

**HIGHWAY WORK PROPOSAL**

Proposal Number: Ø 6

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Dane	5992-06-57	WISC 2012 065	City of Madison, Fish Hatchery Road Emil Street - Wingra Drive	CTH D
Dane	5992-06-61		City of Madison, Fish Hatchery Road Emil Street - Wingra Drive	CTH D

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.

Attach Proposal Guaranty on back of this PAGE.

Proposal Guaranty Required, \$ 75,000.00 Payable to: Wisconsin Department of Transportation Bid Submittal Due Date: February 14, 2012 Time (Local Time): 9:00 AM Contract Completion Time July 21, 2012 Assigned Disadvantaged Business Enterprise Goal 6 %	Firm Name, Address, City, State, Zip Code <div style="text-align: center; font-size: 2em; font-weight: bold;">                     SAMPLE                      NOT FOR BIDDING PURPOSES                 </div> This contract is exempt from federal oversight.
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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

**For Department Use Only**

Type of Work Pavement removal, excavation, grading, water main, storm sewer, select crushed material, base aggregate dense, concrete curb and gutter, sidewalk and driveways, HMA pavement, signing, pavement marking, street lighting, traffic signals, landscaping and finishing items.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

## **PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

## Effective with August 2007 Letting

### BID PREPARATION

#### Preparing the Proposal Schedule of Items

##### **A General**

- (1) Obtain bidding proposals as specified in [section 102](#) of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  1. Electronic bid on the internet.
  2. Electronic bid on a printout with accompanying diskette or CD ROM.
  3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm>. The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.
- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the [www.bidx.com](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm> or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

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

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

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

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

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

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

**Bidder Name**

**BN00**

**Proposals: 1, 12, 14, & 22**

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

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

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

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





**PROPOSAL BID BOND**

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)

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

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

**NOTARY FOR PRINCIPAL**

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

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

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

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

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

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

**Notary Seal**

**NOTARY FOR SURETY**

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

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

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

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

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

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

**Notary Seal**

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



# CERTIFICATE OF ANNUAL BID BOND

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)



**FEBRUARY 1999**

**LIST OF SUBCONTRACTORS**

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

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

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



**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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



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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 5992-06-57 and 5992-06-61 City of Madison, Fish Hatchery Road, Emil Street – Wingra Drive, CTH D, 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, 2012 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 (20110615)

Execution of the water main, street lighting and traffic signal work under this contract will be in accordance to the City of Madison standard specifications.

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

The work under this contract consists of pavement removal, excavation, grading, water main, storm sewer, select crushed material, base aggregate dense, concrete curb and gutter, sidewalk and driveways, HMA pavement, signing, pavement marking, street lighting, traffic signals, landscaping and 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.**

Begin work within 10 calendar days after the engineer issues a written notice to proceed.

Provide the time frame for construction of the project within the 2012 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time.

The notice to proceed is anticipated to be issued no later than April 6, 2012 for an anticipated construction start date of April 17, 2012. If the start of construction is delayed due to circumstances beyond the contractor's control, coordinate with WSOR to move the start of construction to a subsequent Wednesday

Coordinate work in Stage 1 with the Wisconsin Southern Railroad (WSOR) to minimize the closure of Fish Hatchery Road to five days or less, beginning on a Wednesday

morning, and completing work to open Fish Hatchery Road to through traffic by midnight on the following Sunday. WSOR has committed to start their work as described below under Stage 1, at 9:00 AM on April 18, 2012 and to complete their work by 12:00 PM (noon) on April 22, 2012. Complete approach paving and all remaining traffic control items to switch traffic to Stage 2 within 12 hours, or by midnight on Sunday, of the WSOR completion of the track crossing, whichever is later. Provide all submittals, meetings and time frames as noted above to accommodate an anticipated construction start date of April 17, 2012.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. 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 and with concurrence from the City of Madison, Dane County, WisDOT and the Town of Madison.

Conform the schedule of operations to the construction staging as shown in the Construction Staging plans, unless modifications to the schedule are approved in writing by the engineer.

Construct CTH D (Fish Hatchery Road) between Emil Street and Wingra Drive using the following general construction stages:

### **Stage 1**

Furnish and install traffic control devices and facilities for the detour route as shown on the detour route plan sheets. Close CTH D (Fish Hatchery Road) to through traffic by 9:00 AM on Wednesday, April 18, 2012 or by 9:00 AM on a subsequent Wednesday if start of construction is delayed. Construct Stage 1 work within the 5 day closure of CTH D (Fish Hatchery Road) from Badger Road to Wingra Drive. Stage 1 work in the northbound lanes of CTH D (Fish Hatchery Road) consists of asphalt pavement, concrete approach slabs, concrete curb and gutter and concrete sidewalk from Station 82+50 to Station 83+71, and asphalt paving of approaches at the railroad crossing, to be paved after the concrete panels are installed and prior to switching traffic to Stage 2. Stage 1 work also includes signing, striping, and placement of traffic control in preparation for switching traffic to the southbound roadway for Stage 2. Work by others within Stage 1 and Stage 1A will consist of the Wisconsin Southern Railroad removing and replacing the entire railroad crossing including concrete approach panels. Complete Stage 1A work as a sub-stage of Stage 1 construction. Stage 1A work in the southbound lanes of CTH D (Fish Hatchery Road) consists of asphalt pavement, concrete approach slabs, concrete curb and gutter and concrete sidewalk from Station 82+50 to Station 83+71.

Switch traffic to Stage 2 before midnight on April 22, 2012. If the start date is delayed, switch traffic to Stage 2 before midnight on the Sunday after Stage 1 is started.

*Supplement standard spec 108.11 as follows:*

If the contractor fails to complete the work necessary to reopen CTH D (Fish Hatchery Road) to traffic within 12 hours of the completion of the track panels by WSOR, or by midnight on the Sunday following the start of Stage 1, whichever comes later, the department will assess the contractor \$5,000 in interim liquidated damages for each calendar day that contract work on Stage 1 and 1A remains incomplete beyond 12 hours of the completion of the track panels by WSOR, or by midnight on the Sunday following the start of Stage 1, whichever comes later. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

## **Stage 2**

Construct the northbound side of CTH D (Fish Hatchery Road) including all median islands from Station 34+15 to Station 82+50 including the Petra Place, Alrita Court, Catalpa Road, Culmen Street and Plaenert Drive intersections. Complete Stage 2 construction operations including but not limited to pavement removal, excavation, grading, water main, storm sewer, Select Crushed Material, Base Aggregate Dense, concrete curb and gutter, sidewalk and driveways, traffic control items, temporary signals, traffic signals, street lighting, sign bases, erosion control items, temporary pavement marking, HMA Pavement Type E-10, landscaping and finishing items. Storm sewer structures requiring connections to existing storm sewer west of Stage 2 construction limits may require completion in Stage 3 and will require gaps in median curb (to be completed during Stage 3).

Complete Stage 2A and 2B work as sub-stages of Stage 2 construction. Stage 2A work consists of constructing the north half of the Badger Road (east) intersection. Stage 2B work consists of construction the south half of the Badger Road (east) intersection.

## **Stage 3**

Construct the southbound side of CTH D (Fish Hatchery Road) from Station 34+15 to Station 82+50 including the Martin Street and Carver Street intersections. Complete Stage 3 construction operations including but not limited to pavement removal, excavation, grading, water main, storm sewer, Select Crushed Material, Base Aggregate Dense, concrete curb and gutter, sidewalk and driveways, traffic control items, temporary signals, traffic signals, street lighting, signing, erosion control items, temporary pavement marking, HMA Pavement Type E-10, landscaping and finishing items.

Construct Stage 3A and Stage 3B work as a sub-stage of Stage 3 construction. Stage 3A work consists of construction the north half of Badger Road (west) intersection. Stage 3B work consists of construction the south half of the Badger Road (west) intersection.

## **Stage 4**

Construct the upper layer HMA Pavement Type E-10 for northbound and southbound CTH D (Fish Hatchery Road) lanes as well as all side road intersections, and all permanent pavement marking.

## **Contractor Coordination**

Hold a progress meeting once a week. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work expected to begin within the next two weeks shall attend and provide a written schedule of the next week(s)' operation. Include begin and end dates of specific prime and subcontractor work operations. Invite the City of Madison, Dane County, Town of Madison and Madison Metro bus representatives to attend the progress meetings. Agenda items will include review of the contractor's schedule and subcontractors' schedule, evaluation of progress and pay items, and making revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems or 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 will result in the engineer holding pay requests until received.

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.

Coordinate with the City of Madison to provide access for garbage collection. Contact Refuse Supervisor at (608) 246-4532.

Maintain access to all businesses and homes. Notify affected business owners or residents at least 2 days (48 hours) prior to restricting access. If a business has two driveways, keep one open while constructing the other. If a business has one driveway, construct one half at a time.

Notify City of Madison and Town of Madison Police and Fire Departments at least 3 days (72 hours) in advance of any traffic stage changes or restriction. Ensure that emergency vehicles are provided access to all properties along the project at all times.

Submit any traffic control change requests to the engineer at least 3 days (72 hours) prior to an actual traffic control change.

### **Pedestrian Access**

Construct temporary surfaces that meet Americans with Disabilities Act Accessibility Guidelines (ADAAG) requirements and that consist of temporary asphaltic surface, any grade of concrete, skid resistant steel plating, or alternative material as approved by the engineer. Gravel or base course material is not acceptable. Close the sidewalk on the northbound side of CTH D (Fish Hatchery Road) under Stage 2 construction and on the southbound side of CTH D (Fish Hatchery Road) under Stage 3. Temporary crosswalks as shown on the construction staging plans are required to maintain pedestrian access across CTH D (Fish Hatchery Road) during construction.

### **Property Access**

Maintain access to all properties along CTH D (Fish Hatchery Road) and all connecting side streets for local residents, businesses and emergency vehicles. Maintain and keep

open the access to all driveways and parking lots where alternative access is not available at all times. Provide 72 hour notice to affected business or resident prior to closing a driveway. Provide proper traffic control to close any driveway that cannot be maintained.

#### **4. Traffic.**

##### **A General**

Keep CTH D (Fish Hatchery Road) open to through traffic at all times during the Stage 2, 3 and 4 construction. During Stage 2, 3 and 4 construction, maintain one lane of traffic in each direction plus turn bays and two way left turn lanes on CTH D (Fish Hatchery Road) at all times as specified below and as shown on the construction staging plan sheets.

Lane closures (as approved by the engineer) and other flagging operations necessary to complete work shall be incidental to other items of work.

The traffic staging will be divided into four main stages in order to facilitate the road construction.

##### **Stage 1**

Close CTH D (Fish Hatchery Road) to through traffic and detour traffic via USH 12/14/18/151 to Park Street for 5 days from Badger Road to Wingra Drive. Within this time the Wisconsin Southern Railroad will replace the surface of the railroad crossing and improve the railroad signals. Complete work north and south of the Wingra Creek bridge to facilitate use of this area for the north traffic crossover which will include concrete approach slabs, curb and gutter, concrete sidewalk and asphalt pavement.

##### **Stage 2**

Restrict traffic on CTH D (Fish Hatchery Road) to 1 lane of traffic in each direction. Shift traffic to the west (southbound) side of CTH D (Fish Hatchery Road). This will allow completion of Stage 2, 2A and 2B construction on the northbound half of CTH D (Fish Hatchery Road) up to and including paving of the lower layer of HMA pavement.

##### **Stage 3**

Restrict traffic on CTH D (Fish Hatchery Road) to 1 lane of traffic in each direction. Shift traffic to the east (northbound) side of CTH D (Fish Hatchery Road). This will allow for completion of Stage 3, 3A and 3B construction on the southbound half of CTH D (Fish Hatchery Road) up to and including paving of the lower layer of HMA pavement.

##### **Stage 4**

Restrict traffic on CTH D (Fish Hatchery Road) to 1 lane of traffic in each direction through the use of flagging operations and lane closures to facilitate paving of the upper layer of HMA pavement as well as the application of all pavement markings. Required traffic control for all Stage 4 work will be incidental to other items of work.

##### **B Vehicle and Pedestrian Access**



Conduct work operations in a manner that will cause the least interference to traffic and pedestrian movements and access adjacent with and to the construction activities. Maintain vehicle and pedestrian access at all times to buildings within the limits of construction.

Maintain access to all businesses and homes. Notify affected business owners or residents at least 2 days (48 hours) prior to restricting access. If a business has two driveways on CTH D (Fish Hatchery Road) keep one open while constructing the other. If a business has one driveway, construct one half at a time unless alternative access is available on CTH D (Fish Hatchery Road).

Maintain access to all permanent and temporary Metro and school bus stops as shown on the construction staging plans within the project at all times.

### **C Advance Notification and Coordination**

Notify City of Madison and Town of Madison Police and Fire Departments at least 3 days (72 hours) in advance of any traffic stage changes or restriction.

Contact and coordinate with the City of Madison for signal timing and phasing setup for temporary and permanent signals.

Notify Madison Metro two weeks prior to construction. Notify one week prior to traffic switches, street closures, and reopening the road to through traffic for bus routing. Contact Drew Beck at (608) 266-6599 or email: dbeck@cityofmadison.com.

## **5. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying CTH D (Fish Hatchery Road), USH 12, 14, 18 and 151 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 25, 2012 to 7:00 AM Tuesday, May 29, 2012 for Memorial Day;
- From 7:00 PM Tuesday, July 3, 2012 to 7:00 AM Thursday, July 5, 2012 for Independence Day.

107-005 (20050502)

## **6. Utilities.**

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

107-065 (20080501)

Underground and overhead utility facilities are located within the project limits. Known utility adjustments required for this construction project are noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that

have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

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

Utility coordination meetings will be held once a week by the department. The contractor's superintendent or designated representative shall attend and provide a written schedule of the next week(s)' operations.

**Madison Gas and Electric (Gas)** has underground gas mains running along the east back of curb from Station 34+15 to Station 38+25, continues in the east terrace from Station 38+25 to Station 51+00, then moves to the northbound lane from Station 51+00 to Station 61+50. Additionally there are gas main crossings at Station 34+45, 35+63, 37+11, 40+22, 44+30, 47+90, 53+20, 56+39, 57+86, 59+75 and 84+76.

Prior to the beginning of the construction project MG&E will install 1300 feet of 2-inch gas main on the west side of CTH D (Fish Hatchery Road) approximately 2 feet from the right-of-way line. This main will extend approximately from Station 34+00 to Station 51+50. Additionally a new 4-inch PE gas main crossing of West Badger Road will be installed. MG&E will also install 1100 feet of 4 inch PE gas main on the east side of CTH D (Fish Hatchery Road) from approximately Station 51+50 to Station 61+50 as well as a new crossing approximately at Station 53+20. Proposed utility relocations are intended to minimize conflicts between the utility and proposed roadway construction. Connections and service lateral work may carry over into the 2012 construction season.

Utility conflicts are anticipated between the gas facilities and the proposed storm sewer, water main and roadway excavation work. Utilize the Utility Line Openings (ULO) bid item as early in the project as possible to identify conflicts. Required utility adjustments will be made by Madison Gas and Electric (MG&E) during the construction activities.

Take all necessary steps to locate and protect MG&E gas facilities. Provide MG&E with 3 business days advance notice of conflicts to allow for one calls and scheduling of relocations. MG&E gas anticipates it will take up to 2 days to resolve any utility conflicts which cross their gas facilities and up to 5 days to resolve any utility conflicts which run parallel to their gas facilities. Report and damage to existing gas facilities immediately to MG&E.

**Madison Gas and Electric (Electric)** has overhead electrical facilities running parallel to CTH D (Fish Hatchery Road) which are located in the west terrace of CTH D (Fish Hatchery Road) from Station 39+50 to Station 61+50. The overhead line continues behind the west curblines on CTH D (Fish Hatchery Road) from Station 61+50 to Station 68+00 and then moves to behind the east curblines from Station 68+00 to Station 84+00. Additionally there is an overhead electrical crossing of CTH D (Fish Hatchery Road) located on the south side of Badger Road. Underground concrete encased electrical facilities are located in the west terrace of CTH D (Fish Hatchery Road) from Station

34+15 to Station 50+25, within the roadway from Station 50+20 to Station 52+50, then again in the west terrace from Station 52+50 to Station 61+25. The facilities then cross to the east terrace of CTH D (Fish Hatchery Road) from Station 61+25 to Station 84+75. Underground concrete encased facilities cross CTH D (Fish Hatchery Road) along the north half of Badger Road as well as at Station 44+80, 51+25, 54+10 and 58+00. These concrete encased duct packages are steel reinforced and approximately 3 feet by 3 feet in size.

Utility poles and guy wires located at Station 38+11 RT, 48+38 LT, 49+62 LT and 87+27 RT are in conflict and will require relocation. MG&E will relocate these poles during construction. The pole at Station 38+11 will be relocated to Station 38+70, 47' RT. The poles at Station 48+38 and Station 49+62 will be slid to the edge of the sidewalk. The pole at Station 87+27 will be relocated to Station 81+20, 30' RT.

Potential conflicts exist between the underground electrical facilities and the proposed water main, storm sewer and roadway excavation work. Utilize the Utility Line Openings (ULO) bid item as early in the project as possible to identify conflicts. ULO's may be necessary for the storm sewer conflicts near Stations 35+66 LT, 39+07 LT, 51+35 LT, 53+48 LT and 58+20 LT. ULO's may be necessary for water main conflicts near Stations 35+70 RT, all water crossings over electrical conduit within the Badger Road intersection, 44+90 RT, 50+10 RT and 51+25.

Required utility adjustments will be made by MG&E during construction. It is the intention of this contract that the concrete encased conduit will not be moved for this project, even if the conduit extends above the top of the subgrade elevation. However, if relocation of the electrical concrete encased conduit crossings is required, the relocation will require a minimum of 8 weeks' notice.

Take all necessary steps to locate and protect MG&E electrical facilities. Provide MG&E with 5 business days advance notice of conflicts to allow for one calls and scheduling of required relocations. MG&E electric anticipates it will take up to 10 working days to resolve conflicts requiring poles to be moved and up to 8 weeks per incident to resolve any utility conflicts which cross or run parallel to their electric facilities. Report any damage to existing electrical facilities immediately to MG&E.

**AT&T (Fiber Optic)** has buried fiber optic facilities running parallel to CTH D (Fish Hatchery Road) located in the west terrace from Station 34+15 to Station 56+00. The facilities then cross CTH D (Fish Hatchery Road) to under the east sidewalk from Station 58+00 to Station 62+00 and then continue east of the CTH D (Fish Hatchery Road) right-of-way from Station 58+00 to Station 66+00. The underground fiber optic facility continues in the east terrace of CTH D (Fish Hatchery Road) from Station 66+00 to Station 84+00. There are also several additional crossing of CTH D (Fish Hatchery Road).

Potential conflicts exist between the underground fiber optic and the proposed water main, storm sewer and roadway excavation work. Utilize the Utility Line Openings

(ULO) bid item as early in the project as possible to identify conflicts. Required utility adjustments will be made by AT&T during the construction activities.

Take all necessary steps to locate and protect AT&T fiber optic facilities. Provide AT&T with 5 business days advance notice of conflicts to allow for one calls and scheduling of required relocations. AT&T anticipates it will take up to 5 days to resolve any utility conflicts which cross their fiber optic facilities or parallel to their fiber optic facilities. The length of time for conflicts depends on how much adjustment needs to take place, crossing a facility or running parallel to. Test holes will be done to determine that prior to construction. Report any damage to existing fiber optic facilities immediately to AT&T.

**AT&T (Telephone)** has buried telephone facilities running parallel to CTH D (Fish Hatchery Road) under the west sidewalk from Station 35+50 to Station 37+00. Facilities are also located east of the CTH D (Fish Hatchery Road) right-of-way from Station 81+25 to Station 84+00.

No utility conflicts are anticipated with the construction activities.

**Centurylink (Fiber Optic)** has buried fiber optic facilities running parallel to CTH D (Fish Hatchery Road) located under the east sidewalk from Station 34+15 to Station 39+50. The facilities then resume behind or under the east sidewalk from Station 48+30 to Station 62+00. The facilities are then located east of the CTH D (Fish Hatchery Road) right-of-way from Station 62+00 to Station 66+25 where they continue in the east terrace from Station 66+25 to Station 84+00. Additionally there is a fiber optic crossing of CTH D (Fish Hatchery Road) at Station 48+30.

Potential conflicts exist between the underground fiber optic and the proposed water main construction work. Utilize the Utility Line Openings (ULO) bid item as early in the project as possible to identify conflicts. Required utility adjustments will be made by Centurylink during the construction activities.

Take all necessary steps to locate and protect Centurylink fiber optic facilities. Provide Centurylink with 6 business days advance notice of conflicts to allow for one calls and scheduling of required relocations. Centurylink anticipates it will take up to 2 days to resolve any utility conflicts which cross their fiber optic facilities and up to 4 days to resolve any utility conflicts which run parallel to their fiber optic facilities. Report any damage to existing fiber optic facilities immediately to Centurylink.

**American Transmission Company (ATC Electric)** has a 69,000 volt overhead transmission line crossing CTH D (Fish Hatchery Road) at Station 52+50.

No utility conflicts are anticipated with the construction activities.

**Charter Communications** has aerial communication facilities mounted on MG&E's utility poles as described previously under the MG&E (electric) section of this special provision.

No utility conflicts are anticipated with the construction activities.

**U.S. Signal (Fiber Optic)** has buried fiber optic facilities running from a utility pole located at Station 39+55 LT to an existing MG&E manhole located at Station 40+05, 68' LT.

Utility conflicts are anticipated at the above location with water main and storm sewer work. Any required utility relocations will be made prior to construction.

Take all necessary steps to locate and protect U.S. Signal fiber optic facilities. Provide U.S. Signal with 2 business days advance notice of conflicts to allow for one calls and scheduling of required relocations. U.S. Signal anticipates that any additional utility adjustments will require up to 60 days to resolve utility conflicts crossing their fiber optic facilities and up to 120 days to resolve utility conflicts running parallel to their fiber optic facilities. Report any damage to existing fiber optic facilities immediately to U.S. Signal.

**City of Madison (Sanitary Sewer)** has underground sanitary sewer facilities running parallel to CTH D (Fish Hatchery Road) in the northbound lane from Station 34+15 to Station 40+50. The sanitary sewer continues located in the east terrace or under the east sidewalk from Station 40+50 to Station 51+00 and then continues in the northbound lane from Station 51+00 to Station 51+80.

No utility conflicts are anticipated with the construction activities.

**Town of Madison (Sanitary Sewer)** has buried sanitary sewer facilities running parallel to CTH D (Fish Hatchery Road) located in the southbound lane from Station 51+20 to Station 53+25 where it crosses to the northbound lane and continues to Station 56+75.

No utility conflicts are anticipated with the construction activities.

**Wisconsin Department of Natural Resources** has two 2-inch PVC horizontal injection lines crossing CTH D (Fish Hatchery Road) in between monitoring wells which are approximately located at Stations 36+50 RT and 37+60 LT. The depth of these lines is approximately 4 to 5 feet below ground.

Additionally monitoring wells are located in the medians at Station 36+80, 36+88, 36+96, 36+97, 37+02, 38+17 and 39+09.

A utility conflict is not anticipated with water main construction at Station 36+75, 18' RT. However, utilize the Utility Line Openings (ULO) bid item as early in the project as possible to identify and protect these facilities.

Contact Wendell Wojner (WisDNR) at (608) 275-3297 to report any damage to these facilities.

**Madison Metro Sewerage District (Sanitary Sewer)** has buried 48” RCP interceptor sewer crossing CTH D (Fish Hatchery Road), which is located at Station 84+25.

No utility conflicts are anticipated with the construction activities.

## **7. Work by Others.**

During the Stage 1 roadway closure of CTH D (Fish Hatchery Road), the Wisconsin Southern Railroad will be replacing their at grade railroad crossing of CTH D (Fish Hatchery Road) located at Station 51+90. The crossing replacement will include removal of the existing crossing, excavation and installation of the new rails and concrete panel crossing.

Additionally, under a separate Project 1206-01-04, the department’s reconstruction project of the USH 12/14/18/151 interchange with CTH D (Fish Hatchery Road) may begin in mid-July prior to the completion of Project 5992-06-57/61. Reconstruction of the USH 12/14/18/151 and CTH D (Fish Hatchery Road) interchange is staged to begin with construction of southbound CTH D (Fish Hatchery Road).

## **8. Railroad Insurance and Coordination.**

### **A Description**

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

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

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

Notify evidence of the required coverage, and duration to Ben Meighan at (608) 243-9101, 1890 E. Johnson Street, Madison, WI 53704-4745. Include the following information on the insurance document:

Project 5992-06-57

Route Name CTH D (Fish Hatchery Road), Dane County

### **A.2 Work by Railroad**

The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor. During the Stage 1 roadway closure of CTH D (Fish Hatchery Road), the Wisconsin Southern Railroad will be replacing their at grade railroad crossing of CTH D (Fish Hatchery Road) located at Station 51+90. The crossing replacement will include removal of the existing crossing, excavation and installation of the new rails and concrete panel crossing.

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

Contact Ben Meighan, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co., 1890 East Johnson Street, Madison, WI 53704, TELEPHONE (608) 243-9129, ext. 4201, FAX (608) 243-9225, email [bmeighan@wsorrailroad.com](mailto:bmeighan@wsorrailroad.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.

#### **A.4 Temporary Grade Crossing**

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

#### **A.5 Train Operation**

Approximately three through freight trains operate daily through the construction site. Through freight trains operate at up to 10 mph.

### **9. Notice to Contractor - Archaeological Sites.**

Archaeologically significant sites exist in the project area. These sites are located behind the existing back of curb approximately from Station 66+50 to Station 83+75 RT.

Provide two weeks' notice to the Environmental Services Section (ESS) before doing any work in the areas of these sites. ESS will provide a qualified archaeologist to be on site at all times when work occurs near these areas.

The contact at ESS is Jim Becker, (608) 261-0137 or Lynn Cloud, (608) 266-0099.

If a potentially significant archaeological feature or material is discovered during construction operations, the qualified archeologist will promptly coordinate with the engineer and with ESS to determine an appropriate course of action.

### **10. Health and Safety Requirements for Workers Remediating Contamination.**

*Supplement standard spec 107.1(2) with the following:*

Soil contamination with dry-cleaner solvent (tetrachloroethylene) and metals (arsenic and lead) may be encountered during excavation activities. The maximum tetrachloroethylene concentration observed was 640 micrograms per kilogram (ug/kg), 45 milligrams per kilogram (mg/kg) arsenic and 56 mg/kg lead in the areas described in the following section. Prepare a site specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Prior to the start of remediation work, submit to the engineer a site specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusions zones for each contaminated site location pursuant to 29 CFR 1910.120.  
107-115 (20050502)

## **11. Hauling Restrictions.**

Conduct construction operations at all times in a manner that will cause a minimum of inconvenience to the free flow of traffic on roadways carrying CTH D (Fish Hatchery Road) traffic.

Use only City of Madison designated truck routes for material haul roads as detailed in standard spec 618.

All vehicles traveling on public roads hauling materials or removals that are subject to spillage, by either wind or vibration, shall be equipped 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.

## **12. Public Convenience and Safety.**

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

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

A written request must be submitted to and approved by the engineer seven days prior to any desired work hour alteration.

## **13. Coordination with Businesses.**

Arrange and conduct meetings between the contractor, the department local officials and business owners to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting one week prior to the start of work under this contract and hold one meeting bi-weekly thereafter for the duration of the contract. This coordination is incidental to other items of the contract.

## **14. Municipality Acceptance of Water Main Construction.**



Both the department and City of Madison personnel will inspect construction of water main under this contract. However, testing, and final acceptance of the water main construction will be by the City of Madison.

## **15. 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 Dean Kahl, City of Madison Forestry at (608) 266-4891 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.

### **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 will mark “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 will mark “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, do grading 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 Existing Tree 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 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 shall have a minimum caliper of 3 inches. The species and replanting location shall be determined by the city Forestry.
- The value of the existing tree which shall equal \$125.00 per trunk diameter inch, measured at 4.5 feet above ground.

For bark scraping and broken branches:

- 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:

- 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.

## **16. Removing Lighting Units, Item 204.9060.S.01; Removing Electrical Handholes, Item 204.9060.S.02.**

**A Description**

This special provision describes removing electrical handholes, light poles, mast arms, luminaires, and electrical manholes in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

**B (Vacant)**

**C Construction**

Salvage electrical handholes, light poles, breakaway bases, mast arms, and luminaires as selected by the city, and carefully remove and stockpile at a location on the right-of-way outside the construction limits for pickup by City of Madison personnel. Contact Dennis Rowe at (608) 266-4767 to schedule pickup. Remove from the right-of-way and dispose of lamps in approved manner as determined by EPA regulations.

Prior to removal, the electrical handholes, light poles, mast arms, and luminaires shall be inspected by representatives from the city, contractor, and the engineer to assess their original condition.

Carefully remove the luminaires from the poles. Any damage due to the contractor’s negligence shall be repaired or the item or part replaced at the contractor’s expense.

**D Measurement**

The department will measure Removing Lighting Units, Removing Electrical Handholes, as each individual removed unit, acceptably completed.

**E Payment**

Supplement subsection 204.5 of the standard specifications to include the following: The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Lighting Units	Each
204.9060.S.02	Removing Electrical Handholes	Each

**17. Excavation, Hauling, and Disposal of Contaminated Soil, Item 205.0501.S.**

**A Description**

**A.1 General**

This special provision describes excavating, loading, hauling, and disposing of contaminated soil at a sanitary landfill. Sanitary landfills in the project vicinity that have indicated they will accept the soils from this site include Waste Management’s Mad-Prairie Landfill (6002 Nelson Road, Sun Prairie; contact Ashley McMahon (262) 250-8758 and provide her with the analytical results and WDNR “Contained-Out” letter for the necessary forms for landfill approval) and Dane County’s Rodefild Landfill (7102 US Hwy 12; contact Mike DiMaggio at (608) 266-4990 and provide him with the analytical results for approval).

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

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

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

1. Station 34+75 to 35+70 from centerline to 15 feet RT of centerline (Tetrachloroethylene)
2. Station 35+70 to 37+60 from 25 feet LT of centerline to 40 feet RT of centerline (Tetrachloroethylene)
3. Station 37+60 to 38+50 from 55 feet LT of centerline to 15 feet RT of centerline. (Tetrachloroethylene)
4. Station 51+30 to 52+35 from 40 feet LT of centerline to 30 feet RT of centerline (arsenic and lead)

If contaminated (unusual odor, presence of cinders or solid waste) soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For a copy of the Phase 2-1/2 site investigations and analytical results, and/or further information regarding previous investigation and remediation activities at these sites contact:

Name: Matt Rice  
Dane County Highway Department  
Address: 2302 CTH D (Fish Hatchery Road), Madison, 53713  
Phone: (608) 266-4037  
E-mail: rice@countyofdane.com

### **A.3 Coordination**

Coordinate work under this contract with the engineer, or with Dane County Highway Department. Note that the contaminants of concern (Tetrachlorethylene, arsenic, and lead) are not detected by field screening instruments; therefore, the limits of soils to be excavated are based on the results of the Phase 2-1/2 Site Investigations, as shown on the plans.

Contact: Dane County Highway Department  
Address: 2302 CTH D (Fish Hatchery Road), Madison 53713  
Contact: Matt Rice  
Phone: (608) 266-4037  
e-mail: Rice@countyofdane.com

The role of the engineer will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations and visual observations;
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.

At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the engineer. Also notify the engineer at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Coordinate with the engineer to ensure that the engineer is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the approved landfill that will be used for disposal of contaminated soils, coordinate forms and paperwork, and provide this information to the engineer no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. Do not transport contaminated soil offsite without prior approval from the engineer.

#### **A.4 Health and Safety Requirements**

*Supplement standard spec 107.1 with the following:*

During excavation activities, expect to encounter soil contaminated with dry-cleaning solvent or metals. 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 engineer will evaluate excavated soil based on soil analytical results from previous environmental investigations. Field screening of soils will not be conducted.

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

**D Measurement**

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

**E Payment**

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

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

Payment is full compensation for excavating, segregating, loading, hauling, and disposal of Tetrachloroethylene and/or metals contaminated soil; obtaining solid waste collection and transportation service operating licenses; and for dewatering of soils prior to transport, if necessary.

**18. Excavation – General.**

Conduct this work in accordance to the pertinent provisions of standard spec 205, as shown on the plans and as hereinafter provided.

Clay soils may exist at levels lower than the subgrade elevation from Station 34+15 to Station 65+44. As encountered and approved by the engineer, excavate these soils to additional depths as directed by the engineer.

Do not excavate or disturb the bedding material and foundations of existing utility structures, utility facilities and/or remaining storm sewer structures and piping.

**19. Base Aggregate Dense 1¼-Inch for Lower Base Layers.**

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

- Use 1¼-inch base throughout the full base depth.
- Use ¾-inch base to compensate for corrections to the grade and cross slope from Station 65+44 to Station 83+71.

**20. QMP Base Aggregate.**

**A Description**

**A.1 General**

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, 305, and 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
  - 1. Production and placement control and inspection.
  - 2. Material sampling and testing.
- (5) Chapter 8 of the department’s construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department’s web site at:

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

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

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

<b>Plan Quantity</b>	<b>Minimum Required Testing</b>
≤ 1500 tons	One test from production, load-out, or placement at the contractor’s option <sup>[1]</sup>
> 1500 tons and ≤ 6000 tons	Two tests of the same type, either from production, load-out, or placement at the contractor’s option <sup>[1]</sup>

> 6000 tons and ≤ 9000 tons	Three placement tests <sup>[2][3]</sup>
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<sup>[1]</sup> If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

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

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

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.

4. Department verification testing is optional for quantities of 6000 tons or less.

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

## **B Materials**

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

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

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.

2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.

3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.

4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.

5. Descriptions of stockpiling and hauling methods.

6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.

7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

### **B.2 Personnel**

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

<b>Required Certification Level:</b>	<b>Sampling or Testing Roles:</b>
Aggregate Technician IPP	Aggregate Sampling <sup>[1]</sup>



Aggregate Sampling Technician Aggregate Assistant Certified Technician (ACT-AGG)	
Aggregate Technician IPP Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

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

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

### **B.3 Laboratory**

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

Materials Management Section  
3502 Kinsman Blvd.  
Madison, WI 53704  
Telephone: (608) 246-5388

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

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

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

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

#### **B.4.2 Records**

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

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

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a

method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:

1. Contractor individual QC tests.
  2. Department QV tests.
  3. Department IA tests.
  4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

## **B.5 Contractor Testing**

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

## **B.6 Test Methods**

### **B.6.1 Gradation**

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:  
Gradation..... AASHTO T 27  
Material finer than the No. 200 sieve..... AASHTO T 11

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

#### **B.6.2 Fracture**

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

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

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

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

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

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

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

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

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

## **B.8 Department Testing**

### **B.8.1 General**

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

### **B.8.2 Verification Testing**

#### **B.8.2.1 General**

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing

personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

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

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

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

### **B.9 Dispute Resolution**

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department

and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

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

**C (Vacant)**

**D (Vacant)**

**E Payment**

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

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**21. Asphalt Pavement – General.**

**A HMA Pavement Type E-10**

Perform this work in accordance to standard spec 460 and as hereinafter provided.

Provide to the city the results from the Freeze / Thaw Test (AASHTO T103) for quarried course aggregates used in the work produced from limestone / dolomite sources. The maximum percent loss for aggregates retained on the No. 4 sieve shall be four percent.

**B Asphaltic Surface Temporary**

Perform this work in accordance to standard spec 460 and 465 and as hereinafter provided.

Use HMA Pavement Type E-1 mix for Asphaltic Surface Temporary.

Removal of asphalt surface temporary will be incidental to the items of removing pavement or removing asphaltic pavement.

### **C Night Paving**

Upper layer asphalt paving operations may be conducted during nighttime hours. Conform to the requirements of the special provision Public Convenience and Safety.

## **22. QMP HMA Pavement Nuclear Density.**

### **A Description**

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

- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
  1. Selection of test sites.
  2. Testing.
  3. Necessary adjustments in the process.
  4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:  
<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>
- (4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:  
<http://www.atwoodsystems.com/mrs>

### **B Materials**

#### **B.1 Personnel**

- (1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.
- (2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician

ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

## **B.2 Testing**

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

## **B.3 Equipment**

### **B.3.1 General**

- (1) Furnish nuclear gauges from the department's approved product list at <http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm>.
- (2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.
- (3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:  
Materials Management Section  
3502 Kinsman Blvd.  
Madison, Wisconsin 53704  
Telephone: (608) 243-5998

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

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

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



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

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

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.
- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft<sup>3</sup> of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft<sup>3</sup> of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

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

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

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

- (1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.
- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.
- (5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites

when performing the tests. Perform density tests prior to opening the roadway to traffic.

- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

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

**Table 1**

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

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

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

**Table 2**

#### **B.4.2 Pavement Density Determination**

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

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

tonnage from any such subplot is subject to disincentive pay according to standard spec 460.5.2.2.

#### **B.4.2.2 Mainline Shoulders**

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

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

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

- (1) If all subplot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- (2) If a subplot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

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

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

##### **B.4.2.4 Documentation**

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

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

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- (2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted subplot. Testing in a previously accepted subplot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full subplot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.

- (5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the subplot and lot densities.
- (6) If 2 consecutive subplot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

## **B.5 Department Testing**

### **B.5.1 Verification Testing**

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

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

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

## **B.6 Dispute Resolution**

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.
- (2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- (3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV subplot density test results or retesting of the subplot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

## **B.7 Acceptance**

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

## **C (Vacant)**

## **D (Vacant)**

## **E Payment**

### **E.1 QMP Testing**

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

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

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

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

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

<b>Percent Lot Density Above Minimum</b>	<b>Pay Adjustment Per Ton</b>
--	-------------------------------

From -0.4 to 1.0 inclusive	\$0
From 1.1 to 1.8 inclusive	\$0.40
More than 1.8	\$0.80

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

## **23. Reheating HMA Pavement Longitudinal Joints, Item 460.4100.S.**

### **A Description**

This special provision describes reheating the abutting edge of the previously compacted surface 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 surface layer in the adjacent lane as follows:

- Ambient air temperature at or above 60 degrees F (15 degrees C), reheat to 290 to 340 degrees F (143-171 degrees C).
- Ambient air temperature below 60 degrees F (15 degrees C), reheat to 240 to 290 degrees F (115-143 degrees C).

The engineer may modify the required joint reheat temperatures 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 full 100-foot (40 m) survey station acceptably completed as measured along the joint. The department will measure partial stations as full stations.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
460.4100.S	Reheating HMA Pavement Longitudinal Joints	STA

Payment is full compensation for furnishing all the work required under this bid item. 460-015 (20090901)

**24. Concrete Collar, Item 520.8000.S.**

**A Description**

This special provision describes constructing a concrete collar as shown on the plans and as hereinafter provided.

**B Materials**

Provide concrete masonry in accordance to standard spec 501.

**C (Vacant)**

**D Measurement**

The department will measure Concrete Collar 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
520.8000.S	Concrete Collar	Each

Payment is full compensation for furnishing, hauling and placing of all materials; and for excavation, backfilling and disposing of excess material.

**25. Curb Ramp Detectable Warning Fields.**

*Revise standard spec 602.2(3) as follows:*

Furnish Curb Ramp Detectable Warning Fields, which shall be cast iron set in the concrete, manufactured by East Jordan Ironworks, Neenah Foundry, Pioneer Detectable LLC or equivalent.

**26. Storm Sewer – General.**

Construct all round and elliptical shape storm sewers in accordance to the pertinent provisions of standard spec 608, standard spec 610 and standard spec 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. 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 standard spec 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 in accordance to standard spec 305.2.1 or when water is encountered, No. 1 coarse concrete aggregate in accordance 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.

Dewatering trenches is included in the bid items for all storm sewer pipe installation. Sheetpile required for dewatering shall be incidental to the unit price for all storm sewer pipe installation.

Construct all inlets rectangular in shape. 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 in accordance to subsection 305.2.1 of the standard specifications or when water is encountered, No. 1 coarse concrete aggregate in accordance to standard spec 501.3.6.4.5, and as shown on the plans. Bedding for structures is included in the bid items for the installation of the structure.

Bid all structures (manholes and inlets) as field poured, and construct all structures as field-poured unless the contractor receives approval of the City of Madison design engineer to precast the structures. This approval will not be given until it can be confirmed that the proposed design will fit existing conditions including possible utility conflicts. No precast approval shall be authorized for any structure until such time as all ULO's that could affect the structure/structures in question have been completed and the City of Madison design engineer has had a minimum of three working days to review all the relevant information.

Submit shop drawings for all precast structures to the City of Madison design engineer. The city design engineer will have three days to approve or reject the shop drawings. Obtain written approval of shop drawings for all precast structures prior to delivery or use on construction 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 and the costs to plug pipes for future use including tapping the hole, placing the pipe and sealing the joint, furnishing and installing a plugging device as specified above, will be included in the unit price bid for the pipe of the type, class and diameter used. The cost for a concrete collar for storm sewer, where shown on the plans or directed by the engineer, will be paid for separately.

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 Rennie Richardson, City of Madison Department of Public Works at (608) 267-1973 to schedule pickup. Payment for this is included in storm sewer bid items.

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

Removing existing sections of storm sewer pipe, all connections to existing storm sewer pipe and capping of storm sewer pipes is incidental to the associated items of Storm Sewer Pipe Reinforced Concrete Class III (size) and Relaid Storm Sewer (size) as shown on the plans and specified in the contract.

## **27. Adjusting Manhole Covers.**

This work shall be in accordance to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided.

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.

611-005 (20030820)

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

### **A Description**

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

### **B Materials**

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

### **C (Vacant)**

### **D Measurement**

The department will measure Cover Plates Temporary, acceptably completed in place, as units.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	Each

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

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

611-006 (20030820)

## **29. Seeding – General.**

Conduct this work in accordance to the pertinent provisions of standard spec 630, as shown on the plans and as hereinafter provided.

Revise standard spec 630.2.1.5.1.1.1 by providing the following mixture proportions for Seeding Mixture No. 80.

Species	Species Botanical Name	Mixture Proportions (in percent)
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Sideoats Grama	Bouteloua Curtipendula	25
Canada Wildrye	Elymus Canadensis	25
Slender Wheatgrass	Elymus Trachycaulus	20
Annual Ryegrass	Lolium Multiflorum	10
Switchgrass	Puccinella Virgatum	10
Little Bluestem	Schizachyrium (Andropogon) Scoparium	10

### 30. **Field Facilities.**

*Replace standard spec 642.2.2.1 (1) with the following:*

Provide the field office with up to three communication services, designated as follows: 1-voice, 1-fax, and 1-high speed Internet connection for computer(s) at setting no less than 384 K and up to 1 MB. The high speed Internet connection must utilize either DHCP or PPPoE as the connection method and may be combined with the fax service.

Provide two programmable touch-tone telephones of which one will be a cordless type operating at no less than 2.4 GHz and one will have an answering machine unless voice mail service is available. The telephones and the communication services are for the sole purpose of the department staff.

642-005 (20080902)

### 31. **Traffic Control Covering Signs, Item 643.0905.S.**

#### **A Description**

This special provision describes covering sign messages, maintaining the sign covering, and removing the sign covering, as shown on the plan and as hereinafter provided. The covered sign message shall be unreadable during daytime and nighttime hours.

#### **B Materials**

Provide covering material of sufficient durability to withstand the effects of weather. Provide porous cloth or sheet aluminum covering. If porous cloth covers are provided, only provide those that do not allow light to reflect from the sign face at night.

Tape, paper, plastic, or sheet metal covers will not be allowed.

#### **C Construction**

If porous cloth covering is provided, fold porous cloth covers over the sign edges and secure to the back of the sign. When only a portion of the sign is to be covered, cover only the area of the sign designated to be covered with the cloth cover held tightly in place using a rope system or other system as approved by the engineer. Secure the cloth so that it will not flap against the sign face.

If sheet aluminum covers are provided, rivet the covering to the sign face. Provide rivets that are a maximum of 3/16-inch in diameter. When only a portion of the sign is to be covered, provide aluminum cover sheeting that has on its face the same color as the surrounding sign.

**D Measurement**

The department will measure Traffic Control Covering Signs in units for each sign covered. Multiple covers on the same sign will be paid for separately. Multiple coverings and removals of sign coverings on the same sign will be paid for separately.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
643.0905.S	Traffic Control Covering Signs	Each

Payment is full compensation for furnishing, installing, maintaining, and removing sign covers.

643-040 (20050502)

**32. Signing – General.**

All removed signs as specified in the contract are property of the contractor and may be used for temporary signing.

The City of Madison will remove all street name signs. The city will also install and maintain all temporary and permanent street name, bike route and Madison Metro signs. 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 providing and 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.

Sign R7-1 “no parking anytime” is modified to remove the bottom directional arrow.

**33. General Provisions for Water Main.**

**Contact Information:**

City of Madison Water Utility  
Dennis Cawley  
Phone: (608) 261-9243  
E-mail: dcawley@madisonwater.org

**Utility Standard Specifications:** Perform work in accordance to these provisions and the latest edition of the City of Madison Standard Specifications for Public Works Construction (March 1, 2011 or most recent), hereinafter referred to as the *City Standard Specifications*.

**Work Sequence:** As construction staging and sequence allows, disinfect the new water mains. The city Water Utility will flush and test all newly installed water mains. Coordinate as necessary with the city 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.

Valves at connections of the new water main to the existing water main shall remain 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, arrange sequencing 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, cut off the existing water main, drain, plug open ends or bulkhead with concrete, and the abandon pipe in place.

Do not exclusively use station and offset, as given in the water main plans, for fire hydrants exclusively for final layout of the hydrant. Determine the curb line, sidewalk limits, and confirmed existing utilities in the area of the hydrant prior to the installation of the hydrant to assure the proper location of the hydrant relative to the curb line.

**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 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.

#### **34. General Requirements for Electrical Work.**

*Replace standard spec 651.2(6) with the following:*

The approved products list is located at:

<http://www.dot.wisconsin.gov/business/engrserv/docs/ap0/electrical.pdf>

#### **35. General Provisions for City Traffic Signals.**

Perform all work on the lighting and conduit/pull box system in accordance 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. 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 including those that also have traffic signal equipment on them.

Each pedestrian push button installation shall include “Push Button for Walk Signal” signs. Also provide single direction arrow signing with all buttons except two direction arrow signing is needed for single buttons on median poles.

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

### **36. General Provisions for City 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 and to the satisfaction of the engineer. 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.

### **37. General Provisions for City Electrical Systems.**

#### **A General Requirements**

Perform this work in accordance to the Wisconsin Electrical Code, National Electrical Contractor's Association (NECA) electrical construction practices, OSHA and the standard specifications.

Upon completion of the work, or a portion of the work, notify the engineer that the work is ready for inspection by the engineer.

Perform all work on the lighting and conduit/pull box system in accordance 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 as selected by the city. Stockpile at a location on the right-of-way outside the construction limits for pickup by City of Madison personnel. Contact Dennis Rowe at (608) 266-4767 to schedule pickup. Prior to removal, the electrical handholes, light poles, mast arms, and luminaires shall be inspected by representatives from the city, contractor, and the engineer to assess their original condition. Remove from the right-of-way and dispose of poles, arms, breakaway bases and luminaires that the city does not want. Dispose of lamps in approved manner as determined by EPA regulations.

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, in accordance 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 journeyworker 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.

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 in accordance to the electrical plans and specifications, using only the best of materials available and installed in a substantial manner by experienced labor.

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#4 and 1#8 green wire. The color coding for the #4 wire shall be one black, one red, and one white.

Ground wires shall have green insulation. 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, structures and ducts, 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 in accordance 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 are 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**

Complete splices to 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**

Liberally coat all threaded fasteners, i.e., screws, and bolts with an approved anti-seize compound. Excepting fasteners inside control cabinets, fasteners up to ½-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**

Coordinate with the engineer 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 inspector.

### **J Items of the Same Classification**

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

### **K 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 associated with arranging and waiting for inspections.

## **38. Rock Excavation for Water Main Installation, Item SPV.0035.01.**

### **A Description**

This special provision describes rock excavation for water main installation.

Soil investigations have indicated the possible presence of rock on CTH D (Fish Hatchery Road) between Station 34+50 to 35+70 and Station 37+60 to 38+50, within areas of proposed water main and fitting installations. Complete rock excavation to include all hard solid rock in ledges, bedded deposits, unstratified masses, conglomerate deposits, or any other material so firmly cemented as to present the characteristics of solid rock. If determined by the engineer that such material is so hard or so firmly cemented that it is not practical to excavate and remove such material with a power shovel, it shall be thoroughly and continuously drilled and blasted prior to removal. The term "power shovel" applies to a modern track mounted power shovel or backhoe of not less than three-quarter (3/4) cubic yard manufacturer's rated capacity, having adequate power and being in good running condition in the hands of an experienced operator.

This item also includes removal of all rock boulders necessary having a volume of one cubic yard (27 cubic feet) or more. Rock excavation shall not apply to plain or asphalt-bound bases or surface courses of macadam, gravel, or broken stone.

### **B (Vacant)**

**C Construction**

When rock excavation is necessary, remove all rock to provide a clearance below and on each side of all pipe, valves and fittings of at least 6 inches for nominal pipe sizes 24 inches or smaller, and 9 inches for nominal pipe sizes 30 inches or larger. When rock excavation is complete, refill this portion of the trench with select fill and mechanically compact the select fill prior to laying the pipe. In every case, provide a uniform bearing along the entire pipe length and do not lay pipe directly on rock. The width of rock excavation shall be limited to the outside diameter of the pipe plus 2 feet.

**D Measurement**

The department will measure Rock Excavation for Water Main Installation by the cubic yard, acceptably completed. Compute the volume in cubic yards from those measurements. Volumes shall be neat line. The vertical measurements shall extend from the surface of the rock to an elevation 6 inches below the bottom of the pipe or structure; the horizontal measurements shall be limited to the outside diameter of the pipe or outside width of the structure plus 2 feet. Boulders 1/2 cubic yard or more in volume will be measured individually, and the volume of each boulder computed from average dimensions taken in three directions.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Rock Excavation for Water Main	CY

Payment is full compensation for excavation of the rock; disposal of surplus material from the excavation; replacement with approved material of any shortage of backfill material resulting from rock excavation; and all other work incidental to rock excavation.

**39. Utility Line Opening (ULO), Item SPV.0060.01.**

**A Description**

This special provision describes excavating to uncover utilities for the purpose of determining elevation and potential conflicts as shown on the plans or as directed by the engineer.

**B (Vacant)**

**C Construction**

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

Perform the utility line openings 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. Give the engineer a minimum of three working days once utility line opening information is received to review all relevant design information prior to proposed utility

construction. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening is called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Approve and coordinate all utility line openings with the engineer. Notify the utility field 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.

Replace pavement over utility line opening trenches which are within the staged traffic area with Asphaltic Surface Temporary. Replace pavement and open to traffic within 24 hours of the excavation.

**D Measurement**

The department will measure Utility Line Opening (ULO) as each individual ULO unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Utility Line Opening (ULO)	Each

Payment is full compensation for the excavation required to expose the utility line; backfilling with existing material removed from the excavation; compacting the backfill material; restoring the site; cleanup; and for furnishing all labor, tools, equipment, transportation, and incidentals to perform the work.

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

**40. Precast Sign Post Base, Item SPV.0060.02.**

**A Description**

This special provision describes constructing and installing the 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	Section 501
Steel Reinforcement	Section 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**

The base shall consist of a 24-inch x 11-inch precast base formed in accordance 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; construct to that it remains 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.

**C.1. Installation**

Set the signpost bases at the locations shown on the plans. Construct the center of the finished installation to be 5'0" + inches 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.

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 material used for backfilling around the base in 6-inch layers to ensure the installation will remain plumb.

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

**D Measurement**

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

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Precast Sign Post Base	Each

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

#### **41. Sign Post Base for Concrete Installation, Item SPV.0060.03.**

##### **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 Thorogrip 29/64 or equivalent, US Spec Anchoring Cement, or Unitex Anchoring Cement, or approved equal.

##### **C Construction**

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

##### **C.1. Installation**

Set the signpost bases at the locations shown on the plans. Construct the center of the finished installation to be 5'0" (2'6" 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.

Install base by drilling or core drilling a 3" hole all the way through the concrete to the base material. With a temporary pipe 4 to 5 feet long, hand-tighten it into the insert (see insert detail). 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. Construct the installation so that it is level/plumb, solid, and able to support required sign post and signs. Construct the patch so that it is flush with adjacent concrete without exposed shims.

Coat the threads of the pipe and coupling in the with graphite grease prior to assembly. Install the base such that the installed sign post will be plumb.

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

**D Measurement**

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

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	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 for anchoring cement.

**42. Temporary Curb Ramp, Item SPV.0060.04.**

**A Description**

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

**B Materials**

Furnish asphaltic surface in accordance to standard spec 465.2 (2) or furnish concrete in accordance to standard spec 606.2.

Furnish 4-Inch diameter polyvinyl chloride drainage pipe conforming to AASHTO M 278.

Furnish a protective layer for use in protecting the existing curb and gutter and existing pavement from asphaltic surface temporary in order to allow easy removal of asphaltic surface. Approve the protective layer material with the engineer.

**C Construction**

Place 4-Inch PVC drainage pipe in the flow line of the curb and gutter to maintain storm water drainage.

Place a protective layer between the existing curb and gutter or existing pavement and the asphaltic surface or concrete for temporary curb ramp.

For the portion of the temporary curb ramp in the terrace area, form the foundation by excavating at least 3 inches. Tamp or compact the foundation to ensure stability.



Place asphaltic surface temporary in accordance to standard spec 465.3.1 or place concrete in accordance to standard spec 602.3.2.3, and as shown in the plan.

Maintain temporary curb ramps until permanent curb ramps and crosswalks are in place and open to pedestrian traffic as directed by the engineer.

Remove temporary curb ramps once permanent curb ramps and crosswalks are open and restore the site.

**D Measurement**

The department will measure Temporary Curb Ramp as each individual temporary curb ramp, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Temporary Curb Ramp	Each

Payment is full compensation for providing all materials; for excavating and preparing the foundation; backfilling and disposing of surplus material; for constructing; for removing; and for restoring the work site.

**43. Temporary Bus Stop Pad, Item SPV.0060.05.**

**A Description**

This special provision describes furnishing, maintaining, moving, and removing temporary pavement for Temporary Bus Stop Pads in the median during construction and for Temporary Bus Stop Pads in the terrace, as shown on the plans.

**B Materials**

Furnish asphaltic surface temporary in accordance to standard spec 465.2 (2) or furnish concrete in accordance to standard spec 602.2.

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

Furnish fence fabric meeting the following requirements.

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

**C Construction**

Construct temporary bus stop pads 10 feet long by 6 feet wide (or the width of the terrace) that meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Form the foundation by excavating at least 3 inches. Tamp or compact the foundation to ensure stability.

Place 3 inches of Asphaltic Surface Temporary in accordance to standard spec 465.3.1 or place three inches of concrete in accordance to standard spec 602.3.2.3, and as shown in the plan.

Separate temporary bus stop pads in the median from construction operations with orange safety fence and locate them outside the immediate work area, as directed by the engineer. Connect temporary bus stop pads in the median to crosswalks and permanent sidewalks by Temporary Crosswalk Access, which will be paid for separately.

Reconstruct or move temporary bus stop pads if required for utility installation or paving operations.

Temporary bus stop signs and poles will be furnished and installed by Madison Metro.

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 Temporary Bus Stop Pad by the unit acceptably installed, maintained, and removed in accordance to the contract.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Temporary Bus Stop Pad	Each

Payment is full compensation for furnishing and installing all materials; for constructing; for reconstructing or moving; for removing; 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.

**44. Temporary Pavement Marking Symbols Railroad Crossing, Item SPV.0060.06.**

**A Description**

This special provision describes furnishing all materials and labor for providing temporary railroad crossing symbols at the locations shown in the plans.

**B Materials**

All materials shall conform to standard spec 649.2 Temporary Pavement Marking.

**C Construction**

All construction shall conform to standard spec 649.3 Temporary Pavement Marking and be in accordance to standard detail drawing Pavement Marking, Signing and Pavement Marking Details for Railroad – Highway Grade Crossings.

**D Measurement**

The department will measure Temporary Pavement Marking Symbols Railroad Crossing as each individual temporary pavement marking symbols railroad crossing, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Temporary Pavement Marking Symbols Railroad Crossing	Each

Payment is full compensation for providing all materials, equipment and labor for the specified work.

**45. Temporary Crosswalk Access, Item SPV.0060.07.**

**A Description**

This special provision describes furnishing, installing, maintaining and removing temporary access for pedestrian crossings and access of the project area at locations designated in the plans.

**B (Vacant)**

**C Construction**

Maintain pedestrian movements crossing the construction zone as shown in the plan details at locations designated on the plans. Pedestrian crossings of intersections shall meet requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and shall consist of temporary asphaltic surface. Gravel or base course material is not acceptable. Maintain ADA accessible pedestrian walkways that are free from mud, sand, and construction debris. Any closures of sidewalk shall be approved by the engineer and shall conform to City of Madison standard detail drawing 6.36 in

addition to any signing shown on the traffic control plan. At locations where crosswalks crossing CTH D (Fish Hatchery Road) exist on both sides of the intersection, contractor may close one of the two crosswalks as long as all other crossings are completely open. At intersections where only one crosswalk exists crossing CTH D (Fish Hatchery Road), contractor shall stage work to maintain crosswalk at all times.

In areas of sidewalk construction, provide a temporary surface for pedestrian access at all times. The temporary surface shall meet Americans with Disabilities Act Accessibility Guidelines (ADAAG) requirements and shall consist of temporary asphaltic surface, any grade of concrete, skid resistant steel plating, or alternative material as approved by the engineer. Gravel or base course material is not acceptable. Maintaining sidewalk is considered incidental to the contract. Maintain sidewalk access to all businesses at all times.

**D Measurement**

The department will measure Temporary Crosswalk Access, as each individual temporary crosswalk access, 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.0600.07	Temporary Crosswalk Access	Each

Payment is full compensation for furnishing, hauling and placing all materials.

**46. Maintenance, Protection and Adjusting Groundwater Monitoring Well, Item SPV.0060.08.**

**A Description**

This special provision describes maintaining and protecting groundwater monitoring wells and piping during construction activities as well as adjusting groundwater monitoring wells vertically to the finished roadway grade, and as hereinafter provided. Others have constructed groundwater monitoring wells located at Station 36+80 , 9' LT; 36+88, 9' LT; 36+96, 12' LT; 36+97, 8' LT; 37+02, 11' LT; 38+17, 10.5' LT and 39+09, 13' LT. Additionally, there are 2-2" PVC horizontal injection lines 4-5 feet below ground which begin at the monitoring well located at Station 36+50 RT and extend northwesterly under the roadway lanes to behind the west sidewalk at Station 37+60 LT.

These wells are located within the median islands of CTH D (Fish Hatchery Road). Exercise care and do not disturb or damage the wells during construction. Monitoring well covers require adjustment to the final grade elevation.

Contact Wendell Wojner, Wisconsin Department of Natural Resources, at (608) 275-3297 3 days prior to excavation in the vicinity of the groundwater monitoring wells and piping, and 3 days prior to adjustment of the groundwater monitoring wells to

their finished grade. Notify Mr. Wojner immediately of any damage to the groundwater monitoring wells and/or associated piping.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Maintenance, Protection and Adjusting Groundwater Monitoring Well as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Maintenance, Protection and Adjusting Groundwater Monitoring Well	Each

Payment is full compensation for protecting, maintaining and adjusting groundwater monitoring.

**47. Cut-In Connection, Item SPV.0060.09.**

**A Description**

This special provision describes Cut-In Connections consisting of all means and methods, equipment, tools, labor, etc. necessary for making a cut-in connection to the existing water main where designated on the drawings in accordance to Section 703.6 of the *City Standard Specifications*. Any associated concrete capping pipe or mechanical joint capping required due the cut-in connection is incidental to this work; construct to provide a water-tight seal.

**B Materials**

All materials used for this work shall conform to the requirements of section 702 of the *City Standard Specifications*.

**C Construction**

Complete all work associated with Cut-In Connections to conform to section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Cut-In Connections per each conducted as a completed unit, in accordance to section 704.5 of the *City Standard Specifications*.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
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SPV.0060.09

Cut-In Connection

Each

Payment is full compensation for each Cut-In Connection including the excavation required to expose the utility line, imported select fill, backfilling and compacting the excavation; all tools, equipment, labor, and materials required, restoring and maintaining the site, and all other work incidental to the Cut-In Connection.

**48. Furnish and Install Hydrant, Item SPV.0060.10.**

**A Description**

This special provision describes furnishing and installing new fire hydrants as shown on the plans in accordance to section 704.7 of the *City Standard Specifications*.

**B Materials**

Furnish materials in accordance to section 702.4 of the *City Standard Specifications*.

**C Construction**

Install all hydrants in accordance to Section 703.8 and Standard Detail Drawing 7.04 of the City of Madison *City Standard Specifications*, unless otherwise shown or specified.

**D Measurement**

The department will measure Furnish and Install Hydrant as each individual hydrant, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Furnish and Install Hydrant	Each

Payment is full compensation for furnishing all materials, except as noted in the specific contract documents, excavation, sheeting and bracing, dewatering, backfilling and compaction necessary to connect the hydrant to the water main, installing the necessary rock and plastic to provide a proper drain field for the hydrant, furnishing and installing the concrete thrust blocking behind the hydrant and all other work which may be incidental to the installation of the hydrant.

**49. Cut Off Existing Water Main, Item SPV.0060.11.**

**A Description**

This special provision describes abandoning the existing water mains at the locations shown or as designated by the engineer in accordance 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. All work under this section shall comply with Section 703.15 of the *City Standard Specifications*.

**D Measurement**

The department will measure Cut Off Existing Water Main per unit for each complete individual cutoff made in accordance to the *City Standard Specifications*. This item will not be measured for work associated with Cut-In Connections.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Cut Off Existing Water Main	Each

Payment is full compensation for furnishing all work in cutting off the water main as specified herein.

**50. Abandon Water Valve, Item SPV.0060.12.**

**A Description**

This special provision describes 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 in accordance 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. This item also includes, but is not necessarily limited to all materials, equipment, labor, select fill and incidentals necessary to complete the work.

**B Materials**

All materials used for this work shall comply with section 702 of the *City Standard Specifications*.

**C Construction**

Complete all associated work to conform to the requirements of section 703 of the *City Standard Specifications*. Complete all work after the existing water main has been abandoned. Remove the top casting to a point 3 feet below the existing elevation, then backfill the opening with select fill and compact.

**D Measurement**

The department will measure Abandon Water Valve as each individual abandoned water valve unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Abandon Water Valve	Each

Payment is full compensation for furnishing all work in abandoning the water valve box as specified herein.

**51. Abandon Hydrant, Item SPV.0060.13.**

**A Description**

This special provision describes abandoning all fire hydrants identified on the drawings to be abandoned per section 704.16 of the *City Standard Specifications*. This item includes but is not necessarily limited to; all materials, equipment, labor, select fill and incidentals necessary to complete the work.

**B Materials**

Materials shall conform to section 702 of the *City Standard Specifications*.

**C Construction**

Work shall conform to section 703.16 of the *City Standard Specifications*, and shall only take place 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 the 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 individual abandoned hydrant unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.13	Abandon Hydrant	Each

Payment is full compensation for furnishing all work in abandoning the hydrant as specified herein.

**52. Adjust Water Valve Box, Item SPV.0060.14.**

**A Description**

This special provision describes adjusting all existing water valve boxes within the project limits to between ¼ inch to ½ inch below finished grade. Adjustment of new valve



boxes is incidental to water main construction, and will not be paid under this item. This item includes all materials, equipment, labor, and incidentals necessary to complete this work, and shall be conducted in accordance to section 704.18 of the *City Standard Specifications*.

**B Materials**

All materials shall conform to the requirements of section 702 of the *City Standard Specifications*.

**C Construction**

Complete all work associated with adjust water valve box to conform to the requirements of 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 in accordance 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 adjusted water valve box unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Adjust Water Valve Box	Each

Payment is full compensation for furnishing all work in adjusting the water valve box as specified herein.

**53. Furnish and Install 6-Inch Valve, Item SPV.0060.15; Furnish and Install 8-Inch Valve, Item SPV.0060.16; Furnish and Install 12-Inch Valve, Item SPV.0060.17.**

**A Description**

This special provision describes furnishing and installing all valves as identified on the plan and as required to complete the installation of the proposed water main in accordance 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 to be included in these items.

**B Materials**

Furnish materials in accordance to section 702 of the *City Standard Specifications*.

**C Construction**

Make valve installations in accordance to section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Furnish and Install (Size) Valve per completed unit, accordance with section 704.27 of the *City Standard Specifications*.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.15	Furnish and Install 6-Inch Valve	Each
SPV.0060.16	Furnish and Install 8-Inch Valve	Each
SPV.0060.17	Furnish and Install 12-Inch Valve	Each

Payment is full compensation for 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; all tools, labor, equipment, restraint, polyethylene encasement, thrust restraint and any other appurtenances required to furnish and install valves as required.

**54. Disconnect and Reconnect Service Lateral 1-Inch, Item SPV.0060.18; Disconnect and Reconnect Service Lateral 1.5 or 2-Inch, Item SPV.0060.19.**

**A Description**

This special provision describes cutting off and reconnecting the existing copper water service laterals to the new water main that results in a shorter water service lateral. Furnish all materials for tapping the new main and reconnecting the copper water service laterals. The task 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.

**B Materials**

All materials shall conform to the requirements of section 702 of the *City Standard Specifications*.

**C Construction**

Complete all associated work shall to conform to the requirements of section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Disconnect and Reconnect Service Lateral (Inch) as each complete cutoff and reconnection unit made in accordance to the *City Standard Specifications*.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.18	Disconnect and Reconnect Service Lateral – 1-Inch	Each
SPV.0060.19	Disconnect and Reconnect Service Lateral – 1.5 or 2 Inch	Each

Payment is full compensation for furnishing all associated work as specified herein.

**55. Furnish Excavation and Ditch for Live Tap, Item SPV.0060.20.**

**A Description**

This special provision describes excavating and preparing the ditch for the Madison Water Utility to perform a live-tap connection on an existing water main (may also be noted on the plans as “Pressure Tap”). This task includes but is not necessarily limited to; all excavation including shoring/trench protection, and water removal as necessary to expose the existing water main; clearing and preparing a suitable work area in the ditch for Madison Water Utility to perform the connection; backfill; backfilling the excavation; compacting the backfill material; restoring and maintaining the site and all other work incidental to preparing the ditch.

**B Materials**

All materials shall conform to the requirements of section 702 of the *City Standard Specifications*.

**C Construction**

Complete all associated work shall to conform to the requirements of section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Furnish Excavation and Ditch for Live Tap as each individual complete live-tap connection 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.0060.20	Furnish Excavation and Ditch for Live Tap	Each

Payment is full compensation for furnishing all associated work as specified herein.

**56. Type I Handhole, Item SPV.0060.21; Type III Handhole, Item SPV.0060.22; Type V Handhole, Item SPV.0060.23.**

**A Description**

This special provision describes furnishing and installing pull boxes and manholes in accordance to standard spec 653, the plan details, and as herein provided.

**B Materials**

Type I Handhole shall be gray colored polymer concrete construction. Box dimensions for Type I shall be 19” wide x 32” long x 24” deep and come with a cover rated to withstand 15,000 lbs over a 10” square with a minimum test load of 22,568 lbs.

Type III Handhole 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.

Type V Handhole shall be gray colored polymer concrete construction. Box dimensions shall be 24” wide by 36” long by 24” deep. The box and cover shall be rated at 15,000 lbs over a 10” square. Each cover shall have the logo “TRAFFIC SIGNAL” imprinted from the manufacturer.

**C Construction**

Install in accordance to the pertinent provisions of standard spec 653.3 and the plan details.

**D Measurement**

The department will measure (Type) Handhole as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.21	Type I Handhole	Each
SPV.0060.22	Type III Handhole	Each
SPV.0060.23	Type V Handhole	Each

Payment is full compensation for furnishing and installing all materials, including crushed aggregate; and for excavation, backfill, and disposal of surplus materials.

**57. Electric Utility Access Structure, Item SPV.0060.24.**

**A Description**

This special provision describes furnishing and installing Electrical Utility Access Structures in accordance to the applicable provisions of standard spec 611 and as detailed in the plans.

**B (Vacant)**

**C Construction**

Install in accordance to the pertinent provisions of standard spec 611 and the plan details.

**D Measurement**

The department will measure Electric Utility Access Structure as each individual electrical utility access structure unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.24	Electric Utility Access Structure	Each

Payment is full compensation for furnishing and installing all materials, including crushed aggregate; for excavation, backfill, and disposal of surplus materials.

**58. Concrete Base Type G, Item SPV.0060.25; Concrete Base Type LB-3, Item SPV. 0060.26; Concrete Base Type LB-8, Item SPV.0060.27; Concrete Base Type P, Item SPV.0060.28.**

**A Description**

This special provision describes construction of concrete foundations, including necessary hardware, as shown on the plans, in accordance 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 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 inch including 4 inch L-bend at the bottom. The Type P and M bases shall include a concrete maintenance platform. Construct the Type P bases in accordance to the Concrete Control Cabinet Base Standard Detail. Confirm the location of the conduits in the base 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 section 505 of the standard specifications.

**C Construction**

Place the bases with one side parallel to the centerline of the street. Construct forms to 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. Construct the top surface of the base to be level with a 3/4 inch bevel on the edges and shall be given 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 by the contractor, except as noted on the details. Install elbows 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. Extend existing conduit into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Install an extra elbow in base at the end of a run shall as directed by the engineer. Install extra elbows in any base as directed by the engineer.

Do not erect poles 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 (Type) as each individual concrete base unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.25	Concrete Base Type G	Each
SPV.0060.26	Concrete Base Type LB-3	Each
SPV.0060.27	Concrete Base Type LB-8	Each
SPV.0060.28	Concrete Base Type P	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, and for backfill, and disposal of surplus materials.

**59. Transformer Base 20-Inch Steel, Item SPV.0060.29.**

**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 in accordance 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. All such material shall be hot-dipped galvanized and be of sufficient size and strength to exceed the capacity of the bases. 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 in accordance to the manufacturer's instructions, contract plans and specifications. Some of the bases may be required to be installed under existing streetlight poles. In such cases, lift and reinstall the existing light pole as part of this bid item. New streetlight pole wire may be needed to reconnect the luminaire to the circuit.

**D Measurement**

The department will measure Transformer Bases, 20-Inch Steel, as each individual transformer base unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.29	Transformer Base 20-Inch Steel	Each

Payment is full compensation furnishing and installing transformer bases, streetlight pole wire, mechanical grounding connector and related hardware; and for leveling shims when required.

**60. Monotube Pole Type 9, Item SPV.0060.30; Monotube Arm 30-Foot, Item SPV.0060.31.**

**A Description**

This special provision describes furnishing and installing poles and monotube arms for traffic signals.

**B Materials**

Design support structures, consisting of poles and arms, conforming to the completed maximum loading configurations and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph.

Along with the materials list, submit a certificate of compliance certifying that poles as furnished conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and notarized. Send a copy of the certificate and a copy of the pole shop drawings to the engineer. Furnish poles from an approved manufacturer.

Furnish shop drawings as specified in standard spec 506.3.2, except submit five copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show.

Show the width, depth, length, and thickness of all material, and list all pertinent ASTM specification designations and metal alloy designations together with the tensile strength of all metallic members.

After completing the manufacturing process, ensure that all shafts a nominal 40 feet or less in length for lighting poles only, are round, of one-piece construction, and of the specified length.

Construct poles of materials having sufficient rigidity that, with all material installed and in place as the plans show, the centerline of the shaft is vertical. Include dampers for poles as needed. If the engineer determines that vibration is a problem after a pole has been installed, install dampeners as the engineer directs.

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 in accordance to the requirements of ASTM Designation A123. The hardware shall be hotdipped galvanized in accordance to ASTM Designation A153. The galvanized finish shall be bright, shiny, and uniform. Matted or dull pole sections will not be accepted.

Provide a reinforced hand hole measuring 5 inches by 8 inches. Locate the hand hole approximately 18 inches from the bottom of the pole base plate to the center of the door. For the hand hole, include an access cover mounted to the pole by two 1/4" -20 x 3/4" hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware as required, inside the pole, 180-degrees from the handhole side of the pole.

Provide access to the grounding L-clip from the hand hole. Before galvanizing the pole, weld the grounding L-clip directly opposite the hand hole on the inside wall of the pole. Equip the top of the pole shaft with a removable, ventilated cap held securely in place by at least one 1/4" -20 x 3/4" hex-head stainless steel set screw.

Ensure that all castings are clean, smooth, and with all details well defined and true to pattern.



Attach base plates firmly to the pole shaft by welding or other approved method.

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 shaft length, manufacturer's name, 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.

Monotube arms shall have:

- A mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole.
- Stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.
- A wiring raceway.

### **C Construction**

Under each bid item, furnish and install poles, ventilated pole caps, arms, and all necessary miscellaneous hardware needed to complete the installation of the poles and arms.

Install dampeners as the plans show and for poles and arms used in configurations susceptible to vibration. If the engineer determines that vibration is a problem after a pole and arm has been installed, install dampeners as the engineer directs.

After completing erection using normal pole shaft raking techniques, ensure that the centerline of the shaft is vertical.

### **D Measurement**

The department will measure Monotube Pole, Type 9, and Monotube Arm, 30-Foot as each individual unit, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Monotube Pole Type 9	Each
SPV.0060.31	Monotube Arm 30-Foot	Each

Payment is full compensation for furnishing and installing all materials.

## **61. Pole 20-Foot 7 Gauge, Item SPV.0060.32; Pole 30-Foot 11 Gauge, Item SPV.0060.33; Pole 30-Foot 7 Gauge, Item SPV.0060.34.**

### **A Description**

This special provision describes furnishing and installing poles and arms in accordance 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 designed 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. The 20-foot 7 gauge poles will be used for supporting aluminum trombone arms holding signs and/or signal heads.

A 4" x 6-1/2" 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° clockwise from the bracket arm side of poles as viewed when looking down from the top of the pole. The center of the handhole shall 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 is 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.

All 30-foot poles shall have luminaire fixture mounting and wire raceway holes placed before being hot-dipped galvanized. 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 in accordance to the requirements of ASTM Designation A123. The hardware shall be hot-dipped galvanized in accordance 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**

Group lighting units to operate from branch circuits, which are energized by lighting contactors remotely controlled by photocell. Where a system is employed, no individual lighting units shall be controlled by photocells or time switches. Time switches control only the removal from service of the midnight circuits.

Wire each system in a manner that presents as near as is possible a balanced load at the source of supply during midnight and all-night operation.

Conductors to the luminaire shall be two No. 14 solid annealed copper, UF, 600 volt, as manufactured by General Cable, Anaconda, Rome, Kaiser, or approved equal. On all systems, the phase wire at the pole handhole shall have a secondary in-line fuse assembly, Series 64, as manufactured by Elastic Stop Nut Corporation of America, Buss Tron HEB-AA fuseholder, or approved equal, with a Bussmantype FNM or FNQ fuse, 2.0 amp for Type A and 3.0 amp for Type B luminaires.

Do not splice the phase wire between the fuse assembly and luminaire. For poles with two luminaires, two fuseholders and separate wire from each fuseholder to each luminaire shall be provided. A sufficient length of No. 14 conductor shall be installed in the pole to permit removal of this fuseholder through the handhole before disconnecting. A 24" length of #12 THHN Stranded Conductor tail shall be installed to supply wires permitting easy removal of fixture wires and fuse holder through the handhole.

Ground a tail of #4 wire from the neutral conductor to each ground rod and metal street light pole.

Use the following color coding at all street light bases:

- Midnight Circuit (red)
- All night circuit (black)
- Neutral (white)

Construct electrical splices and connections to be electrically secure and made with pressure or compression fittings as manufactured by Thomas and Betts, Burndy, 3-M (scotch lock brand) or approved equal and used as recommended by the engineer. Protect taps and splices in the following manner: coat all wire connections with a no- lox compound; build taps and splices made with irregularly shaped connectors first with insulating material, "Air Seal" #18415 manufactured by Kearney, Air Seal #18415 manufactured by Cooper Power Systems, or approved equal; fill all sharp corners and voids; over this, install 3 half lapped layers of rubber electrical tape, dielectric strength,

300 volts per mil - self vulcanizing tape, installed as per manufacturer's instructions; over this, apply 3 half lapped layers of an approved vinyl plastic electrical tape; then dip the entire splice 1" beyond the insulating material with a liberal coating of an approved electrical varnish or approved sealant providing flexible protection from oil, moisture, and corrosion. Allow the constructed splice to air dry completely before insertion into the street light pole. Construct so that all wires leaving the splice are in one direction. Hammer and retighten split bolts, when used, three times, and provide a spacer between any copper and aluminum conductors.

Connect the fuse holder to the All-Night circuit or Midnight circuit as indicated on the plans with an approved wire nut (3M or Ideal). The wire nut shall be dipped in an approved electrical varnish or approved sealant providing flexible protection from oil, moisture, and corrosion.

Connect the lighting units with the underground or overhead cable, as is applicable, and construct to provide a complete, operational system when finished.

Set and plumb metal poles with the use of leveling nuts furnished with the anchor bolts. Level luminaires after erecting and leveling the metal standards with bracket arms. The proper leveling method may be obtained from the manufacturer's instruction manual. Torque nuts on anchor and transformer bolts to 175-200 foot pounds or as directed by the engineer. Provide rust, corrosion, and anti-seize protection 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.

Attach the stranded copper ground wire that is installed as a part of base construction with an approved connector to a ground nut located inside the pole and opposite the handhole.

When transformer bases are not installed, trowel grout 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. Leave a 1/2 inch slot for drainage through the grouting on the street side at the top of the concrete base.

**D Measurement**

The department will measure Pole (description) as each individual pole unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.32	Pole 20-Foot, 7 Gauge	Each
SPV.0060.33	Pole 30-Foot, 11 Gauge	Each
SPV.0060.34	Pole 30-Foot, 7 Gauge	Each

Payment is full compensation for furnishing and installing all materials, including poles, pole wire, all hardware and fittings necessary to completely install the pole; for corrosion prevention when required; and for installing identification plaques when required.

**62. Lighting Fixtures Special Type-A, Item SPV.0060.35; Lighting Fixtures Special Type-B, Item SPV.0060.36.**

**A Description**

This special provision describes work to install city-furnished poles, luminaires, at the locations shown on the plans and in accordance to requirements of the plans and specifications.

**B Materials**

The city of Madison will furnish all luminaires, and lamps if applicable.

**C (Vacant)**

**D Measurement**

The department will measure Lighting Fixtures Special (Type) as each individual lighting fixture, 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.0060.35	Lighting Fixtures Special, Type-A	Each
SPV.0060.36	Lighting Fixtures Special, Type-B	Each

Payment is full compensation for furnishing and installing all materials, including luminaires and mounting hardware; and for making all necessary electrical connections.

**63. Remove and Reuse Street Light Base and Pole, Item SPV.0060.37.**

**A Description**

This special provision describes the removing and storing existing concrete bases, streetlight poles, including transformer bases and luminaires; and reusing the pole, transformer base and luminaire as shown on the plans and as directed by the engineer, City of Madison, and as hereinafter provided.

Complete pole, transformer base, and luminaire installations in accordance to the plans and as indicated elsewhere in this project for new poles, transformer bases, and luminaries.

**B (Vacant)**

**C Construction**

Use means and methods that will preclude damage to the concrete base, transformer base, light pole and luminaire that are to be reused. Replace any elements damaged by contractor at the contractor's expense. In lieu of reusing the existing base, the contractor may discard the existing base and construct an identical new base. There will not be any separate additional compensation if the contractor chooses to discard the existing concrete base and construct a new base.

**D Measurement**

The department will measure Remove and Reuse Street Light Base and Pole as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.37	Remove and Reuse Street Light Base Pole	Each

Payment is full compensation for removing the existing concrete base, transformer base, streetlight pole, and luminaire; storing or disposal of concrete base, construction of new concrete base (if not reusing existing base); storing of streetlight pole, luminaire; and furnishing of all hardware and fittings necessary to completely reuse the concrete base (if elected), transformer base, streetlight pole, and luminaire.

**64. Remove and Reuse Concrete Street Light Pole, Item SPV.0060.38.**

**A Description**

This special provision describes the removing and storing existing direct burial concrete streetlight poles, including luminaires; and reusing the pole and luminaire as shown on the plans and as directed by the engineer, City of Madison, and as hereinafter provided. Pole and luminaire installations shall be in accordance to the plans and as indicated elsewhere in this project for new poles and luminaries.

**B (Vacant)**

**C Construction**

Use means and methods that will preclude damage to the concrete base light pole and luminaire that are to be reused. Replace any elements damaged by contractor at the contractor's expense.

**D Measurement**

The department will measure Remove and Reuse Concrete Street Light Pole 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
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SPV.0060.38

Remove and Reuse Concrete Street Light Pole

Each

Payment is full compensation for removing the existing streetlight pole, and luminaire; storing of streetlight pole, luminaire; and furnishing of all hardware and fittings necessary to completely reuse the streetlight pole, and luminaire.

## **65. Traffic Signal Control Cabinet, Item SPV.0060.39.**

### **A Description**

This special provision describes providing, to the City of Madison, a door-in-door style, 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° F and 150° 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.

Provide the flash transfer relay with a connector (Cinch-Jones Type P-408-SB, or equivalent) and intermate with Cinch-Jones Type #S-408-SB, or equivalent.

The socket pin assignments shall be as follows:

#### **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 8½ inches out from each socket.

### **B.7 Flash Sequence Programming**

Provide a programming means 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 8½ 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**

Provide the wiring and cabinet panel arrangement for full dual ring eight phase actuated operation. Supply and wire a 12-channel conflict monitor harness in each cabinet. Construct all cabinet wiring harnesses to be neat, firm and routed to minimize crosstalk and electrical interference. Rout loop harnesses to the right (hinge) side of the cabinet and attach up to shelf level to avoid harnesses dangling in front of the door.

Route and bundle wiring containing AC separately from all low voltage control circuits. Furnish fuses and surge protection for all interconnect circuits. Cover all conductors and live terminals or parts, which could be hazardous to maintenance personnel, with suitable insulating material.

### **B.10 Terminal Blocks**

Construct terminal block connections to be a minimum of 8 inches from the bottom of the cabinet. The terminal blocks provided shall be two-position barrier type. Arrange terminal blocks so that they shall not upset the entrance, training and connection of incoming field conductors. Clearly identify all terminals and permanently associate 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.

Provide field terminal blocks for the connection of all loop detectors. Where a card rack is required, provide terminal blocks to accommodate 16 detector channels.

### **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. Supply a four-channel power supply with per-channel fusing and output indicators for each channel. Mount the card rack 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:

- Pulse or presence.
- Sensitivity, minimum of 6 levels.
- Sequentially scan channels or other suitable means to reduce crosstalk.
- Display detection and faults for each channel.
- Self tuning.

### **B.13 Power Panel**

The cabinet shall have a power distribution panel containing the following elements:

- Surge protection provided by use of a varistor or other suitable equipment. • Two 30 amp Radio Interference Suppressors.
- 50 amp single pole Main Breaker followed by dual 30 amp Main Circuit Breakers with single common trip.
- 15 amp Auxiliary Equipment Circuit Breaker.
- Two 30 amp Power Relays (Mercury Contactors).
- Neutral Bus Bar Isolated from Cabinet Ground.
- Ground Bus Bar.
- 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:

- GFCI duplex convenience outlet.
- Stop time switch.
- Controller on/off switch.
- Vehicle and pedestrian detector actuation test push buttons.
- 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. Wire the conflict monitor through the stop time switch such that when in the AUTO setting and a conflict is detected, stop timing will 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 Vendor 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 city.

**B.19 Cabinet Design for City Review Before Manufacturing.**

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, wire the cabinets 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 by each individual unit, acceptably completed, and delivered to the City of Madison.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.39	Traffic Signal Control Cabinet	Each

Payment is full compensation for furnishing and delivering all materials to the City of Madison, 1120 Sayle Street.

**66. Traffic Signal Controller, Item SPV.0060.40.**

**A Description**

This special provision describes furnishing a traffic signal controller with auxiliary equipment to the City of Madison.

**B Materials**

Furnish the following:

- Econolite ASC/3-2100 with HTR, data key, and Ethernet.
- FSK TLM 25 pin for this controller.
- Econolite TIO board with harness.
- D connector interface harness and board.

**C (Vacant)**

**D Measurement**

The department will measure Traffic Signal Controller by each individual unit, acceptably completed, and delivered to the City of Madison.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
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SPV.0060.40                      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.

**67. NEMA-Plus Conflict Monitor, Item SPV.0060.41.**

**A Description**

This special provision describes furnishing a NEMA-Plus 12-Channel Conflict Monitor to the City of Madison.

**B Materials**

Furnish a NEMA-Plus 12-Channel Signal Conflict Monitor, with LCD display, and a Ejector Tab card release on side of card.

**C (Vacant)**

**D Measurement**

The department will measure NEMA-Plus Conflict Monitor by each individual unit, acceptably completed, and delivered to the City of Madison.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.41	NEMA-Plus Conflict Monitor	Each

Payment is full compensation for furnishing and delivering the conflict monitor to the City of Madison, 1120 Sayle Street.

**68. Traffic Signal Heads 12-Inch 3-Section Vertical R-Y-G Balls, Item SPV.0060.42; Traffic Signal Heads 12-Inch 3-Section Vertical R-Y-G Arrows, Item SPV.0060.43; Traffic Signal Heads 12-Inch 4-Section Vertical R-Y-Y-G Arrows, Item SPV.0060.44; Traffic Signal Heads 8-Inch 3-Section Vertical R-Y-G Balls, Item SPV.0060.45; Traffic Signal Heads 12-Inch Pedestrian, Item SPV.0060.46; Traffic Signal Heads 12-Inch Pedestrian Countdown, Item SPV.0060.47.**

**A Description**

This special provision describes furnishing and installing vehicle and pedestrian signals with LED indications in accordance to the standard specifications and these special provisions.

**B Materials**

Furnish all LED lamps according to those listed in the table below:

8 inch Red Ball LED	Duralight JXC-200VIR
8 inch Yellow Ball LED	Duralight JXC-200VIY
8 inch Green Ball LED	Duralight JXC-200VIG
12 inch Red Ball LED	Duralight JXC-300CAR
12 inch Yellow Ball LED	Duralight JXC-300CAY
12 inch Green Ball LED	Duralight JXC-300CAG
12 inch Red Arrow LED	Duralight JXJ-300VIRA
12 inch Yellow Arrow LED	Duralight JXJ-300VIYA
12 inch Green Arrow LED	Duralight JXJ-300VIGA
12 inch Pedestrian Countdown LED	Duralight JXM-200VIEP
12 inch Pedestrian Signal	Duralight JXM200VIHM

All pedestrian signals shall have tunnel visors.

All vehicle signals shall have cutaway visors.

All signals mounted on monotube arms or trombone arms shall have a snow-shedding shield on each signal indication. 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 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.

All vehicle and pedestrian signal heads shall be CH-SIG, Siemens LFE/SG, McCain, or Peek/TCT or a make and model approved by City of Madison Traffic Engineering. Drain channels shall be provided so that rainwater does not pond on top of the units.

All vehicle and pedestrian signal heads shall be made 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. All exterior hardware shall be stainless steel.

### **C Construction**

Install per manufacturer's instructions.

### **D Measurement**

The department will measure Traffic Signal Heads 12-Inch (Description) as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.42	Traffic Signal Heads 12-Inch, 3-Section Vertical, R-Y-G Balls	Each
SPV.0060.43	Traffic Signal Heads 12-Inch, 3-Section Vertical, R-Y-G Arrows	Each
SPV.0060.44	Traffic Signal Heads 12-Inch, 4-Section Vertical, R-Y-Y-G Arrows	Each
SPV.0060.45	Traffic Signal Heads 8-Inch, 3- Section Vertical, R-Y-G Balls	Each
SPV.0060.46	Traffic Signal Heads 12-Inch, Pedestrian	Each
SPV.0060.47	Traffic Signal Heads 12-Inch, Pedestrian Countdown	Each

Payment is full compensation for furnishing and installing all materials.

**69. Backplates Signal Face 3-Section 12-Inch, Item SPV.0060.48; Backplates Signal Face 4-Section 12-Inch, Item SPV.0060.49.**

**A Description**

This special provision describes furnishing and installing backplates for signal faces.

**B Materials**

Furnish Backplates Signal Face (Size) that are in accordance to the pertinent requirements of standard spec 658 and these special provisions. Backplates for 12” signal heads shall provide a 5” 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 in accordance to standard spec 658.3, the manufacturer’s instructions, and as shown on the plans.

**D Measurement**

The department will measure Backplates Signal Face (Description) 12-Inch as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.48	Backplates Signal Face, 3-Section 12-Inch	Each
SPV.0060.49	Backplates Signal Face, 4-Section 12-Inch	Each

Payment is full compensation for furnishing and installing all materials.

**70. Root Pruning Existing Terrace Trees, Item SPV.0060.50.**

**A Description**

This special provision describes pruning roots of existing terrace 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 trees not shown as being removed on the plans. Prune roots of existing terrace 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. Prune roots in the terrace from the back of curb and gutter to the face of sidewalk in areas of proposed sanitary and water utility lateral installations a minimum of 6 feet from the centerline the proposed utility trench. Roots shall not be pruned closer than 15 inches to any existing 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.

Perform backfilling of the area after removal of the roots as part of this item in accordance to the pertinent provisions of standard spec 207. Use hand implements for backfilling within the dripline of terrace trees.

Dispose of tree roots in accordance 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 Existing Terrace Trees as each individual root pruned 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.0060.50	Root Pruning Existing Terrace Trees	Each



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

## 71. **Optical Signal Preempt, Item SPV.0060.51.**

### **A Description**

This special provision describes furnishing and installing Optical signal preempt equipment for one signalized intersection. The acceptability of alternate equipment rests solely with the City of Madison Traffic Engineering Division.

### **B Materials**

Provide the following material:

- Two channel discriminator
- Optical detectors, two total
- Card rack
- Detector cable as necessary
- Cables and auxiliary equipment as necessary for a complete operating system

All equipment shall be from the same manufacturer and fully compatible. The discriminator shall detect and prioritize Tomar and 3M 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, aim 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.

Use installation methods that are 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 as each individual optical signal preempt unit, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.51	Optical Signal Preempt	Each

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.

**72. Concrete Curb and Gutter 24-Inch Type D Special, Item SPV.0090.01.**

**A Description**

This special provision describes constructing concrete curb and gutter as shown in the plans in accordance to standard spec 601.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Concrete Curb and Gutter 24-Inch Type D Special in accordance to standard spec 601.4.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 24-Inch Type D Special	LF

Payment is full compensation for furnishing all work, equipment, materials, labor, and incidentals required to complete the work as set for in the description.

**73. Reflective Sign Post, Item SPV.0090.02.**

**A Description**

This special provision describes furnishing and installing new sign posts, reflective sign posts, or powder coated sign posts for signs. All signposts shall be round tubular steel to be 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 sign post shall have two sheets of 3-M or equivalent engineer grade yellow sheeting completely around pipe as shown in the plans.

**C Construction Method**

Install the sign posts at the locations as shown on the plans and approved by the engineer. If the finished grade cannot be determined, ask the engineer should to identify the final grade. Install all signs in a true vertical position. "Boxed out" all installations in hard surfaced areas (concrete) with a round PVC pipe with a minimum diameter of 3-inches. Coordinate all "box-outs". Install all signs to conform to the latest edition of the Manual on Uniform

Traffic Control Devices. Locate all underground utilities prior to placing signposts. Fasten signs to the posts using machine bolts, nuts and washers as shown in the State sign plate A4-8. Cut off excess length of post in the field to provide the desired sign clearance.

**D Measurement**

The department will measure Reflective Sign Post 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.0090.02	Reflective Sign Post	LF

Payment is full compensation for furnishing and installing all necessary posts, reflective sheeting, hardware and anchors. All materials damaged during construction shall be placed with new items incidental to the contractor.

**74. Furnish and Install 6-Inch Pipe and Fittings, Item SPV.0090.03; Furnish and Install 8-Inch Pipe and Fittings, Item SPV.0090.04; Furnish and Install 12-Inch Pipe and Fittings, Item SPV.0090.05.**

**A Description**

This special provision describes furnishing and installing pipe and fittings of the size specified in the plans in accordance to section 704.6 of the *City Standard Specifications*.

**B Materials**

Furnish materials in accordance to section 702.2 of the *City Standard Specifications*.

**C Construction**

Install water main pipe and fittings in accordance to section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Furnish and Install (Size) Pipe and Fittings by the linear foot, in accordance to section 704.6 of the *City Standard Specifications*.

All fittings shown on the plan set are included in the linear foot price for Furnish and Install (Size) Pipe and Fittings. Any additional fittings such as bends, offsets, tees, and reducers that are not specified on the plans shall be measured by the unit acceptably completed. The engineer must provide written authority to allow any installations of additional 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.0090.03	Furnish and Install 6-Inch Pipe and Fittings	LF

SPV.0090.04	Furnish and Install 8-Inch Pipe and Fittings	LF
SPV.0090.05	Furnish and Install 12-Inch Pipe and Fittings	LF

Payment is full compensation in accordance to section 704.6 of the *City Standard Specifications*.

Where authorized, the department will pay for additional fittings as follows:

DESCRIPTION	UNIT	PRICE
6-Inch Fitting	Each	\$620.00
8-Inch Fitting	Each	\$840.00
12-Inch Fitting	Each	\$1,295.00

Additional fittings to be paid will be offset by any fittings identified on the plan set to be furnished and installed, but that were not furnished and installed. Additional tee fittings will be paid as one and one-half (1.5) fittings. Additional offset or cross fittings will be paid as two (2) fittings.

**75. Furnish and Install 24-Inch Steel Casing, Item SPV.0090.06.**

**A Description**

This special provision describes the installation of a 24-inch steel casing as shown on the drawings or as directed in the field by a Construction engineer. All costs for furnishing and installing the steel casing pipe, casing spacers, sand or pea gravel, access and receiving pits, and all work necessary to jack and bore the sections shall be included.

**B Materials**

All materials shall conform to the requirements of section 702 of the *City Standard Specifications* and the “Specifications for Pipelines with Maximum Casing Diameter of 48 Inches (Non-Flammable Substances)” of the Union Pacific Railroad (<http://www.uprr.com/reus/pipeline/pipespec.shtml>). The minimum wall thickness of the steel casing shall be 7/16” (0.4375”).

**C Construction**

Complete all associated work to conform to the requirements of section 703 of the *City Standard Specifications* and the “Minimum Safety Requirements for Contractors” of the Union Pacific Railroad (<http://www.uprr.com/reus/group/contract.shtml>).

Included in this item is the excavation and backfilling of the receiving pits. The pits and boring areas are anticipated to be in areas of contaminated soil, excavate and dispose of the excavated material and spoil as described in the provisions for the excavation, hauling, and disposal of contaminated soil. Backfill material shall meet the City of Madison Standard Specifications for road construction. Necessary work and materials to adequately secure the pits with full cover or security fencing shall be incidental to this bid item. Any dewatering necessary for the construction and maintenance shall be incidental to this bid item.

The related un-trenched construction shall be constructed by dry auger boring and jacking. Water jacking for excavation of the soil is not allowed. The use of water to facilitate removal of spoil is permitted. The casing shall extend beneath the railroad until the ends measure a minimum of 30 feet from the centerline of the track when measured at a right angle to the track. The remaining length of casing, if any, may be installed by traditional open trench construction.

For the casing installation, the borehole diameter shall be essentially the same as the outside diameter of the casing. If voids should develop or if the borehole diameter is greater than the outside diameter of the pipe by more than approximately 1 inch, the voids shall be pressure grouted.

Provide a steerable front section of casing to allow vertical grade adjustments. Provide a water level or other means to allow monitoring of the grade elevation of the auger casing. Casing shall be installed as shown on the construction drawings to an accuracy of +/- 1%.

Use continuous, circumferential, field butt-welding in accordance to AWWA C206 for the connections of adjacent lengths of steel pipe. The connections shall result in a straight and true casing with a watertight seal.

Install the carrier pipe on line and grade through the casing pipe. Install approved casing spacers at the approved distances. Fill the annular space between the casing and carrier pipe with approved material (sand or pea gravel).

Take care to ensure that developed thrust pressures do not disturb existing utilities in or around the bore pit area.

Schedule and coordinate any required railroad flagging per requirements of the Railroad and the Railroad Insurance and Coordination article of these special provisions.

**D Measurement**

The department will measure Furnish and Install 24-Inch Steel Casing by the linear foot of actual casing pipeline installed, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.06	Furnish and Install 24-Inch Steel Casing	LF

Payment is full compensation for furnishing all associated work, materials, labor, and incidentals as specified herein, with the exception of the disposal of the contaminated soil.

**76. Select Fill-Sand for Water Main, Item SPV.0090.07.**

**A Description**

This special provision describes furnishing and placing select fill backfill over the water main and water services along the entire length of the pipeline in accordance to section 704.8 of the *City Standard Specifications*.

**B Materials**

Select Fill-Sand for Water Main shall be granular backfill meeting the requirements of section 202.2 (b) and section 703 of the *City Standard Specifications*.

**C Construction**

Place Select Fill-Sand for Water Main in accordance to section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Select Fill-Sand for Water Main by the linear foot, in accordance to section 704.8 of the *City Standard Specifications*.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.07	Select Fill-Sand for Water Main	LF

Payment is full compensation for furnishing, hauling, placing and compacting the specified material, and disposal of surplus material from the excavation displaced by the Select Fill, unless that surplus material is contaminated soil.

**77. Extend and Reconnect Service Lateral 1-Inch, Item SPV.0090.08; Extend and Reconnect Service Lateral 2-Inch, Item SPV.0090.09.**

**A Description**

This special provision describes reconnecting and extending the existing copper water service laterals from the existing 6-inch water main (which will be abandoned) to the parallel existing 8-inch main. Furnish all materials for tapping the new main and reconnecting and extending the copper water service laterals. This item includes but is not necessarily limited to; all excavation, including hand digging necessary to expose the existing piping; tapping the new main; reconnecting and extending the existing service; backfilling the excavation; compacting the backfill material; maintaining the ditches and all other work incidental to restoring and maintaining the site.

**B Materials**

Furnish materials in accordance to section 702 of the *City Standard Specifications*.

**C Construction**

Complete all associated work in accordance to section 703 of the *City Standard Specifications*.

**D Measurement**

The department will measure Extend and Reconnect Service Lateral (Inch) by the linear foot, acceptably completed, measured along the centerline of the pipe at the surface from the center of the water main to the point of the connection.

**E Payment**

The department will pay for measured quantities for each diameter of service lateral at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.08	Extend and Reconnect Service Lateral – 1-Inch	LF
SPV.0090.09	Extend and Reconnect Service Lateral – 2-Inch	LF

Payment per foot shall be full compensation for furnishing all work in furnishing and reconnecting water service laterals.

**78. Furnish and Install Extruded Polystyrene Foam, Item SPV.0090.10.**

**A Description**

This special provision describes Furnish and Install Extruded Polystyrene Foam which consists of placing Extruded Polystyrene Foam in order to insulate water mains and/or water service laterals. This section includes but is not necessarily limited to; all materials, equipment, labor and incidentals necessary to complete the insulation of the pipe, and shall be executed in compliance with section 704.13 of the *City Standard Specifications*.

**B Materials**

Extruded Polystyrene Foam shall comply with section 702.12 of the *City Standard Specifications*.

**C Construction**

Extruded Polystyrene Foam is required at all locations where there is 5 feet or less of cover, where water main crosses below existing or proposed storm sewer pipe, or when specified, shown on the drawings or ordered by the engineer. Installation shall conform to section 703.13 of the *City Standard Specifications*.

**D Measurement**

The department will measure Furnish and Install Extruded Polystyrene Foam by the linear foot, acceptably completed, in feet of pipe insulated measured along the centerline of the pipe at the surface.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.10	Furnish and Install Extruded Polystyrene Foam	LF

Payment is full compensation for furnishing all work in insulating the pipe as required. Broken insulation shall not be considered for payment.

**79. Loop Detector Lead-In Cable Special, Item SPV.0090.11.**

**A Description**

This special provision describes furnishing and installing loop detector lead in cable according to standad spec 655 and these specifications.

**B Material**

Furnish 0.25 inch diameter, 4-conductor, #18 AWG, waterproof, shielded, polypropylene insulation cable, with HDPE outer jacket. Meeting IMSA specifications. Loop detector lead in cable shall 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 item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.11	Loop Detector Lead-In Cable Special	LF

Payment is full compensation for furnishing and installing all materials.

**80. Temporary Vehicle Detection Badger Road Intersection, Item SPV.0105.01.**

**A Description**

This special provision describes furnishing, installing, and maintaining vehicle detection systems at the intersection of Badger Road in conjunction with temporary traffic signals as shown in the plans.

The desired vehicle detection zones and their operational parameters are shown in the plans.

The contractor, with prior approval of the engineer and 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. 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.

Detection technology shall provide for true presence detection.

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.

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.

**B Materials**

Provide all necessary equipment for the approved method of temporary vehicle detection.

**C (Vacant)**

**D Measurement**

The department will measure Temporary Vehicle Detection Badger Road Intersection, as a single lump sum unit of work per intersection, acceptably completed.

If repairs or adjustments to restore vehicle detection to full function are not made the same day as notification, the associated pay item shall 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 noncompliance.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Temporary Vehicle Detection Badger Road Intersection	LS

Payment is full compensation for demonstrating and selecting the vehicle detector technology, furnishing, installing, and adjusting or moving the equipment, including all required materials, tools, and supplies; and for furnishing all labor; for clean-up and waste disposal.

**81. Temporary Traffic Signals Badger Road Intersection, Item SPV.0105.02.**

## **A Description**

This special provision describes installing temporary traffic signals for intersections, using overhead and temporary underground electrical wiring to temporary and proposed traffic signal poles and temporary supports, in accordance to standard spec 661 and as amended herein. The City of Madison traffic signal personnel will perform the traffic signal inspection.

## **B Materials**

Furnish and use materials that are in accordance to standard spec 661.2 and as amended herein. Maintain and extend signal interconnectivity Furnish and install Optical Signal Preempt for the temporary signals which conform to special provision SPV.0060.51. Approaches for each direction of CTH D (Fish Hatchery Road) traffic need to be detected and brought back individually to the signal control cabinet at the Badger Road intersection for signal pre-empt.

### **B.1 Luminaires**

Furnish and install luminaire arms and luminaries conforming to the pertinent requirements of standard spec 657 and standard spec 659. Furnish 250 watt, full cutoff, high-pressure sodium luminaires with photo electric cells to turn the luminaire on and off.

### **B.2 Existing City Equipment**

Use of any existing signal equipment, including signal faces, signal poles and trombone arms, which the contractor wishes to remain on site for use as part of the temporary traffic signal, shall be requested in writing to Brian Smith, [bsmith@cityofmadison.com](mailto:bsmith@cityofmadison.com), prior to the installation of the temporary signals.

Existing signal equipment will not be replaced or provided by the city once the temporary traffic signals are installed. Repair or replace in kind any equipment that is requested to remain on site and is subsequently damaged.

### **B.3 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 standard spec 661. Furnish signal faces in accordance to standard spec 661.2.2.2.

### **B.4 Pedestrian Push Buttons**

Furnish pedestrian push buttons conforming to standard spec 658.

### **B.5 Signal Cabinet**

The contractor may use the existing signal cabinet and enclosed signal equipment for temporary signals. If using the existing signal cabinet for temporary signals, relocate the existing cabinet to permit the construction of a new cabinet base and installation of the new cabinet if a new cabinet is called for in the contract. If not using the existing signal cabinet, furnish new or equivalent to new materials as specified in standard spec 661.2 and as follows:

## **B.6 Controller**

Furnish a new or equivalent to new Econolite ASC-2/2100 or ASC3-2100 controller with Telemetry Module for each Econolite Controller. The controller shall be compatible with the City of Madison closed loop system (CLS).

## **B.7 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 in accordance to standard spec 661.2.1.

## **C Construction**

### **C.1 General**

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. The City of Madison will pay for energy costs.

Locate and avoid all underground and above ground 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.

If there is not sufficient right-of-way to allow guying of temporary wood poles, install temporary self-supporting poles with concrete bases or other methods as deemed necessary by the contractor.

### **C.2 Existing City Equipment**

City forces will remove all existing signal equipment after temporary signals are in place. Contact Michael Christoph at (608) 266- 9031 to coordinate signal removals.

### **C.3 Signal Heads**

Signal heads for the same vehicle travel direction shall be a minimum of 11 feet from each other. Provide pedestrian signals for each crosswalk open to pedestrians, whether shown on the plans or not, and shall be located so that they are clearly visible to pedestrians prior to and during their crossing. Move signal heads as necessary or as directed by the engineer.

### **C.4 Pedestrian Push Buttons**

Install pedestrian push buttons for pedestrians crossing Fish Hatchery Road and Badger Road. Mount push buttons so that they are wheelchair accessible from temporary or existing crosswalks. Install pedestrian push buttons as required by the MUTCD chapter 4.

### **C.5 Luminaires**

Orient luminaires as shown on the plans to illuminate traffic lanes and sidewalks on both sides of CTH D (Fish Hatchery Road).

### **C.6 Cabinet**

Have a representative of the supplier of their cabinet on site at the time of the turn on if the existing cabinet is not being used. Install equipment in the cabinet as follows:

#### **C.6.1 Controller**

Install the controller and ensure that it is operational as part of the City of Madison closed loop system.

### **C.7 Maintenance**

Provide immediate response, 24-hour/7 days per week, to maintain any aspect of the temporary vehicle detection that is defective, completing repairs or adjustments the same day as notification.

When a signal installation 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).

### **C.8 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 function pre-emption system. Arrange testing of the pre-emption system with Mike Christoph, (608) 266-9031 before turn-on of the temporary signal.

### **C.9 Temporary Signal Staging**

Adjust, relocate, add, or remove temporary signal supports, signal heads, pedestrian push buttons, or wiring, for each traffic control stage or sub stage as shown in the plans, as directed by the engineer, or as modified by the contractor's operations to maintain the required traffic and complete the proposed work.

### **C.10 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, Badger Road Intersection, completed in accordance to the contract and accepted, as a single complete unit of work, and in accordance to subsection 661.4 of the standard specifications.

If repairs or adjustments to restore vehicle detection to full function are not made the same day as notification, the associated pay item shall be reduced by the following amounts:

- 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.0105.02	Temporary Traffic Signals, Badger Road Intersection	LS

Payment is full compensation for providing, operating, maintaining, and repairing the complete temporary installation, for removal; for furnishing and installing replacement equipment; for utility charges for installation and disconnection; for demonstration of signal equipment operations; and for adjustments, relocations, additions, or removals of traffic signal supports, heads, pedestrian push buttons, or wiring for furnishing all traffic control stages or sub stages.

**82. Temporary Lighting, Item SPV.0105.03.**

**A Description**

This special provision describes furnishing, installing and removal of wood poles, guy wires, luminaires, arms and aerial cable to maintain 100% of the existing lighting system. Perform maintenance on any existing and proposed lighting units within the project limits. Work for temporary wood poles and guy wires shall be in accordance 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 including replacement of any damaged underground lighting cables or installing temporary overhead wiring cables as may be required.

Provide off-hours contact(s) to 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. Complete all other maintenance needs 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.

**D Measurement**

The department will measure Temporary Lighting as a single lump sum unit of work for temporary lighting, 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.0105.03	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.

**83. Construction Staking Water Main, Item SPV.0105.05.**

**A Description**

This special provision describes staking line and grade for installation of proposed water main, laterals, valves, hydrants, and fittings.

**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. Locate stakes to within 0.02 feet of the true horizontal position, and to establish the grade elevations within 0.01 feet of the true vertical position.

**D Measurement**

The department will measure Construction Staking Water Main as a single lump sum unit of work for staking, 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.0105.05	Construction Staking Water Main	LS

Payment is full compensation for locating and setting all construction stakes; and for relocating and resetting damaged or missing construction stakes.

The department will not make final payment for any staking item until the contractor submits all survey notes and computations used to establish the required lines and grades to the engineer within 21 days of completing this work. The department will deduct from payments due the contraction for the additional costs specified in item 105.9 of the *City Standard Specifications*.

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**ADDITIONAL SPECIAL PROVISION 1 (ASP 1)  
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)  
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS**

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The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including “pipeline” activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

*TrANS* is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor’s needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

***I. BASIC CONCEPTS***

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

- 1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of \$5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that   2   (*number*) TrANS Graduate(s) be utilized on this contract.

- 2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 1 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

## **I. RATIONALE AND SPECIAL NOTE**

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

NOTE: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

## **II. IMPLEMENTATION**

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-



OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

#### **IV. TRANS TRAINING**

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

#### **V. APPRENTICESHIP TRAINING**

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

### ADDITIONAL SPECIAL PROVISION 3

Disadvantaged Business Enterprise Development. This item shall consist of concerted efforts by the contractor as part of its affirmative action responsibilities to train and develop minority business enterprises to become fully qualified contractors in the transportation construction field. Hereafter, minority business enterprise refers to businesses owned or controlled by socially and economically disadvantaged person(s) as certified by the Wisconsin Department of Transportation. It is the intention of this provision that firms owned and controlled by women be included as a presumptive group within the definition of Disadvantaged Business Enterprise (DBE).

The contractor will aggressively solicit DBE subcontractor and/or supplier quotes and incorporate them in its bid for work on this project by making systematic written and verbal contact with DBEs likely to have an interest in transportation construction work.

In this contract, the contractor shall procure services, materials, or subcontract the minimum percentage as shown on the cover of the Highway Work Proposal of the total amount bid to one or more certified DBEs. The Department maintains and furnishes the list of DBEs considered certified. If the proposed DBE is uncertified, the contractor must appeal to the Department to establish the eligibility of the DBE to become certified. This goal may be accomplished through the use of any combination of ethnic or women owned businesses certified as DBEs by the Department.

It is the intent of this specification that the percentage goal specified be fulfilled as indicated. However, if the contractor considers such fulfillment to be impossible of attainment, and if the contractor can demonstrate to the satisfaction of the Department that such utilization is not feasible, the Department may accept a varying percentage in lieu of the designated percentage for the DBE classification.

The contractor is encouraged to develop DBEs in areas of construction where these firms have traditionally been non-competitive. Therefore, the DBE goal on this contract may be reduced by the Department up to 50 percent for DBE work in the non-traditional construction categories of: concrete paving, asphalt paving, excavating and heavy grading, aggregate production, structures and major culvert installation. Any goal reduction is discretionary by the Department and will only be granted where it is clear the intended work will benefit the development and experience of the DBE.

Credit toward the required DBE goal is allowed for supplies and materials furnished by DBEs. However, the DBEs must assume the actual contractual responsibilities for furnishing the supplies and materials and also manufacture them. For these purposes, a manufacturer is a supplier that either produces goods from raw materials or substantially alters them before resale. When the supplier is not the manufacturer, only 60 percent of the expenditure to the supplier may be credited toward the DBE goal, provided the supplier performs a commercially useful function in the transaction.

Nevertheless, in order for the Department to execute a contract with a bidder that has failed to meet the specified DBE contract goal, the Department must determine that the bidder's good faith efforts were those that, given all relevant circumstances, a bidder activity and aggressively seeking to meet the goal would make.

Good faith efforts are to include contacts with the Department's Office of Disadvantaged Business Programs. In determining whether a contractor has made good faith efforts, the Department will usually look not only at the different kinds of efforts that the bidder has made, but also the quantity and intensity of those efforts. Efforts that are merely pro forma are not good faith efforts to meet the goal. Even if the efforts are sincerely motivated, they are not considered to be good faith efforts if, given all relevant circumstances, they could not

reasonably be expected to produce a level of DBE participation sufficient to meet the goal.

Within ten working days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the subcontract or supply agreement and the dollar amount of such items of work. Failure by the contractor to furnish the necessary information within the specified time frame does not negate the Department's right to award and execute the contract; however, good faith efforts after the submittal requirement will be discounted. Delay in fulfilling this requirement shall not constitute a cause for extension of the contract time. All other aspects of this minority business enterprise requirement shall be in accordance with appropriate provisions of Part 26 of Volume 49 of the Code of Federal Regulations entitled "Participation by Minority Business Enterprises in Department of Transportation Programs."

The contractor shall also provide or arrange for direct assistance to the DBEs in such areas as providing information to prepare intelligent quotations, insuring that the DBE can read and understand highway plans, assisting in reaching a full understanding of the Standard Specifications and contract requirements applicable to the DBE portion of the work, appropriate cost accounting and other business practices, and other actions aimed at continued development of the DBE into a viable highway contracting business.

The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

The work herein prescribed will not be paid for separately, but will be considered incidental to other items of work included in the contract.

Failure on the part of the bidder to meet the DBE goal and to meet an adequate level of good faith efforts will, at the discretion of the Department, be deemed failure to execute the contract, be just cause of the cancellation of the award, and such other actions as deemed appropriate.

The entire provisions of this item do not apply if the bidder, excluding joint ventures, is a certified DBE.

**ADDITIONAL SPECIAL PROVISION 4**

Payment to all Subcontractors. Within 10 calendar days of receipt by a contractor of a progress payment for work performed, materials furnished, or materials stockpiled by a subcontractor, the contractor shall pay that subcontractor for all work satisfactorily performed and for all materials furnished or stockpiled.

The contractor agrees further to release retainage amounts to each subcontractor within 10 calendar days after the subcontractor's work is satisfactorily completed. In addition, whenever the Department reduces the contract retainage amount, within 10 calendar days of receipt by a contractor of a retainage payment, the contractor must reduce the total amount retained from subcontractors to no more than remains retained by the Department.

The contractor shall pay the subcontractor within the time frames described above unless the contractor complies with both of the following within 10 calendar days of receiving the Department's progress payment:

- 1) The contractor notifies the subcontractor in writing that the work is not satisfactorily completed.
- 2) The contractor requests approval from the Department to delay payment because the subcontractor has not satisfactorily completed the work.

The contractor's request for approval should include the written notification to the subcontractor and shall provide sufficient documentation of good cause to assist the engineer in making a timely decision. If the engineer does not grant approval, the contractor shall pay the subcontractor within 10 calendar days of the Department's decision.

All subcontracting agreements made by a contractor shall include the above provisions and shall be binding on all contractors and subcontractors.

The contractor certifies compliance with the requirements of this Additional Special Provision by signing the contract. This clause applies to both DBE and non-DBE subcontractors.



**ADDITIONAL SPECIAL PROVISION 6  
MODIFICATIONS TO THE STANDARD SPECIFICATIONS**

*Make the following revisions to the 2012 edition of the standard specifications:*

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**102.1 Prequalifying Bidders**

*Replace paragraph two with the following effective with the November 2011 letting:*

- (2) Furnish a dated prequalification statement on the department's form at least 10 business days before the time set for opening proposals.
- 

**107.17.3 Railroad Insurance Requirements**

*Replace the entire text with the following effective with the November 2011 letting:*

- (1) If required by the special provisions, provide or arrange for a subcontractor to provide railroad protective liability insurance in addition to the types and limits of insurance required in 107.26. Keep railroad protective liability insurance coverage in force until completing all work, under or incidental to the contract, on the railroad right-of-way or premises of the railroad and until the department has accepted the work as specified in 105.11.2.4.
- (2) Provide railroad protective liability insurance coverage written as specified in 23 CFR part 646 subpart A with the Wisconsin Department of Transportation, its officers, agents, and employees named as an additional insured. Provide a separate policy for each railroad owning tracks on the project. Ensure that the railroad protective liability insurance policies provide the following minimum limits of coverage:
  1. Coverage A, bodily injury liability and property damage liability; \$2 million per occurrence.
  2. Coverage B, physical damage to property liability; \$2 million per occurrence.
  3. An annual aggregate amount of \$6 million that shall apply separately to each policy renewal or extension.
- (3) Obtain coverage from insurance companies licensed to do business in Wisconsin that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.
- (4) Submit the following to each railroad owning tracks on the project as evidence of that railroad's respective coverage:
  1. A certificate of insurance for the types and limits of insurance specified in 107.26.
  2. The railroad protective liability insurance policy or other acceptable documentation to the railroad company.
- (5) Submit the following to the region as evidence of the required coverage:
  1. A copy of the letter to the railroad company transmitting the submittal documents specified in 107.17.3(4).
  2. A certificate of insurance for the required railroad protective liability coverages.
- (6) Do not begin work on the right-of-way or premises of the railroad company until the region receives the submittals specified in 107.17.3(5) and notification from the railroad company that the contractor has provided sufficient insurance information to begin work.
- (7) Notify the railroad and the region immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations within 50 feet of the railroad right-of-way immediately if insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.

**107.26 Standard Insurance Requirements**

Replace the entire text with the following effective with the November 2011 letting:

- (1) Maintain the following types and limits of commercial insurance in force until completing and obtaining the department's acceptance of all work as specified in 105.11.2.4.

TYPE OF INSURANCE	MINIMUM LIMITS REQUIRED[1]
1. Commercial general liability insurance endorsed to include blanket contractual liability coverage. <sup>[2]</sup>	\$2 million combined single limits per occurrence with an annual aggregate limit of not less than \$4 million.
2. Workers' compensation providing coverage regardless of the number of employees.	Statutory limits
3. Employers' liability insurance.	Bodily injury by accident: \$100,000 each accident Bodily injury by disease: \$500,000 each accident \$100,000 each employee
4. Commercial automobile liability insurance covering all contractor-owned, non-owned, and hired vehicles used in carrying out the contract. <sup>[2]</sup>	\$1 million-combined single limits per occurrence.

<sup>[1]</sup> The contractor may satisfy these requirements through primary insurance coverage or through excess/umbrella policies.

<sup>[2]</sup> The Wisconsin Department of Transportation, its officers, agents, and employees must be named as an additional insured under the general liability and automobile liability insurance.

- (2) For a joint venture, limited liability company, or partnership; ensure that the bidding entity is the named insured and that coverages apply jointly and severally to its member entities.
- (3) Obtain coverage from insurance companies licensed to do business in the state that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract.
- (4) The department may request proof of insurance at any time. Submit copies of insurance policies as well as associated certificates of insurance upon department request.
- (5) Notify the department immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations immediately if any insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.
- (6) The above insurance requirements apply with equal force whether the contractor or a subcontractor, or anyone directly or indirectly employed by either, performs work under the project.

**450.2.1 Acronyms and Definitions**

Replace the entire text with the following effective with the November 2011 letting:

- (1) Interpret materials related acronyms used in sections 450 through 499 as follows:

- FRAP** Fractioned reclaimed asphaltic pavement
- HMA** Hot mix asphalt
- JMF** Job mix formula
- PG** Performance graded
- RAP** Reclaimed asphaltic pavement
- RAS** Recycled asphalt shingles
- SMA** Stone matrix asphalt



**VMA** Voids in mineral aggregate

**WMA** Warm mix asphalt

(2) Interpret materials related definitions used in sections 450 through 499 as follows:

**Asphaltic binder** The principal asphaltic binding agent in HMA, including asphalt cement and material added to modify the original asphalt cement properties.

**Filler** A finely divided mineral aggregate added to asphaltic mixtures to improve mixture properties.

**Fractioned reclaimed asphaltic pavement** Material resulting from cold milling or crushing existing asphaltic pavement processed to control gradation properties.

**Leveling layer** Initial layer placed thinner than the minimum required under 460.3.2.

**Lower layer** Any asphaltic pavement layer that will not be exposed to traffic when the pavement structure is complete. A pavement structure may have multiple lower layers.

**Reclaimed asphaltic pavement** Material resulting from cold milling or crushing existing asphaltic pavement.

**Recycled asphalt shingles** Waste material from a shingle manufacturing facility, either new or used material salvaged from residential roofing operations, or any combination of these materials ground to ensure that 100 percent will pass a 1/2 sieve and processed to remove deleterious material.

**Upper layer** The asphaltic pavement layer exposed to traffic when the pavement structure is complete. A pavement structure has only one upper layer.

**Warm mix asphalt** Any asphaltic mixture that contains a warm mix additive, or utilizes a warm mix process, as part of its mixture design that has the ability to reduce the mixing and compaction temperature requirements below the typical temperatures used for that application.

#### 460.1 Description

*Replace paragraph one with the following effective with the November 2011 letting:*

- (1) This section describes HMA mixture design, providing and maintaining a quality management program for HMA mixtures, and constructing HMA pavement. Unless specifically indicated otherwise, references within section 460 to HMA also apply to WMA.

#### 460.2.1 General

*Replace paragraph one with the following effective with the November 2011 letting:*

- (1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material.

#### 460.2.4.4 Warm Mix Asphalt Additive or Process

*Add a new subsection as follows effective with the November 2011 letting:*

##### 460.2.4.4 Warm Mix Asphalt Additive or Process

- (1) Use additives or processes from the department's approved products list. Follow supplier or manufacturer recommendations for additives and processes when producing WMA mixtures.

**460.5.2.1 General**

Replace paragraphs two and three with the following effective with the November 2011 letting:

- (2) Payment for HMA Pavement Type E-0.3, E-1, E-3, E-10, E-30, and E-30x is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for QMP testing and aggregate source testing; for warm mix asphalt additives or processes; and for all materials except asphaltic materials.
- (3) Payment for HMA Pavement Type SMA, is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting the mixture; for QMP testing and aggregate source testing; for all materials including asphaltic materials and warm mix asphalt additives and processes; and for stabilizer, hydrated lime, and liquid antistripping agent if required.

**506.3.22 Shop Inspection**

Replace paragraph one with the following effective with the July 2010 letting:

- (1) The engineer or an independent inspection agency under department contract may inspect all structural steel and miscellaneous metals furnished. The department will provide the contractor with monthly consultant inspection invoices and identify any quality deficiencies at the fabrication facility.

**506.5 Payment**

Add paragraph nine as follows effective with the June 2010 letting:

- (9) The department will limit costs for inspections conducted under 506.3.2 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

**Errata**

Make the following corrections to the 2012 edition of the standard specifications:

**506.2.6.4 Non-Laminated Elastomeric**

- (2) The pads shall conform to the following physical properties:

Correct the allowable hardness range for natural rubber:

	NATURAL RUBBER	CHLOROPRENE
Hardness (ASTM D2240) .....	60+/-5	60+/-5

**634.2.5.1 General**

Correct errata by changing ASTM A570 to ASTM A1011.

- (2) Fabricate the tubular components using structural quality 12-gauge strip steel conforming to ASTM A1011, grade 50 with an average minimum yield strength, after cold-forming, of 55,000 psi. Punch holes on all 4 sides for the full length as the plans show. Provide corner radii of approximately 5/32 inches and conform to other dimensions and tolerances as follows:

**ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> Tier and DBE Payments During Construction
1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
  2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
  3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
  4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
  5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
  6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- B. Costs for conforming to this special provision are incidental to the contract.



**ADDITIONAL SPECIAL PROVISION 9  
Electronic Certified Payroll Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm>

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see section 3.2 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

<http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/docs/crc-basic-info.pdf>

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- [I. General](#)
- [II. Nondiscrimination](#)
- [III. Nonsegregated Facilities](#)
- [IV. Payment of Predetermined Minimum Wage](#)
- [V. Statements and Payrolls](#)
- [VI. Record of Materials, Supplies, and Labor](#)
- [VII. Subletting or Assigning the Contract](#)
- [VIII. Safety: Accident Prevention](#)
- [IX. False Statements Concerning Highway Projects](#)
- [X. Implementation of Clean Air Act and Federal Water Pollution Control Act](#)
- [XI. Certification Regarding Debarment, Suspension Ineligibility, and Voluntary Exclusion](#)
- [XII. Certification Regarding Use of Contract Funds for Lobbying](#)

### ATTACHMENTS

- [A. Employment Preference for Appalachian Contracts \(included in Appalachian contracts only\)](#)

#### **I. GENERAL**

1. 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.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4, and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

## **II. NONDISCRIMINATION**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

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 and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO 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 minority group employees.

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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 his 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 his avenues of appeal.

6. **Training and Promotion:**



a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best 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 SHA 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 minority and women 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 minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.

8. **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.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors

with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

**9. 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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

- (1) The number 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;
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

### **III. NONSEGREGATED FACILITIES**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

### **IV. PAYMENT OF PREDETERMINED MINIMUM WAGE**

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

**1. General:**

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

b. 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.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

**2. Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards

Administration, Washington, D.C. 20210. The Wage and Hour 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

### **3. Payment of Fringe Benefits:**

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

### **4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:**

#### **a. Apprentices:**

(1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) 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 journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) 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 DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

**5. 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.

**6. Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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 SHA contracting officer 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.

**7. Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**8. Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

**9. Withholding for Unpaid Wages and Liquidated Damages:**

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

**V. STATEMENTS AND PAYROLLS**

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

**1. Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

**2. Payrolls and Payroll Records:**

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such 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 the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. 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 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

#### **VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR**

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

#### **VII. SUBLETTING OR ASSIGNING THE CONTRACT**

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 State. 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).

a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.

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 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 VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### **VIII. SAFETY: ACCIDENT PREVENTION**

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 SHA 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. 333).

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. 333).

#### **IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

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, the following notice 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:

**NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS**

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 not more than \$10,000 or imprisoned not more than 5 years or both."*

**X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

**XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

**1. Instructions for Certification - Primary Covered Transactions:**

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary 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 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "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 rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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.

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.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions**

1. The prospective primary participant 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 3-year period preceding this proposal been convicted of or had a civil judgement 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 offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary 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 Covered Transactions:**  
(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

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.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

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 Covered Transactions:**

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 participation in this transaction 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.

\* \* \* \* \*

**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

(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 his or her bid or proposal that he or she 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 PREFERENCE FOR APPALACHIAN CONTRACTS**

(Applicable to Appalachian contracts only.)

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 he 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, he 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 1 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 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.

This page last updated May 20, 2002

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United States Department of Transportation - Federal Highway Administration - Office of Bridge Technology

**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.

**SEPTEMBER 2002**

**ADDITIONAL FEDERAL-AID PROVISIONS**

**BUY AMERICA**

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project.

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.



**Effective with September 2004 Letting**

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

**I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES**

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contracts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

## **II. PAYROLL REQUIREMENTS**

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

## **III. POSTINGS AT THE SITE OF THE WORK**

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

## **IV. WAGE RATE REDISTRIBUTION**

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

## **V. ADDITIONAL CLASSIFICATIONS**

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
4. The unlisted classification must be commonly employed in the area where the project is located.
5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
6. The request should be made prior to the actual performance of the work by the unlisted classification.
7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
DANE COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development  
for the Department of Transportation  
Pursuant to s. 103.50, Stats.  
Issued on July 15, 2011

**CLASSIFICATION:** Contractors are required to call the Department of Workforce Development if there are any questions regarding the proper trade or classification to be used for any worker on a public works project.

**OVERTIME:** Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

**FUTURE INCREASE:** If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

**PREMIUM PAY:** If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

**SUBJOURNEY:** Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	33.80	20.37	54.17
Carpenter	28.31	14.91	43.22
Cement Finisher	29.37	15.13	44.50
Future Increase(s): Add \$1.86 on 6/1/11; Add \$1.86 on 6/1/12; Add \$1.87 on 6/1/13; Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/ 1/ 16.			
Premium Pay: Effective 6/1/2011 for "Airport Pavement or State Highway Construction" project type only, add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night to avoid peak traffic volumes under artificial illumination with traffic control. The work is completed after sunset and before sunrise.			
Electrician	37.25	14.68	51.93
Fence Erector	21.51	5.07	26.58
Ironworker	30.90	17.11	48.01
Line Constructor (Electrical)	35.26	21.35	56.61
Painter	26.00	12.15	38.15
Pavement Marking Operator	26.54	14.45	40.99
Piledriver	30.31	15.68	45.99
Roofer or Waterproofer	28.85	0.37	29.22
Teledata Technician or Installer	21.26	11.52	32.78
Tuckpointer, Caulker or Cleaner	31.46	17.43	48.89
Underwater Diver (Except on Great Lakes)	32.31	14.91	47.22
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	33.23	15.04	48.27
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.21	13.51	41.72
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.68	12.41	37.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	22.92	11.87	34.79



<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	26.75	6.22	32.97

### TRUCK DRIVERS

Single Axle or Two Axle	21.00	14.51	35.51
Three or More Axle	23.99	14.62	38.61
Articulated, Euclid, Dumptr, Off Road Material Hauler	25.62	18.10	43.72
Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Pavement Marking Vehicle	20.06	13.67	33.73
Shadow or Pilot Vehicle	21.00	14.51	35.51
Truck Mechanic	23.99	14.62	38.61

### LABORERS

General Laborer	26.15	12.90	39.05
Future Increase(s): Add \$1.60/hr on 6/1/2011; Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/ 1/ 2014. Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. "Airport Pavement or State Highway Construction" project type only, add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	16.00	4.81	20.81
Landscaper	26.15	12.90	39.05
Future Increase(s): Add \$1.60/hr on 6/1/11; Add \$1.60/hr on 6/1/12; Add \$1.70/hr on 6/1/13; Add \$1.60/hr on 6/ 1/ 14. Premium Pay: "Airport Pavement or State Highway Construction" project type only, add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	22.50	12.90	35.40
Future Increase(s): Add \$1.60/hr on 6/1/2011; Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/ 1/ 2014. Premium Pay: "Airport Pavement or State Highway Construction" project type only, add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	15.00	3.59	18.59
Railroad Track Laborer	22.81	13.42	36.23

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
<b>HEAVY EQUIPMENT OPERATORS</b>			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.07	18.10	51.17
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	32.57	18.10	50.67
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	32.07	18.10	50.17

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	31.81	18.10	49.91
Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	31.52	18.10	49.62
Future Increase(s): Add \$1.95/hr on 6/1/11; Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: On Sunday & holidays, pay two times the hourly basic rate. For "Airport Pavement or State Highway Construction" project type only, add \$1.50/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Fiber Optic Cable Equipment.	22.79	15.30	38.09
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SUPERSEDES DECISION WI20070010  
 U. S. DEPARTMENT OF LABOR  
 (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin  
 DECISION NUMBER: W1080010  
 DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: November 11, 2011

<u>LABORERS CLASSIFICATION:</u>	Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler .....	\$24.15 .....	11.75
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer .....	24.25 .....	11.75
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man .....	24.30 .....	11.75
Group 4: Line and Grade Specialist .....	24.50 .....	11.75
Group 5: Blaster and Powderman .....	24.35 .....	11.75
Group 6: Flagperson and Traffic Control Person .....	20.50 .....	11.75

Truck Drivers:

	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles .....	25.09 .....	15.20
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic .....	25.24 .....	15.20

CLASSES OF LABORER AND MECHANICS

Bricklayer .....	28.41 .....	12.81
Carpenter .....	30.56 .....	13.36
Millwright .....	32.16 .....	13.36
Piledriverman .....	31.06 .....	13.36
Ironworker .....	30.90 .....	19.13
Cement Mason/Concrete Finisher .....	30.68 .....	15.68
Electrician .....	See Page 3	
Line Construction		
Lineman .....	37.05 .....	17.60
Heavy Equipment Operator .....	33.35 .....	16.34
Equipment Operator .....	29.64 .....	15.07
Heavy Groundman Driver .....	25.94 .....	13.83
Light Groundman Driver .....	24.08 .....	13.18
Groundsman .....	20.38 .....	11.94
Painter, Brush .....	25.65 .....	13.10
Painter, Spray, Structural Steel, Bridges .....	26.65 .....	13.10
Well Drilling:		
Well Driller .....	16.52 .....	3.70

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification 0, dated March 12, 2010; Modification 1, dated March 19, 2010; Modification 2, dated June 4, 2010; Modification 3, dated July 2, 2010; Modification 4, dated August 6, 2010; Modification 5, dated September 3, 2010; Modification 6, dated October 1, 2010; Modification 7, dated November 5, 2010; Modification 8; dated November 15, 2010; Modification 9, dated January 7, 2011; Modification #10 dated February 11, 2011; Modification #11 dated May 6, 2011; Modification #12 dated May 13, 2011; Modification #13 dated June 3, 2011; Modification #14 dated July 29, 2011; Modification #15 dated August 12, 2011; Modification #16 dated August 26, 2011; Modification #17 dated September 16, 2011; Modification #18 dated October 14, 2011; Modification #19 dated November 11, 2011.

SUPERSEDES DECISION WI20070010  
 U. S. DEPARTMENT OF LABOR  
 (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: November 11, 2011

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer .....	\$34.22	\$18.65	(scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator. ....	\$33.22	\$18.65
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer. ....	\$33.72	\$18.65	Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner. ....	\$32.96	\$18.65
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.....	\$32.67	\$18.65
			Group 6: Off – road material hauler with or without ejector .....	\$26.77	\$18.65
			Premium Pay: EPA Level "A" protection - \$ 3.00 per hour EPA Level "B" protection - \$ 2.00 per hour EPA Level "C" protection - \$ 1.00 per hours		

SUPERSEDES DECISION WI20070010  
 U. S. DEPARTMENT OF LABOR  
 (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: November 11, 2011

LABORERS CLASSIFICATION:

	<u>Rates</u>	<u>Benefits</u>	
Electricians			Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.
Area 1 .....	\$27.40	16.41	
Area 2:			Area 5 - ADAMS, CLARK (Colby, Fremont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Electricians.....	28.74	17.82	
Area 3:			Area 6 - KENOSHA COUNTY
Electrical contracts under \$130,000 .....	26.24	16.85	
Electrical contracts over \$130,000 .....	29.41	16.97	
Area 4: .....	28.29	16.41	Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 5 .....	28.29	16.41	Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 6 .....	33.75	18.87	Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 8			Area 11 - DOUGLAS COUNTY
Electricians.....	30.00	24%+10.56	Area 12 - RACINE (except Burlington township) COUNTY
Area 9:			Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Electricians.....	32.55	18.80	Area 14 - Statewide.
Area 10 .....	28.88	19.06	Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.
Area 11 .....	30.39	22.90	
Area 12 .....	32.87	19.22	
Area 13 .....	31.54	20.88	
Teledata System Installer			
Area 14			
Installer/Technician .....	21.26	11.70	
Sound & Communications			
Area 15			
Installer .....	16.47	13.94	
Technician.....	24.65	15.13	
Area 1 - CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.			
Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPLEALEAU, VERNON and WASHBURN COUNTIES			
Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)			

**FEBRUARY 1999**

**NOTICE TO BIDDERS  
WAGE RATE DECISION**

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.





SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006

PROJECT(S):  
5992-06-57  
5992-06-61

FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 CONTRACT ITEMS

0010	204.0100 REMOVING PAVEMENT	29,890.000 SY	.	.	.	.
0020	204.0110 REMOVING ASPHALTIC SURFACE	12,648.000 SY	.	.	.	.
0030	204.0150 REMOVING CURB & GUTTER	4,024.000 LF	.	.	.	.
0040	204.0155 REMOVING CONCRETE SIDEWALK	461.000 SY	.	.	.	.
0050	204.0195 REMOVING CONCRETE BASES	23.000 EACH	.	.	.	.
0060	204.0210 REMOVING MANHOLES	1.000 EACH	.	.	.	.
0070	204.0220 REMOVING INLETS	25.000 EACH	.	.	.	.
0080	204.9060.S REMOVING (ITEM DESCRIPTION) 01. LIGHTING UNITS	19.000 EACH	.	.	.	.
0090	204.9060.S REMOVING (ITEM DESCRIPTION) 02. ELECTRICAL HANDHOLES	19.000 EACH	.	.	.	.
0100	205.0100 EXCAVATION COMMON	28,664.000 CY	.	.	.	.

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006PROJECT(S):  
5992-06-57  
5992-06-61FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	4,510.000 TON	.		.	
0120	213.0100 FINISHING ROADWAY (PROJECT) 01. 5992-06-57	1.000 EACH	.		.	
0130	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	31,480.000 TON	.		.	
0140	305.0130 BASE AGGREGATE DENSE 3-INCH	5,250.000 TON	.		.	
0150	312.0110 SELECT CRUSHED MATERIAL	50,520.000 TON	.		.	
0160	416.0055 CONCRETE PAVEMENT APPROACH SLAB HES	190.000 SY	.		.	
0170	416.0170 CONCRETE DRIVEWAY 7-INCH	168.000 SY	.		.	
0180	416.0270 CONCRETE DRIVEWAY HES 7-INCH	324.000 SY	.		.	
0190	455.0115 ASPHALTIC MATERIAL PG64-22	376.000 TON	.		.	
0200	455.0120 ASPHALTIC MATERIAL PG64-28	310.000 TON	.		.	
0210	455.0605 TACK COAT	916.000 GAL	.		.	

## SCHEDULE OF ITEMS

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5992-06-57  
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WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	460.1110 HMA PAVEMENT TYPE E-10	11,396.000 TON	.	.	.	.
0230	460.2000 INCENTIVE DENSITY HMA PAVEMENT	7,300.000 DOL	1.00000	.	7300.00	.
0240	460.4100.S REHEATING HMA LONGITUDINAL JOINTS	175.000 STA	.	.	.	.
0250	465.0105 ASPHALTIC SURFACE	8.000 TON	.	.	.	.
0260	465.0110 ASPHALTIC SURFACE PATCHING	60.000 TON	.	.	.	.
0270	465.0125 ASPHALTIC SURFACE TEMPORARY	92.000 TON	.	.	.	.
0280	520.8000.S CULVERT PIPE CONCRETE COLLAR	12.000 EACH	.	.	.	.
0290	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D	3,961.000 LF	.	.	.	.
0300	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A	42.000 LF	.	.	.	.
0310	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	1,090.000 LF	.	.	.	.
0320	602.0410 CONCRETE SIDEWALK 5-INCH	16,236.000 SF	.	.	.	.

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006PROJECT(S):  
5992-06-57  
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WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0330	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	264.000 SF	.		.	
0340	602.2400 CONCRETE SAFETY ISLANDS	1,960.000 SF	.		.	
0350	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	48.000 LF	.		.	
0360	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	119.000 LF	.		.	
0370	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	48.000 LF	.		.	
0380	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	8.000 LF	.		.	
0390	608.0327 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 27-INCH	8.000 LF	.		.	
0400	609.0112 RELAID STORM SEWER 12-INCH	32.000 LF	.		.	
0410	609.0115 RELAID STORM SEWER 15-INCH	156.000 LF	.		.	
0420	609.0118 RELAID STORM SEWER 18-INCH	66.000 LF	.		.	
0430	609.0121 RELAID STORM SEWER 21-INCH	57.000 LF	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006PROJECT(S):  
5992-06-57  
5992-06-61FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0440	609.0124 RELAID STORM SEWER 24-INCH	66.000 LF	.		.	
0450	611.0201 MANHOLES TYPE 1	2.000 EACH	.		.	
0460	611.0210 MANHOLES TYPE 3	1.000 EACH	.		.	
0470	611.0301 INLETS TYPE 1	1.000 EACH	.		.	
0480	611.0303 INLETS TYPE 3	22.000 EACH	.		.	
0490	611.0420 RECONSTRUCTING MANHOLES	3.000 EACH	.		.	
0500	611.0609 INLET COVERS TYPE B-A	1.000 EACH	.		.	
0510	611.0624 INLET COVERS TYPE H	1.000 EACH	.		.	
0520	611.0666 INLET COVERS TYPE Z	1.000 EACH	.		.	
0530	611.8110 ADJUSTING MANHOLE COVERS	40.000 EACH	.		.	
0540	611.8115 ADJUSTING INLET COVERS	42.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006

PROJECT(S):  
5992-06-57  
5992-06-61

FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0550	611.8120.S COVER PLATES TEMPORARY	32.000 EACH	.		.	
0560	611.9710 SALVAGED INLET COVERS	25.000 EACH	.		.	
0570	619.1000 MOBILIZATION	1.000 EACH	.		.	
0580	620.0200 CONCRETE MEDIAN BLUNT NOSE	265.000 SF	.		.	
0590	620.0300 CONCRETE MEDIAN SLOPED NOSE	620.000 SF	.		.	
0600	624.0100 WATER	599.000 MGAL	.		.	
0610	625.0105 TOPSOIL	853.000 CY	.		.	
0620	625.0500 SALVAGED TOPSOIL	1,751.000 SY	.		.	
0630	628.1504 SILT FENCE	2,651.000 LF	.		.	
0640	628.1520 SILT FENCE MAINTENANCE	2,651.000 LF	.		.	
0650	628.1905 MOBILIZATIONS EROSION CONTROL	3.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006PROJECT(S):  
5992-06-57  
5992-06-61FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0660	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	3.000 EACH	.		.	
0670	628.2008 EROSION MAT URBAN CLASS I TYPE B	1,951.000 SY	.		.	
0680	628.7005 INLET PROTECTION TYPE A	64.000 EACH	.		.	
0690	628.7015 INLET PROTECTION TYPE C	65.000 EACH	.		.	
0700	628.7020 INLET PROTECTION TYPE D	9.000 EACH	.		.	
0710	628.7560 TRACKING PADS	24.000 EACH	.		.	
0720	629.0210 FERTILIZER TYPE B	446.000 CWT	.		.	
0730	630.0140 SEEDING MIXTURE NO. 40	14.000 LB	.		.	
0740	630.0180 SEEDING MIXTURE NO. 80	8.000 LB	.		.	
0750	630.0200 SEEDING TEMPORARY	50.000 LB	.		.	
0760	631.0300 SOD WATER	1,150.000 MGAL	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006

PROJECT(S):  
5992-06-57  
5992-06-61

FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0770	631.1000 SOD LAWN	5,106.000 SY	.		.	
0780	637.0202 SIGNS REFLECTIVE TYPE II	612.230 SF	.		.	
0790	638.2102 MOVING SIGNS TYPE II	56.000 EACH	.		.	
0800	638.2602 REMOVING SIGNS TYPE II	118.000 EACH	.		.	
0810	638.3000 REMOVING SMALL SIGN SUPPORTS	58.000 EACH	.		.	
0820	642.5201 FIELD OFFICE TYPE C	1.000 EACH	.		.	
0830	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 5992-06-57	96.000 DAY	.		.	
0840	643.0300 TRAFFIC CONTROL DRUMS	54,941.000 DAY	.		.	
0850	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	3,838.000 DAY	.		.	
0860	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	411.000 EACH	.		.	



SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20120214006

PROJECT(S):  
5992-06-57  
5992-06-61

FEDERAL ID(S):  
WISC 2012065  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0870	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	361.000 EACH	.		.	
0880	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	27,431.000 DAY	.		.	
0890	643.0800 TRAFFIC CONTROL ARROW BOARDS	189.000 DAY	.		.	
0900	643.0900 TRAFFIC CONTROL SIGNS	10,258.000 DAY	.		.	
0910	643.0905.S TRAFFIC CONTROL COVERING SIGNS	25.000 EACH	.		.	
0920	643.1050 TRAFFIC CONTROL SIGNS PCMS	240.000 DAY	.		.	
0930	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 01. 5992-06-57	1.000 EACH	.		.	
0940	643.3000 TRAFFIC CONTROL DETOUR SIGNS	470.000 DAY	.		.	
0950	645.0140 GEOTEXTILE FABRIC TYPE SAS	30,050.000 SY	.		.	
0960	646.0106 PAVEMENT MARKING EPOXY 4-INCH	8,934.000 LF	.		.	
0970	646.0116 PAVEMENT MARKING EPOXY 6-INCH	10,780.000 LF	.		.	

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REVISED:

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5992-06-57  
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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0980	646.0126 PAVEMENT MARKING EPOXY 8-INCH	610.000 LF	.		.	
0990	646.0600 REMOVING PAVEMENT MARKINGS	11,286.000 LF	.		.	
1000	647.0110 PAVEMENT MARKING RAILROAD CROSSINGS EPOXY	4.000 EACH	.		.	
1010	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2	22.000 EACH	.		.	
1020	647.0176 PAVEMENT MARKING ARROWS EPOXY TYPE 3	2.000 EACH	.		.	
1030	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY	18.000 EACH	.		.	
1040	647.0356 PAVEMENT MARKING WORDS EPOXY	8.000 EACH	.		.	
1050	647.0406 PAVEMENT MARKING WORDS BIKE LANE EPOXY	33.000 EACH	.		.	
1060	647.0456 PAVEMENT MARKING CURB EPOXY	255.000 LF	.		.	
1070	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH	302.000 LF	.		.	
1080	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	14.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1090	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	98.000 LF	.		.	
1100	647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	1,742.000 LF	.		.	
1110	647.0955 REMOVING PAVEMENT MARKINGS ARROWS	8.000 EACH	.		.	
1120	647.0960 REMOVING PAVEMENT MARKINGS SYMBOLS	2.000 EACH	.		.	
1130	647.0965 REMOVING PAVEMENT MARKINGS WORDS	12.000 EACH	.		.	
1140	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH	34,888.000 LF	.		.	
1150	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH	1,095.000 LF	.		.	
1160	649.1100 TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH	277.000 LF	.		.	
1170	649.1300 TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH	30.000 LF	.		.	
1180	649.1700 TEMPORARY PAVEMENT MARKING ARROWS	66.000 EACH	.		.	
1190	649.1900 TEMPORARY PAVEMENT MARKING WORDS	16.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1200	650.4000 CONSTRUCTION STAKING STORM SEWER	26.000 EACH	.		.	
1210	650.4500 CONSTRUCTION STAKING SUBGRADE	7,258.000 LF	.		.	
1220	650.5000 CONSTRUCTION STAKING BASE	11,406.000 LF	.		.	
1230	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	13,858.000 LF	.		.	
1240	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 5992-06-57	LUMP	LUMP		.	
1250	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5992-06-57	LUMP	LUMP		.	
1260	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	36.000 LF	.		.	
1270	652.0215 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1 1/4-INCH	825.000 LF	.		.	
1280	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	5,080.000 LF	.		.	
1290	652.0230 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2 1/2-INCH	128.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1300	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	4,250.000 LF	.		.	
1310	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	1,418.000 LF	.		.	
1320	652.0330 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2 1/2-INCH	214.000 LF	.		.	
1330	652.0335 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH	2,202.000 LF	.		.	
1340	652.0800 CONDUIT LOOP DETECTOR	516.000 LF	.		.	
1350	654.0110 CONCRETE BASES TYPE 10	2.000 EACH	.		.	
1360	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG	365.000 LF	.		.	
1370	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG	135.000 LF	.		.	
1380	655.0250 CABLE TRAFFIC SIGNAL 9-14 AWG	1,115.000 LF	.		.	
1390	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG	310.000 LF	.		.	
1400	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	7,150.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1410	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	7,355.000 LF	.		.	
1420	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	22,065.000 LF	.		.	
1430	655.0800 LOOP DETECTOR WIRE	1,423.000 LF	.		.	
1440	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. BADGER-FISH HATCHERY	LUMP	LUMP		.	
1450	657.0100 PEDESTAL BASES	5.000 EACH	.		.	
1460	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	5.000 EACH	.		.	
1470	658.0500 PEDESTRIAN PUSH BUTTONS	6.000 EACH	.		.	
1480	658.5069 SIGNAL MOUNTING HARDWARE (LOCATION) 01. BADGER-FISH HATCHERY	LUMP	LUMP		.	
1490	690.0150 SAWING ASPHALT	480.000 LF	.		.	
1500	690.0250 SAWING CONCRETE	3,630.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1510	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	450.000 HRS	5.00000		2250.00	
1520	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	700.000 HRS	5.00000		3500.00	
1530	SPV.0035 SPECIAL 01. ROCK EXCAVATION FOR WATER MAIN INSTALLATION	47.000 CY	.		.	
1540	SPV.0060 SPECIAL 01. UTILITY LINE OPENING (ULO)	31.000 EACH	.		.	
1550	SPV.0060 SPECIAL 02. PRECAST SIGN POST BASE	66.000 EACH	.		.	
1560	SPV.0060 SPECIAL 03. SIGN POST BASE FOR CONCRETE INSTALLATION	2.000 EACH	.		.	
1570	SPV.0060 SPECIAL 04. TEMPORARY CURB RAMP	5.000 EACH	.		.	
1580	SPV.0060 SPECIAL 05. TEMPORARY BUS STOP PAD	10.000 EACH	.		.	
1590	SPV.0060 SPECIAL 06. TEMPORARY PAVEMENT MARKING SYMBOLS RAILROAD CROSSING	4.000 EACH	.		.	
1600	SPV.0060 SPECIAL 07. TEMPORARY CROSSWALK ACCESS	10.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1610	SPV.0060 SPECIAL 08. MAINTENANCE, PROTECTION AND ADJUSTING GROUND WATER MONITORING WELL	EACH 7.000	.		.	
1620	SPV.0060 SPECIAL 09. CUT-IN CONNECTION	EACH 1.000	.		.	
1630	SPV.0060 SPECIAL 10. FURNISH AND INSTALL HYDRANT	EACH 2.000	.		.	
1640	SPV.0060 SPECIAL 11. CUT OFF EXISTING WATER MAIN	EACH 7.000	.		.	
1650	SPV.0060 SPECIAL 12. ABANDON WATER VALVE	EACH 10.000	.		.	
1660	SPV.0060 SPECIAL 13. ABANDON HYDRANT	EACH 2.000	.		.	
1670	SPV.0060 SPECIAL 14. ADJUST WATER VALVE BOX	EACH 4.000	.		.	
1680	SPV.0060 SPECIAL 15. FURNISH AND INSTALL 6-INCH VALVE	EACH 2.000	.		.	
1690	SPV.0060 SPECIAL 16. FURNISH AND INSTALL 8-INCH VALVE	EACH 2.000	.		.	
1700	SPV.0060 SPECIAL 17. FURNISH AND INSTALL 12-INCH VALVE	EACH 6.000	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1710	SPV.0060 SPECIAL 18. DISCONNECT AND RECONNECT SERVICE LATERAL 1-INCH	2.000 EACH	.		.	
1720	SPV.0060 SPECIAL 19. DISCONNECT AND RECONNECT SERVICE LATERAL 1.5 OR 2-INCH	1.000 EACH	.		.	
1730	SPV.0060 SPECIAL 20. FURNISH EXCAVATION AND DITCH FOR LIVE TAP	6.000 EACH	.		.	
1740	SPV.0060 SPECIAL 21. TYPE I HANDHOLE	21.000 EACH	.		.	
1750	SPV.0060 SPECIAL 22. TYPE III HANDHOLE	7.000 EACH	.		.	
1760	SPV.0060 SPECIAL 23. TYPE V HANDHOLE	3.000 EACH	.		.	
1770	SPV.0060 SPECIAL 24. ELECTRIC UTILITY ACCESS STRUCTURE	1.000 EACH	.		.	
1780	SPV.0060 SPECIAL 25. CONCRETE BASE TYPE G	4.000 EACH	.		.	
1790	SPV.0060 SPECIAL 26. CONCRETE BASE TYPE LB-3	13.000 EACH	.		.	
1800	SPV.0060 SPECIAL 27. CONCRETE BASE TYPE LB-8	5.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1810	SPV.0060 SPECIAL 28. CONCRETE BASE TYPE P	1.000 EACH	.		.	
1820	SPV.0060 SPECIAL 29. TRANSFORMER BASE 20-INCH STEEL	2.000 EACH	.		.	
1830	SPV.0060 SPECIAL 30. MONOTUBE POLE TYPE 9	2.000 EACH	.		.	
1840	SPV.0060 SPECIAL 31. MONOTUBE ARM 30-FOOT	2.000 EACH	.		.	
1850	SPV.0060 SPECIAL 32. POLE 20-FOOT 7 GUAGE	1.000 EACH	.		.	
1860	SPV.0060 SPECIAL 33. POLE 30-FOOT 11 GUAGE	11.000 EACH	.		.	
1870	SPV.0060 SPECIAL 34. POLE 30-FOOT 7 GUAGE	2.000 EACH	.		.	
1880	SPV.0060 SPECIAL 35. LIGHTING FIXTURES SPECIAL TYPE-A	22.000 EACH	.		.	
1890	SPV.0060 SPECIAL 36. LIGHTING FIXTURES SPECIAL TYPE-B	5.000 EACH	.		.	
1900	SPV.0060 SPECIAL 37. REMOVE AND REUSE STREET LIGHT BASE AND POLE	5.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1910	SPV.0060 SPECIAL 38. REMOVE AND REUSE CONCRETE STREET LIGHT POLE	EACH 1.000	.		.	
1920	SPV.0060 SPECIAL 39. TRAFFIC SIGNAL CONTROL CABINET	EACH 1.000	.		.	
1930	SPV.0060 SPECIAL 40. TRAFFIC SIGNAL CONTROLLER	EACH 1.000	.		.	
1940	SPV.0060 SPECIAL 41. NEMA-PLUS CONFLICT MONITOR	EACH 1.000	.		.	
1950	SPV.0060 SPECIAL 42. TRAFFIC SIGNAL HEADS 12-INCH 3- SECTION VERTICAL R-Y-G BALLS	EACH 10.000	.		.	
1960	SPV.0060 SPECIAL 43. TRAFFIC SIGNAL HEADS 12-INCH 3- SECTION VERTICAL R-Y-G ARROWS	EACH 2.000	.		.	
1970	SPV.0060 SPECIAL 44. TRAFFIC SIGNAL HEADS 12-INCH 4- SECTION VERTICAL R-Y-Y-G BALLS	EACH 2.000	.		.	
1980	SPV.0060 SPECIAL 45. TRAFFIC SIGNAL HEADS 8-INCH 3- SECTION VERTICAL R-Y-G BALLS	EACH 2.000	.		.	
1990	SPV.0060 SPECIAL 46. TRAFFIC SIGNAL HEADS 12-INCH PEDESTRIAN	EACH 8.000	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2000	SPV.0060 SPECIAL 47. TRAFFIC SIGNAL HEADS 12-INCH PEDESTRIAN COUNTDOWN	8.000 EACH	.		.	
2010	SPV.0060 SPECIAL 48. BACKPLATES SIGNAL FACE 3-SECTION 12- INCH	12.000 EACH	.		.	
2020	SPV.0060 SPECIAL 49. BACKPLATES SIGNAL FACE 4-SECTION 12- INCH	2.000 EACH	.		.	
2030	SPV.0060 SPECIAL 50. ROOT PRUNING EXISTING TERRACE TREES	73.000 EACH	.		.	
2040	SPV.0060 SPECIAL 51. OPTICAL SIGNAL PREEMPT	2.000 EACH	.		.	
2050	SPV.0090 SPECIAL 01. CONCRETE CURB & GUTTER 24-INCH TYPE D SPECIAL	8,765.000 LF	.		.	
2060	SPV.0090 SPECIAL 02. REFLECTIVE SIGN POST	666.000 LF	.		.	
2070	SPV.0090 SPECIAL 03. FURNISH AND INSTALL 6-INCH PIPE AND FITTINGS	112.000 LF	.		.	
2080	SPV.0090 SPECIAL 04. FURNISH AND INSTALL 8-INCH PIPE AND FITTINGS	315.000 LF	.		.	
2090	SPV.0090 SPECIAL 05. FURNISH AND INSTALL 12-INCH PIPE AND FITTINGS	1,861.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2100	SPV.0090 SPECIAL 06. FURNISH AND INSTALL 24-INCH STEEL CASING	77.000 LF	.		.	
2110	SPV.0090 SPECIAL 07. SELECT FILL-SAND FOR WATER MAIN	2,288.000 LF	.		.	
2120	SPV.0090 SPECIAL 08. EXTEND AND RECONNECT SERVICE LATERAL 1-INCH	218.000 LF	.		.	
2130	SPV.0090 SPECIAL 09. EXTEND AND RECONNECT SERVICE LATERAL 2-INCH	16.000 LF	.		.	
2140	SPV.0090 SPECIAL 10. FURNISH AND INSTALL EXTRUDED POLYSTYRENE FOAM	112.000 LF	.		.	
2150	SPV.0090 SPECIAL 11. LOOP DETECTOR LEAD-IN-CABLE SPECIAL	2,290.000 LF	.		.	
2160	SPV.0105 SPECIAL 01. TEMPORARY VEHICLE DETECTION BADGER ROAD INTERSECTION	LUMP	LUMP		.	
2170	SPV.0105 SPECIAL 02. TEMPORARY TRAFFIC SIGNALS BADGER ROAD INTERSECTION	LUMP	LUMP		.	
2180	SPV.0105 SPECIAL 03. TEMPORARY LIGHTING	LUMP	LUMP		.	
2190	SPV.0105 SPECIAL 05. CONSTRUCTION STAKING WATERMAIN	LUMP	LUMP		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	



**PLEASE ATTACH SCHEDULE OF ITEMS HERE**