.	_____.



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SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0666	SPV.0180 Special 001. Asphaltic Surface Temporary Wedging	810.000 SY	_____.	_____.
0668	SPV.0180 Special 002. Shredded Hardwood Bark Mulch, 3-Inch Depth	95.000 SY	_____.	_____.
0670	SPV.0180 Special 003. Reinforced Concrete Pavement 9-Inch	580.000 SY	_____.	_____.
0672	SPV.0195 Special 001. Excavating, Loading, Hauling, and Landfill Trmt or Disposal of Ctmd Soil	1,245.000 TON	_____.	_____.
0674	SPV.0200 Special 100. Construct Outside Drop, 8- Inch	6.500 VF	_____.	_____.
0676	SPV.0200 Special 101. Construct Inside Drop, 6- Inch	4.700 VF	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH SCHEDULE OF ITEMS HERE