HIGHWAY WORK PROPOSAL

Proposal Number: 3 6

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Marathon	6999-03-79	WISC 2016 179	C Wausau, Highway 52 17th Avenue to 1st Avenue	STH 52
Marathon	6999-03-80	WISC 2016 180	C Wausau, Highway 52 1st Avenue to First Street	STH 52
Marathon	6999-03-81	WISC 2016 181	C Wausau, Highway 52 Wisconsin River to McClellan St, WB	STH 52

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

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: May 10, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time October 28, 2016	
Assigned Disadvantaged Business Enterprise Goal 12 %	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Concrete pavement, concrete joint repair, HMA pavement, asphalt milling, curb and gutter, sidewalk, storm sewer, aggregate base dense, traffic signals, pavement marking and signing.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

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

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

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

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

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

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the 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.

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

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

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

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

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

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at:

http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder

Name

BN00

Proposals: 1, 12, 14, & 22

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

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

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

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

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

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

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

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

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

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 - "Required Contract Provisions Federal Aid Construction Contracts," without

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

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

(1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

Special Provisions

Table of Contents

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 6999-03-79, C Wausau, Highway 52, 17th Avenue to 1st Avenue, STH 52; Project 6999-03-80, C Wausau, Highway 52, 1st Avenue to First Street, STH 52; Project 6999-03-81, C Wausau, Highway 52, Wisconsin River to McClellan St, westbound, STH 52, Marathon 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, 2016 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 (20151210)

2. Scope of Work.

The work under this contract shall consist of concrete pavement, concrete joint repair, HMA pavement, asphalt milling, curb and gutter, sidewalk, storm sewer, aggregate base dense, traffic signals, pavement marking and signing. and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2016 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. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

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.

This project will require maintaining an expedited schedule in order to complete work as required. Compile all electrical material submittals within two weeks of contract award and provide to the engineer for review and approval. Approvals must be completed as early as possible to provide adequate lead time from material suppliers.

All required work on STH 52 and side streets between 17th Avenue and Station 220+80 EB and westbound shall be completed between the dates of June 9, 2016 and August 31, 2016 while the John Muir Middle School is out for the summer break.

Stage the construction operations for traffic signals as follows:

STH 52 and 3rd Avenue

- Install temporary traffic signals and remove existing traffic signal poles and heads prior to implementing long-term lane closures for stage 1
- Install permanent signal bases, pullboxes and conduit in intersection quadrants in stage 1.
- Install permanent signal bases, pullboxes and conduit in median areas in stage 2.
- Deactivate the temporary traffic signal and energize the permanent traffic signal prior to removing long term-lane closures for stage 2.

STH 52 and 1st Avenue

- Install temporary traffic signals and remove existing traffic signal poles and heads prior to implementing long-term lane closures for stage 1
- Install permanent signal bases, pullboxes and conduit in intersection quadrants in stage 1.
- Install permanent signal bases, pullboxes and conduit in median areas in stage 2.
- Deactivate the temporary traffic signal and energize the permanent traffic signal prior to removing long term-lane closures for stage 2.
- Provide for railroad preemption prior to energizing permanent traffic signal.

STH 52 and 1st Street

- Stage traffic signal construction to maintain existing traffic signal heads in operation until new bases are installed.
- Reinstall traffic signal poles on new bases and energize traffic signal heads within 4 hours of being removed from existing bases. Coordinate traffic signal reinstallation with the engineer and include additional traffic control devices as required.

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

Do not store equipment, vehicles, or materials within the temporary limited easement or private parking lots of any business parking or driving area without the written approval of the engineer.

Pedestrian access shall be provided throughout construction. Perform sidewalk replacement work in stages to accommodate pedestrian access. When replacing the sidewalks and pedestrian curb ramps provide temporary sidewalks and sidewalk connections, as necessary and as shown in the plans, meeting requirements as designated in the ADA.

Provide a minimum 10 feet clear width at unmarked crossings within the work zone intended to connect designated temporary sidewalks.

When replacing the storm sewer structures and pipes within the 6999-03-79 project limits, once the existing concrete pavement has been removed at the structure designated for replacement the new storm sewer structure, pipes, backfill, base aggregate dense and the new concrete base shall be in place and completed within four calendar days. The asphaltic pavement overlay does not need to be placed within this time frame.

4. Traffic.

STH 52 shall remain open to at least one lane of traffic in each direction at all times according to the traffic control plans during construction operations under this contract. During Stage 2 provide left turn lanes along STH 52 westbound at 3rd Avenue and along STH 52 eastbound at 1st Avenue as shown in the traffic control plans.

Unless otherwise noted the side streets of 12th Avenue, Marathon County Park Entrance, 11th Avenue, 10th Avenue, 9th Avenue, 8th Avenue, 7th Avenue, 6th Avenue, 5th Avenue, 4th Avenue and 2nd Avenue shall remain open to at least one lane of traffic at all times during construction operations under this contract. Conduct operations such that these two-way side streets are open to two lanes of traffic during nighttime hours. Whenever one lane of traffic is provided along any of the two-way side streets, flagging operations shall be in place and follow SDD Traffic Control For Lane Closure (Suitable for Moving Operations).

The south leg of 1st Avenue will be closed to through vehicle traffic while the railroad crossing is replaced and widened by the Wisconsin Central Ltd railroad company. The replacement of the crossing will take one week. 1st Avenue traffic will be detoured and signed by the City of Wausau. Coordinate with the railroad company on when the crossing will be replaced and contact Allen Wesolowski, Wausau City Engineer, (715) 261-6740, two weeks prior to needing 1st Avenue closed.

Existing on-street parking along 1st Avenue and along Scott Street shall be restricted at the locations and during the stages shown in the Traffic Control Plans. The City of Wausau will install temporary no parking signs at these locations. Contact Allen Wesolowski, Wausau City Engineer, (715) 261-6740, two weeks prior to needing the no-parking signs installed.

The side streets of 3rd Avenue and 1st Avenue shall remain open to at least two lanes of traffic at all times during construction operations under this contract. Traffic on 3rd Avenue and 1st Avenue shall be staged as follows:

3rd Avenue

Stage 1A:

Merge 3rd Avenue traffic down to two lanes on the east side of the roadway. Designate the left outside lane as a combined left turn and through lane. Designate the left middle lane as a right turn only lane. Construct the northwest and southwest quadrants of the

3rd Avenue intersection. Replace the existing concrete pavement removed in the southwest quadrant for the storm sewer replacement work with high early strength (HES) concrete base. When work is not being performed within the southwest and northwest quadrants and after the HES concrete base has reached the required strength in the southwest quadrant, pull the traffic control drums back to better accommodate the right turning vehicles.

Stage 1B:

Merge 3rd Avenue traffic down to two lanes on the west side of the roadway. Maintain the right outside lane as a right turn only lane. Designate the right middle lane as a combined left turn and through lane. Construct the northeast and southeast quadrants of the 3rd Avenue intersection.

Stage 2A:

Merge 3rd Avenue traffic down to two lanes on the east side of the roadway. Designate the left outside lane as a combined left turn and through lane. Designate the left middle lane as a right turn only lane. Construct the inside west half of the 3rd Avenue intersection. When work is not being performed within the eastern portion of the intersection pull the traffic control drums back to better accommodate the left turning vehicles.

Stage 2B:

Merge 3rd Avenue traffic down to two lanes on the west side of the roadway. Maintain the right outside lane as a right turn only lane. Designate the right middle lane as a combined left turn and through lane. Construct the inside east half of the 3rd Avenue intersection. When work is not being performed within the eastern portion of the intersection pull the traffic control drums back to better accommodate the left turning vehicles.

1st Avenue

Stage 1A:

Merge 1st Avenue traffic down to two lanes on the west side of the roadway. Maintain the left outside lane as a left turn only lane. Designate the left middle lane as a combined right turn and through lane. Construct the northeast and southeast quadrants of the 1st Avenue intersection. When work is not being performed within the southeast quadrant pull the traffic control drums back to better accommodate the right turning vehicles.

Construct the STH 52 westbound right turn lane and right through lane with high early strength (HES) concrete pavement. Westbound traffic turning right onto 1st Avenue will utilize the left through lane and turn right on the west side of the existing right-turn island. Immediately after the HES concrete pavement placed in the right turn lane

reaches the required strength, construct the temporary asphaltic surface between the new and existing through lanes and shift the right turning vehicles to the right turn lane as shown in Stage 1B.

Stage 1B:

1st Avenue traffic shall continue to utilize the west side of 1st Avenue. Continue to construct the southeast quadrant of the 1st Avenue intersection. The westbound STH 52 right turn turning traffic shall use the right turn lane constructed in Stage 1A. Construct the right turn island and portions of the outside through lane in the northeast quadrant of the 1st Avenue intersection. When work is not being performed within the southeast quadrant pull the traffic control drums back to better accommodate the right turning vehicles.

Stage 1C:

Merge 1st Avenue traffic down to two lanes on the east side of the roadway. Maintain the right outside lane as a right turn only lane. Designate the right middle lane as a combined right turn and through lane. Construct the northwest and southwest quadrants of the 1st Avenue intersection. Utilize flaggers when working in the southwest quadrant to guide northbound to westbound left turning vehicles around the construction operations. Vehicles may need to be flagged to continue north on 1st Avenue if left turns are difficult to make. When work is not being performed within the southwest quadrant pull the traffic control drums back to better accommodate the left turning vehicles.

Stage 2A:

Merge 1st Avenue traffic down to two lanes on the west side of the. Maintain the left outside lane as a left turn only lane. Designate the left middle lane as a combined right turn and through lane. Construct the inside east half of the 1st Avenue intersection.

Stage 2B:

Merge 1st Avenue traffic down to two lanes on the east side of the roadway. Maintain the right outside lane as a right turn only lane. Designate the right middle lane as a combined right turn and through lane. Construct the inside west half of the 1st Avenue intersection. Utilize flaggers when working in the west half of the intersection to guide northbound to westbound left turning vehicles around the construction operations. Vehicles may need to be flagged to continue north on 1st Avenue if left turns are difficult to make. When work is not being performed within the west half of the intersection pull the traffic control drums back to better accommodate the left turning vehicles.

Scott Street shall remain open to at least one lane of traffic and 1st Street shall remain open to at least two lanes of traffic at all times during construction operations under this contract. Traffic on Scott Street and 1st Street shall be staged as follows:

Scott Street and 1st Street

Stage 1A:

Merge Scott Street traffic down to one lane using the left outside lane beginning at the 1st Street intersection. Merge 1st Street traffic down to a 2-lane 2-way operation and shift to the east side of the roadway. Construct the right outside lane of Scott Street, the west half/both southbound lanes of 1st Street with the exception of a portion of the inside lane through the McClellan Street intersection that will be constructed in Stage 1B, and the northwest quadrant of the Scott Street and 1st Street intersection. Construct the northwest quadrant with HES concrete pavement. Immediately after the HES concrete pavement reaches the required strength, construct the temporary asphaltic surface between the new and existing pavement and pull the traffic control drums back to better accommodate the southbound to westbound right turning vehicles.

Stage 1B:

Scott Street traffic shall continue to use the left outside lane. Merge 1st Street northbound traffic down to single lane on the east side of the roadway. 1st Street southbound traffic shall stay as a single lane and use the west side outside lane that was constructed in Stage 1A. Construct the remaining portion of 1st Street's inside southbound lane through the McClellan Street intersection. Prohibit left turn movements from southbound 1st Street onto McClellan Street and from McClellan Street onto southbound 1st Street by installing signs and traffic control devices. Work may continue on the south outside lane of Scott Street.

Stage 1C:

Scott Street traffic shall continue to use the left outside lane. Merge 1st Street traffic down to a 2-lane 2-way operation and shift to the west side of the roadway. Work may continue on the right outside lane of Scott Street. Construct the east half/both northbound lanes of 1st Street and the northeast quadrant of the Scott Street and 1st Street intersection.

Stage 2A:

Merge Scott Street traffic down to one lane using the right outside lane constructed in Stage 1 beginning at the 1st Street intersection. Merge 1st Street traffic down to a 2-lane 2-way operation and shift to the west side of the roadway through the intersection. Construct the left outside lane and middle lane of Scott Street and the southeast quadrant of the Scott Street and 1st Street intersection.

Stage 2B:

Scott Street traffic shall continue to use the right outside lane. Merge 1st Street traffic down to a 2-lane 2-way operation and shift to the east side of the roadway through the

intersection. Provide a southbound right turn lane at the intersection. Work may continue on the left outside lane and middle lane of Scott Street. Construct the southwest quadrant of the Scott Street and 1st Street intersection using HES concrete pavement. Immediately after the HES concrete pavement reaches the required strength pull the traffic control drums back to better accommodate the northbound to westbound left turning vehicles

Wisconsin Lane Closure System Advance Notification.

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction ≤16')	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
Full roadway closures	14 calendar days
System and service ramp closures	14 calendar days
Full system and service ramp closures	14 calendar days
Detours	14 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
System and service ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.
108-057 (20150630)

5. Holiday and Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 52 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 27, 2016 to 6:00 AM Tuesday, May 31, 2016 for Memorial Day;
- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5, 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 6:00 AM Tuesday, September 6, 2016 for Labor Day.

The Marathon County Park entrance located at Station 216+50 EB RT, the south legs of 6th Avenue and 7th Avenue, the Stewart Avenue and 6th Avenue intersection, and the Stewart Avenue and 7th Avenue intersection shall be opened to 2 lanes of traffic during the dates and events listed below. No construction operations shall occur on these entrances, streets, and intersections during these dates. No construction equipment shall be stored on 6th Avenue and 7th Avenue that would impede traffic at any times during these dates. Pedestrian access between the John Muir Middle School and the Park's entrance at 12th Avenue shall not be restricted at any times during these dates.

Date	Event
May 28, 2016	Memorial Day Parade
June 28, 2016 to July 6, 2016	4th of July Celebration
July 29, 2016 to August 9, 2016	Wisconsin Valley Fair
September 9, 2016 to September 15, 2016	Art in the Park and Tech Fair

6. Utilities.

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

Project ID #6999-03-79

Charter Communications (Communications) has an underground fiber optic line running north/south that crosses STH 52 between 6th and 7th Avenue near Station 234+34. Notify Charter at least three business days prior to repairing the storm sewer structure at Station 234+14 and Charter will lower the fiber optic during construction. Charter requires one working day to lower the fiber optic line.

Frontier Communications (Communications) has underground telephone facilities located along the south side of STH 52 entering the project corridor near the park entrance just east of the 12th Ave intersection, cross STH 52, and head to a manhole located in the median between 12th and 11th Ave. From this manhole the facilities continue east within the median to 5th Ave. From 7th Ave to 2nd Ave, Frontier has underground telephone facilities running along the eastbound lanes of STH 52. Frontier also has underground facilities crossing STH 52 to the north at every midblock location between 12th and 3rd Ave. Frontier also has underground telephone facilities running along 1st Ave. Additional telephone facilities begin at 1st Ave and head east along the south side of STH 52 in a concrete encased duct package to the Slough Bridge. Frontier also has a fiber optic line in this duct.

Frontier's duct package at the 3rd Ave intersection runs east along the south side of STH 52 12" south of the existing traffic signal pole in the SE corner of the intersection. This duct package is encased in concrete, approximately 34" wide, and at an approximate depth of 5'. The duct package at the 1st Ave intersection running along the south side of STH 52 is 3' south from the existing traffic signal in the SE corner of the intersection. This duct package is also encased in concrete and 34" wide, but it is only at a shallow depth of 25" below the existing sidewalk.

Frontier will be adjusting their telephone manholes within the STH 52 roadway concurrently with construction to match the proposed surface of the roadway. Contact Frontier at least three business days prior to needing the manholes adjusted. Frontier will need approximately one to three working days to complete the adjustments. Use caution when installing traffic signal bases at 3rd and 1st Ave in order to avoid conflict with Frontier's duct package.

Wausau Community Area Network (Communications) has an underground fiber optic line located along the south side of STH 52 from 17th Avenue to past the Slough Bridge. From 17th Ave to 8th Ave, the fiber optic line is located within a few feet from the park fence south of STH 52. From 8th Ave to 6th Ave, the fiber optic line follows the existing RIGHT-OF-WAY line. From 6th Ave to 1st Ave, the fiber optic line is located directly behind the existing curb and gutter on the south side of STH 52.

When inlets/manholes are replaced at Stations 244+46 EB and 246+91, the fiber optic line will need to be exposed and worked around. Contact Wausau Community Area Network (WCAN) when the fiber optic line is being exposed. Prior to construction, WCAN will relocate their fiber optic line crossing 1st Ave to the north side of the railroad RIGHT-OF-WAY running east, crossing 1st Ave near Station 124+25.

Wausau Water Works (Sewer) has underground sanitary sewer facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wausau Water Works (Water) has underground water main facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wisconsin Public Service Corporation (Electric) is proposing to install underground electric facilities crossing STH 52 near Stations 247+00 and 249+00 starting approximately on April 1, 2016 with an estimated completion of June 1, 2016. The proposed installations include installing a transformer on private property near Station 247+00 WB 60' LT. From this location, an underground electric line will be installed across STH 52 to Station 247+00 EB 42' RT, then it will head east to Station 247+75 EB 42' RT, then it will head south to a pole at Station 247+73 EB 80' RT where it will connect to an existing overhead line.

An additional pole will be placed in the 3 phase circuit at Station 247+77 EB 65' RT with anchors at Station 247+80 EB 50' RT. From this new pole, overhead 3 phase conductors crossing STH 52 and continuing north on 2nd Ave will be removed. A new underground electric line will be installed from the new pole at Station 247+77 EB 65' RT then east to Station 248+40 EB 56' RT, crossing STH 52 to Station 249+00 WB 54' LT where it will continue east, parallel to the right-of-way line to Station 251+00 WB 55' LT. The underground installation will then continue north across Clark Street and into an alley where it will connect to an existing overhead circuit.

Wisconsin Public Service Corporation (WPS) will be supplying the power to the 3rd and 1st Ave traffic signal systems utilizing their underground electric facilities between 3rd and 1st Ave. WPS will be hooking up and energizing the controllers concurrently with construction.

Contact WPS when the controllers need to be energized. Please call 800-450-7240 for electric emergencies.

Wisconsin Public Service Corporation (Gas) has a 4" underground gas main running along the north side of STH 52 from the west project limits to 4th Avenue. From 10th Ave to 4th Ave, this gas main is located under the existing sidewalk along the north side of STH 52. This gas main tees to other gas mains heading south, crossing STH 52 at 7th Ave, 6th Ave, and 4th Ave. At 4th Avenue, the 4" gas main heads south, crossing STH 52 then continues east along the south side of STH 52 and then off of the project corridor near Station 246+50 EB. The gas main then heads north along the east side of 1st Avenue, crossing STH 52 and continuing north. This gas main tees to a gas main heading east in the southeast corner of the 1st Ave intersection, and another gas main heading west in the eastbound lanes of STH 52.

WPS will be relocating their facilities between 3rd and 1st Ave to avoid conflicts with the proposed traffic signals. They plan to install a 6" plastic gas main at depth of 48" (72" depth where the main crosses 3rd Ave) under the backside of the sidewalk, running east along the north side of STH 52 from the NW intersection of 4th Ave to the cul-de-sac on Clark Street near Station 252+10 WB LT. At this station, the main will turn and proceed north along the alley between 1st and 2nd Ave to Callon Street at an approximate depth of 40". This main will be tied into their existing 4" steel main on the east side of 1st Ave near CoVantage Credit Union. WPS plans to install a 6" plastic main across STH 52 near Station 246+75 EB. This gas main will be installed jointly with a new WPS primary electric crossing. The gas main at the 3rd Ave intersection will be discontinued in place. A new 2" plastic main will be installed in the SW corner of the 3rd Ave intersection connecting the gas main running east on the south side of STH 52 and the gas main running south along the west side of 3rd Ave.

The gas main running along the east side of 1st Ave will be discontinued beginning at the T in the gas mains near 123+25 RT. The gas mains crossing STH 52 near 253+00 EB & WB, and 252+40 WB will be discontinued in place. There will be a new 4" plastic gas main (40" depth) installed in the NE corner of the 1st Ave intersection along the RIGHT-OF-WAY connecting the gas main running east along the north side of STH 52 and the gas main running north along the east side of 1st Ave.

WPS will need to adjust seven gas valve boxes prior to the start of paving. WPS will need approximately one full working day to complete the adjustments. WPS will be relocating their gas mains from 3rd Ave to 1st Ave prior to construction. They plan on starting the relocation work on March 1, 2016 and anticipate it taking 25 working days to complete. Please call (800) 450-7280 for gas emergencies.

Project ID #6999-03-80

Frontier Communications (Communications) has underground telephone and fiber optic facilities in a concrete encased duct package (approximately 34" wide) located along the north and south side of STH 52, along both bridges, and along the east side of Washington Street. This duct crosses STH 52 near Stations 261+00 EB and 260+30 WB.

Frontier will be adjusting their telephone manholes within the STH 52 roadway concurrently with construction to match the proposed surface of the roadway. Contact Frontier at least three business days prior to needing the manholes adjusted. Frontier will need approximately one to three working days to complete the adjustments.

Wausau Community Area Network (Communications) has an underground fiber optic line located along the south side of STH 52 throughout the entire project.

WCAN does not anticipate any conflicts with their fiber optic line.

Wausau Water Works (Sewer) has underground sanitary sewer facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wausau Water Works (Water) has underground water main facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wisconsin Public Service Corporation (Electric) has underground electric facilities crossing the STH 52 eastbound and westbound lanes near Station 256+00 EB. WPS also has overhead electric facilities crossing STH 52 EB near Station 263+00 EB.

WPS does not anticipate any conflicts with their electric facilities. Please call (800) 450-7240 for electric emergencies.

Wisconsin Public Service Corporation (Gas) has a 4" underground gas main running along the north side of the STH 52 westbound roadway beginning at the west project limits and continuing to the Wisconsin River Bridge. Near Station 256+30 WB, the gas main tees, crossing STH 52 then continuing east along the south side of the STH 52 westbound roadway past the project limits. Near Station 260+66 WB, a 2" gas main tees off the 4" main and heads south along the east side of Washington Street to the STH 52 eastbound roadway. The 2" main heads east on the north side of STH 52 until Station 263+70 EB, where it ends with a service lateral crossing the STH 52 eastbound roadway.

WPS will complete all valve and manhole adjustments concurrently with construction. Contact WPS at least three business days prior to needing the valves and manholes adjusted. WPS will need approximately one to three business days to complete the adjustments. Please call 800-450-7280 for gas emergencies.

Project ID #6999-03-81

Charter Communications (Communications) has an underground fiber optic line running north/south along the west side of 1st Street that crosses STH 52 near Station 269+60 WB and continues north off of the project limits.

Charter Communications does not anticipate any conflicts with their fiber optic facilities.

Frontier Communications (Communications) has underground telephone and fiber optic facilities in a 3'x4' duct located along the north side of the Scott Street roadway. This duct heads east until it reaches a manhole in the 1st Street/Scott Street intersection near Station 270+11 WB. From this manhole the duct heads north along the east side of 1st Street.

Frontier will be adjusting their telephone manholes within the STH 52 roadway concurrently with construction to match the proposed surface of the roadway. Contact Frontier at least three business days prior to needing the manholes adjusted. Frontier will need approximately one to three working days to complete the adjustments.

Net Lec LLC (Communications) has an underground fiber optic line located within the terrace on the west side of 1st Street. Near Station 10+50 the fiber optic line reaches a pullbox then heads east along the south side of Scott Street.

Net Lec LLC does not anticipate any conflicts with their fiber optic line.

Wausau Water Works (Sewer) has underground sanitary sewer facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wausau Water Works (Water) has underground water main facilities that will be adjusted according to the plans and additional articles in these special provisions.

Wisconsin Public Service Corporation (Electric) has underground electric facilities entering the project limits from the east along Scott Street. These electric lines head west to a manhole near 269+55 WB LT where it starts heading north along the west side of STH 52 (1st Street). These electric lines continue north until they cross STH 52 (1st Street) near 14+20 and head east along McClellan Street.

WPS does not anticipate any conflicts with their electric facilities. Please call (800) 450-7240 for electric emergencies.

Wisconsin Public Service Corporation (Gas) has a 4" underground gas main running along the south side of Scott Street until the 1st Street intersection. At the intersection, the main heads south along the west side of 1st Street past the project limits.

WPS will complete all gas valve and manhole adjustments concurrently with construction. Contact WPS at least three business days prior to needing the valves and manholes adjusted. WPS will need approximately one to three business days to complete the adjustments. The 4" gas main under the Scott Street curb and gutter is approximately 48" so use caution when working in this area.

7. Marathon County Park Fence Protection.

The Marathon County Park fence located along the south side of STH 52 between 17th Avenue and 8th Avenue is an historic fence and is of great importance to the park and community. Extra care shall be taken not to damage the fence. No machinery shall be operated within 3' of the fence. If any work is required within 3' of the fence then the work

shall be completed by hand, including any removal work, stripping of topsoil, placement of fill, topsoil, seed, fertilizer, erosion mat, and silt fence.

8. Environmental Protection, Aquatic Exotic Species Control.

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

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

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

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

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.
107-055 (20130615)

9. Railroad Insurance and Coordination.

A Description
Comply with standard spec 107.17 for all work affecting Wisconsin Central Ltd. property and any existing tracks.

A.1 Railroad Insurance Requirements
In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Wisconsin Central Ltd.

Notify evidence of the required coverage, and duration to Jackie Macewicz, Manager Public Works, 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503; FAX (715) 345-2507; email jackie.macewicz@cn.ca. Include the following information on the insurance document:

Project: 6999-03-79
Route Name: WIS 52 (Stewart Ave)
Crossing ID: 182 029Y
Railroad Subdivision: Kelly Spur
Railroad Milepost: 23.08

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. WCL forces will replace the existing warning devices to be interconnected with the new traffic signals and replace the existing crossing surface with a longer crossing to accommodate the sidewalks.

A.3 Names and addresses of Railroad Representatives for Consultation and Coordination
Contact Jackie Macewicz, Manager Public Works, 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503; FAX (715) 345-2507; email jackie.macewicz@cn.ca for consultation on railroad requirements during construction.

Contact Mary Ellen Carmody, Audit Officer, Administration Service Center, 24002 Vreeland Road, Flat Rock, MI, 48134; TELEPHONE (734) 783-4533 (no FAX number); email maryellen.carmody@cn.ca for flagging arrangements. Advise Ms. Carmody that the flagging services are to be billed at the rate for a public highway project.

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 2 through freight trains operate daily through the construction site. Through freight trains operate at up to 10 mph. In addition to through train movements, there may be switching operations at a lower speed.

10. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

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

Marathon County Sheriff's Department
Wisconsin State Patrol
City of Wausau
Wausau School District
Wausau Post Office

The Marathon County Sheriff's Department 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor.
(NCR 107.05-10152014)

11. Property Marks – Protecting and Restoring.

Replace standard spec107.11.3 (1) with the following:

Protect and carefully preserve all known property and survey marks, land monuments, and right-of-way monuments and marker posts. Notify the engineer of the nature and location of these monuments and markers. Do not disturb or destroy monuments or markers until the engineer has arranged for their referencing or perpetuation.

Reset or replace, to the required standard, any property and survey marks, land monuments, and right-of-way monuments and marker posts that fall outside the construction limits that are shifted, lost or damaged by the contractor during construction operations, as determined by the engineer. If the contractor fails to restore the disturbed monuments or markers within a reasonable time, the department may, upon 48 hours written notice, restore the disturbed monuments or markers. The department will deduct restoration costs from payments due the contractor under the contract.
(NCR 107.09-05312011)

12. Erosion Control.

Add the following to standard spec 107.20:

Perform construction operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil stripping operation through the subsequent grading and finishing to minimize the period of exposure to erosion.

Replace topsoil on disturbed areas, including spot locations such as cross drains, driveways, guardrail and terminals, and intersections, immediately after grading is completed within those areas. Complete finishing operations, which includes seed, fertilizer, mulch and any other permanent erosion control measures required, within seven calendar days after the placement of topsoil.
(NCR 107.03-10152014)

13. Coordination with Businesses and Residents.

The department will arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week prior to the start of work under this contract and hold two meetings per month thereafter. The department will arrange for a suitable location for the meeting(s) that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for the meeting(s). The contractor shall schedule the meeting(s) with at least 2 weeks prior notice to the engineer to allow for these notifications.
108-060 (20141107)

14. Removing Concrete Surface Partial Depth, Item 204.0109.S.

A Description
This special provision describes removing a portion of the concrete surfaces as shown on the plans according to standard spec 204, and as hereinafter provided.

B (Vacant)

C Construction
C.1 Equipment
Use a machine that provides a surface finish acceptable to the engineer. Shroud the machine to prevent discharge of any loosened material into adjacent work areas or live traffic lanes.

Use a machine that is equipped with electronic devices that provide accurate depth, grade and slope control, and acceptable dust control system.

C.2 Methods
Remove existing concrete to the depths as shown on the plan by grinding, planing, chipping, sawing, milling, or by using other methods approved by the engineer.

Perform the removal operation in such a manner as to preclude damage to the remaining pavement and results in a reasonable uniform plane surface free of excessive large scarification marks and having a uniform transverse slope.

The sequence of removal operations shall be such that no exposed longitudinal joints 2 inches or more in depth remain during non-working hours. Windrowing or storing of the removed material on the roadway will only be permitted in conjunction with a continuous removal and pick-up operation. During non-working hours, clear the roadway of all materials and equipment.

The removed pavement shall become the property of the contractor. Properly dispose of it according to standard spec 204.3.1.3.

D Measurement
The department will measure Removing Concrete Surface Partial Depth in area by the square foot of surface area removed.

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0109.S	Removing Concrete Surface Partial Depth	SF

Payment is in full compensation for removing the concrete; and for disposing of materials.
204-041 (20080902)

15. Abandoning Sewer, Item 204.0291.S.

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

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

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

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

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

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

16. QMP Base Aggregate.

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

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

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

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

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

A.2 Contractor Testing for Small Quantities
(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

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

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

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

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

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

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

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

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

B Materials

B.1 Quality Control Plan

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

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.

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

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

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

http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

B.4.3 Control Charts

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

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

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

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

B.5 Contractor Testing

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

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

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

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

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

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

B.6 Test Methods

B.6.1 Gradation

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

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

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

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

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

B.6.2 Fracture

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

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

B.6.3 Liquid Limit and Plasticity

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

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

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

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

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

(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 two business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

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

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

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

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

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

B.8.3 Independent Assurance

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

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

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

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

B.9 Dispute Resolution

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

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

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

C (Vacant)

D (Vacant)

E Payment

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

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

301-010 (20151210)

17. Protecting Concrete.

Add the following to standard spec 415.3.14:

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

The cost for providing the finisher(s), the necessary equipment, and materials shall be considered incidental to the contract unit price for each concrete item.
(NCR 415.01-10152014)

18. Special Material Requirements for Mitigation of Alkali-Silica Reactivity for Cast-in-Place Concrete.

This applies to all cast-in-place concrete in standard spec 390, 415, 416, 501, 502, 509, 601, 602, 603, and 620.

If the contractor elects to use coarse aggregate from sources containing significant amounts of felspa-volcanics (including rhyolite, diorite, gneiss or quartzite), the contractor shall provide the results of an ASTM C1260 test. If the results for the aggregate test indicate the material does not comply with the 0.15 percent expansion limit, the contractor shall run an ASTM C1567 mortar bar test for the blend of cementitious material incorporated into the cast-in-place concrete. The results of the ASTM C1567 shall comply with the 0.15 percent expansion limit.

The testing frequency for the ASTM C1260 test will be once every three years, or if the source of course aggregate changes.

The testing frequency for the ASTM C1567 will also be on a three years cycle unless the cementitious material, cementitious material blend, or aggregate source have changed, then the contractor will be required to provide new test results.
(NCR 415.04-10142015)

19. HMA Pavement 4 MT 58-28 H, Item 460.6424.

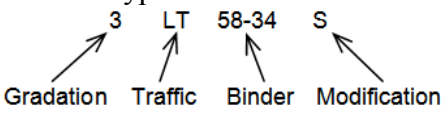
A Description

This special provision describes providing HMA pavement including the binder under a combined bid item.

Define gradations, traffic levels, and asphaltic binder modification levels as follows:

GRADATIONS (NMAS)		TRAFFIC VOLUME		MODIFICATION LEVEL	
1	37.5 mm	LT	Low	S	Standard
2	25.0 mm	MT	Medium	H	Heavy
3	19.0 mm	HT	High	V	Very Heavy
4	12.5 mm			E	Extremely Heavy
5	9.5 mm				
6	4.75 mm				

Construct HMA pavement of the type the bid item indicates encoded as follows:



Conform to standard spec 460 as modified in this special provision.

B Materials

Replace standard spec table 460-1 with the following to change the footnotes to refer to LT and MT mixes instead of E-0.3 and E-3 mixes:

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm (#1)	25.0 mm (#2)	19.0 mm (#3)	12.5 mm (#4)	9.5 mm (#5)	SMA 12.5 mm (#4)	SMA 9.5 mm (#5)
50.0-mm	100						
37.5-mm	90 –100	100					
25.0-mm	90 max	90 -100	100				
19.0-mm	___	90 max	90 -100	100		100	
12.5-mm	___	___	90 max	90 -100	100	90 - 97	100
9.5-mm	___	___	___	90 max	90 -100	58 - 72	90 - 100
4.75-mm	___	___	___	___	90 max	25 - 35	35 - 45
2.36-mm	15 – 41	19 - 45	23 - 49	28 - 58	20 - 65	15 - 25	18 - 28
75-µm	0 – 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	8.0 - 12.0	10.0 - 14.0
% MINIMUM VMA	11.0	12.0	13.0	14.0[1]	15.0[2]	16.0	17.0

[1] 14.5 for LT and MT mixes

[2] 15.5 for LT and MT mixes

Replace standard spec table 460-2 with the following to switch from E mixes to LT, MT, and HT mixes; and change the tensile strength ratio requirements to 0.75 without antistripping additive and 0.80 with antistripping additive:

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
ESALs x 10^6 (20 yr design life)	<2.0	2 - <8	>8	> 5 mil
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	65/ __	75 / 60	98 / 90[6]	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40	43	45	45
Sand Equivalency (AASHTO T176, min)	40	40	45	50
Gyratory Compaction				
Gyrations for N_{ini}	6	7	8	8
Gyrations for N_{des}	40	75	100	65
Gyrations for N_{max}	60	115	160	160
Air Voids, $\%V_a$ ($\%G_{mm}$ N_{des})	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)
% G_{mm} N_{ini}	<= 91.5[1]	<= 89.0[1]	<= 89.0	___
% G_{mm} N_{max}	<= 98.0	<= 98.0	<= 98.0	___
Dust to Binder Ratio[2] (% passing 0.075/P_{be})	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80[4] [5]	65 – 75[3] [4]	65 - 75[3] [4]	70 - 80
Tensile Strength Ratio (TSR) (ASTM 4867)				
no antistripping additive	0.75	0.75	0.75	0.75
with antistripping additive	0.80	0.80	0.80	0.80
Draindown at Production Temperature (%)	___	___	___	0.30

[1] The percent maximum density at initial compaction is only a guideline.

[2] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO MP3), the dust to binder ratio limits are 0.6 - 1.6.

[3] For #5 (9.5mm) and #4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76%.

[4] For #2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

[5] For #1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

Replace standard spec 460.2.8.2.1.7 paragraph six with the following to base payment adjustment on the combined bid item unit price:

(6) The department will reduce payment for nonconforming QMP HMA mixtures, starting from the stop point to the point when the running average is back inside the warning limits, as follows:

PAYMENT FOR MIXTURE[1] [2]

ITEM	PRODUCED WITHIN WARNING BANDS	PRODUCED OUTSIDE JMF LIMITS
Gradation	90%	75%
Asphalt Content	85%	75%
Air Voids	70%	50%
VMA	90%	75%

[1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.

[2] Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. The department will administer pay reduction under the Nonconforming QMP HMA Mixture administrative item.

C Construction

Replace standard spec table 460-3 with the following to switch from E mixes to LT, MT, and HT mixes:

TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT and MT	HT	SMA[5]
TRAFFIC LANES[2]	LOWER	91.5[3]	92.0[4]	____
	UPPER	91.5	92.0	____
SIDE ROADS, CROSSOVERS, TURN LANES, & RAMPS	LOWER	91.5[3]	92.0[4]	____
	UPPER	91.5	92.0	____
SHOULDERS & APPURTENANCES	LOWER	89.5	89.5	____
	UPPER	90.5	90.5	____

[1] The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

[2] Includes parking lanes as determined by the engineer.

[3] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

[4] Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

[5] The minimum required densities for SMA mixtures are determined according to CMM 8-15.

D Measurement
Conform to standard spec 460.4.

E Payment
Add the following to 460.5 to switch from E mixes to LT, MT, and HT mixes; to combine the pavement and binder bid items; and to specify a pay reduction for pavement placed with nonconforming binder:

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

ITEM NUMBER	DESCRIPTION	UNIT
460.6424	HMA Pavement 4 MT 58-28 H	TON

Payment is full compensation for providing HMA Pavement including asphaltic binder.

In addition to any pay adjustment under standard spec 460.2.8.2.1.7(6), the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.
460-025 (20151115)

20. Catch Basins and Manholes.

Construct catch basins and manholes according to standard spec 611 except as hereinafter modified:

Construct catch basins and manholes using only precast or cast in place concrete masonry options. The brick masonry or concrete brick or block masonry options shall not be used.
(NCR 611.01-01182012)

21. Water.

Provide the necessary environmental protection against aquatic exotic species control and pathogens if water source(s) is/are from surface waters of the state.
(NCR 624.01-12152015)

22. Seeding.

Replace standard spec 630.3.3(1) with the following:
Sow seeds by Method A only.
(NCR 630.03-10152014)

23. Sod Water, Item 631.0300.

Replace standard spec 631.3.5(1) with the following:

Under the Sod Water bid item, furnish and apply water to sodded or seeded areas.

Moisten sodded or seeded areas thoroughly after staking and cleanup.

Keep all sodded or seeded areas thoroughly moist by applying a minimum of 1 inch of water per week, minus applicable rainfall, for a minimum of 30 consecutive days. Do not leave un-watered for more than 3 days unless rainfall is sufficient and the engineer determines it does not require watering. Apply water in a manner to preclude washing or erosion.
(NCR 631.01-12152015)

24. Wood and Tubular Steel Sign Post.

Add the following to standard spec 634.3(2):

Fill void around post with asphaltic material at a thickness of 1 inch below the finished grade of the PVC pipe.

Add the following to standard spec 634.5(2) and 634.5(3):

Asphaltic material used for filling pipe box out is incidental to post bid item.
(NCR 634.01-10152014)

25. Removing Signs Type II.

Replace standard spec 638.3.4 (2) with the following:

Aluminum Type II signs are the department's property. Return these signs palletized for handling with a forklift. Contact the region Signing Lead Worker at (715) 421-8006 at least three business days in advance to coordinate the shipment and drop-off location.
(NCR 638.01-04072015)

26. Field Facilities.

Add the following to standard spec 642.2.1(3):

Provide a water cooler to dispense the bottled drinking water.

Add the following to standard spec 642.3:

Set up the field office within seven days after notice from the engineer.

Provide a parking area large enough to park a minimum of six cars directly adjacent to the field office. The parking area and approach to the field office shall be well drained and consist of a

crushed base aggregate or an existing paved surface and shall be ready for use within seven days after the field office is set up.
(NCR 642.02-10152014)

27. Traffic Control.

Add the following to standard spec 643.2.3:

Use 42-inch slimline channelizers with 30-lb base in place of drums at locations shown in the plans. The department will measure and pay for slimline channelizers as traffic control drums.

Add the following to standard spec 643.3.1:

Lighting devices shall be covered or rendered inoperative when not in use.

Provide to the engineer, City of Wausau Police Department, Marathon County Sheriff's Department, and the State Patrol District Headquarters responsible for that county the current telephone number(s) the contractor or their representative can be contacted at all times in the event a safety hazard develops. Repair, replace or restore the damaged or disturbed traffic control devices within two hours from the time notified or made aware of the damaged or disturbed traffic control devices.

Do not park or store equipment, vehicles, or construction materials within 10 feet of the edge of the traffic lane of any roadway during non-working hours.

Utilize two-way radios, and/or additional flag persons, within lane closure areas and at public road intersections, in order to positively direct, control, and safeguard traffic through the work zone.

All contractor vehicles or equipment operating within the project limits shall be equipped with and have flashing yellow lights operating.

A third flag person is required at all moving construction operations involving milling, paving, and shouldering. The third flag person is required to be located at the area of the moving operation to safely guide traffic around the equipment and personnel working at the moving operation.

Promptly replace all state owned signs that are removed by the contractor due to interference with construction operations. At no time may stop signs be removed or moved without flag persons present.
(NCR 643.01-10152014)

28. Temporary Pedestrian Surface Plywood, Item 644.1420.S.

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

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

- Asphaltic surface conforming to standard spec 465.2.
- Pressure treated 2x4 framing lumber, pressure treated 3/4-inch plywood with skid resistant surface coating, and weather resistant deck screws 3-1/2-inch minimum for framing and 1-5/8-inch minimum for plywood.

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

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than ¼ inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Asphalt may also be used to ramp up to materials up to 1 inch thick. Construct conforming to the following:

- Framed plywood panels 4 feet wide with a skid resistant surface coating.

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

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

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

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1420.S	Temporary Pedestrian Surface Plywood	SF

Payment is full compensation for providing, maintaining, and removing temporary pedestrian surface.
644-010 (20150630)

29. Temporary Curb Ramp, Item 644.1601.S.

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

B Materials
Furnish materials as follows:

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

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

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

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

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

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1601.S	Temporary Curb Ramp	Each

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.
644-020 (20150630)

30. Removing Pavement Markings Water Blasting, Item 646.0690.S; Removing Special Pavement Markings Water Blasting, Item 647.0990.S.

A Description
This special provision describes removing pavement markings by water blasting. Conform to standard spec 646 and 647 as modified in this special provision.

B (Vacant)

C Construction
Use water blasting to remove the following, as shown on the plan and directed by the engineer:

- Markings in areas of temporary traffic shifts.
- Markings on bridge decks.
- Temporary markings on the final pavement surface.

Completely remove pavement marking using a truck mounted ultra high pressure pump and water tank capable of delivering a minimum of 30,000 psi and up to 40,000 psi to waterjet nozzles. Use equipment with a vacuum recovery system that contains wastewater and debris to provide a clean, damp-dry surface, without a secondary cleanup operation. Do not scar or damage the pavement during the removal process. Limit water blasting to when the ambient temperature is at least 36 F and rising.

Properly dispose of the accumulated material off site.

D Measurement
The department will measure Removing Pavement Markings Water Blasting by the linear foot, up to a single 8-inch wide line, acceptably completed.

The department will measure Removing Special Pavement Markings Water Blasting as each individual arrow, symbol, or word acceptably removed. The department will count removing an RXR symbol as 3 individual symbol removals.

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0690.S	Removing Pavement Markings Water Blasting	LF
647.0990.S	Removing Special Pavement Markings Water Blasting	Each

Payment is full compensation for removal and disposal of all materials.
646-075 (20151210)

31. Street Lighting and Traffic Signal Systems – General.

All work shall be according to the plans and the State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, 2016 Edition, and these special provisions.

Contacts and Facility Location Information
For the purposes of this contract the primary point of contact for City of Wausau traffic signals and street lighting will be Allen Wesolowski: Allen.Wesolowski@ci.wausau.wi.us / (715) 261-6762 (office)

Provide for salvaged equipment delivery to the following location: City of Wausau Department of Public Works Shop – 400 Myron Street, Wausau, WI

City of Wausau Street Lighting

This contract includes electrical work being completed adjacent to and along STH 52 throughout the project limits. Street lighting work included under this contract consists primarily of removing existing lighting circuits from traffic signalized intersections and minor lighting adjustments to facilitate curb and sidewalk construction. Coordinate with the city in advance of construction to determine existing service locations, conductor sizes and existing circuiting. Undistributed items are included for maintenance of lighting system continuity.

Existing Electrical Systems

This contract includes performing retro-fit electrical work at existing installations. Anticipate effort to perform verification of existing systems including conduit connections, cable-fill capacity, cabling patterns and circuit routing. Portions of existing electrical facilities were unmapped and have been shown as a best fit of as-built mapping and field survey. Document discrepancies in field conditions and provide to the engineer. Consider work described above to be incidental to the work items included in this contract.

Document Existing Equipment

This contract includes salvage and reinstallation of existing traffic signal and lighting equipment. Document the location, condition, attachments, cable routing for all existing equipment noted for removal or salvage. Include labels to track existing equipment. Provide documentation of existing equipment to the engineer. Provide a list of any equipment noted for salvage that is in poor condition or otherwise unable to reinstall.

Salvage and deliver all City of Wausau equipment deemed of suitable condition. Consider work described above to be incidental to the work items included in this contract.

32. Trombone Arms 15-FT, Item 657.0585; Trombone Arms 20-FT, Item 657.0590; Trombone Arms 25-FT, Item 657.0595.

Append standard spec 657.2.2.2, Trombone Arms, with paragraph (4) as follows:

(4) Furnish trombone arms structurally rated and compatible with attaching all signal faces and other equipment shown on the plans, including additional capacity for one future street name sign with a maximum sign area of 14.5 square feet.

33. Signal Mounting Hardware (STH 52 and 3RD Ave), Item 658.5069.01; Signal Mounting Hardware (STH 52 and 1ST Ave), Item 658.5069.02.

Append standard spec 658.2.1, Signal Mounting Hardware, with paragraph (8) as follows:

(8) Furnish signal mounting hardware compatible with attaching all signal faces shown on the plans, including horizontal and vertical mounting to poles and trombone mast arms. Multiple mounting hardware configurations will be required and shall be considered incidental to these items.

34. Temporary Traffic Signals for Intersections (STH 52 and 3RD Ave), Item 661.0200.01; Temporary Traffic Signals for Intersections (STH 52 and 1ST Ave), Item 661.0200.02.

Append standard spec 661.2.2, Temporary Traffic Signals for Intersections, with paragraph (4) as follows:

(4) Furnish equipment needed to provide vehicle detection as shown on the plans. Vehicle detection methods may include (but not limited to) temporary inductive loops, microwave detection and video detection. Vehicle detection method(s) shall be suited for construction site conditions and operating requirements.

Furnish hardware and cabling needed to maintain emergency vehicle preemption (EVP) as shown on the plans.

Append standard spec 661.3.1, General, with paragraph (4) as follows:

Modify, add or remove temporary vehicle detection equipment or detection zones as needed for each traffic control stage shown in the plans. Maintain continuous vehicle detection according to the traffic signal operating requirements for any modifications to work zone conditions not explicitly shown on the plans, or as directed by the engineer. Damage to new pavement for temporary induction loops will not be allowed.

Item includes installing salvaged EVP equipment, operating during all stages of construction and salvaging for reinstallation with the permanent traffic signals.

35. Notice to Contractor - Traffic Signal Loop Installation in HMA Overlay Areas.

Project 6999-03-79 includes loop installation work at the 3rd Avenue and 1st Avenue intersections. Coordinate the installation of loops in the existing concrete pavement in a manner that loop slots are not visible after HMA pavement is installed. Loop installation shall be conducted in the following sequence:

1. Concrete pavement repairs completed prior to loop installation
2. Saw cut loop slots in pavement and curb areas
3. Install loops and seal slots
4. Complete HMA paving (lower and upper layers)

Loop construction on STH 52 will require staged installation across multiple work zones or loop installation under live traffic. The engineer shall approve loop installation methods prior to starting work.

36. Traffic Signal Timing Parameters – STH 52 and 3rd Avenue, STH 52 and 1st Avenue, STH 52 and 1st Street.

The traffic signals shall be timed according to the following traffic signal timings. The temporary traffic signal timings shall be used for all stages of construction. Permanent traffic signal timings shall be used with the completed permanent traffic signals.

All work required to implement permanent and temporary traffic signal timing, perform test operations and make updates for all signalized intersections in this contract shall be considered incidental to the Traffic Signal Systems Integrator bid item.

TEMPORARY AND PERMANENT TRAFFIC SIGNAL TIMING
STH 52 and 3RD AVENUE

Main Street:	WIS 52
Cross Street:	3RD AVE
Location:	City of Wausau - Marathon County
Type:	Permanent Traffic Signal Timing
Date:	February 1, 2016

Phase Data	Phase			
N	2	4	5	6
				
Approach Name	WIS 52 WBT	3RD AVE SBT	WIS 52 WBL	WIS 52 EBT
Vehicle Basic Timings				
Minimum Green (sec.)	10.0	10.0	4.0	10.0
Max 1	28.0	16.0	6.0	28.0
Passage	5.0	2.0	0.0	5.0
Yellow Change (sec)	3.0	4.0	4.0	3.0
Red Clearance (sec)	3.0	3.0	1.0	3.0
Max Variable Initial	20.0	-	-	20.0
Sec/Actuation	2.5	-	-	2.5
Time Before Reduction	-	-	-	-
Time to Reduce	-	-	-	-
Minimum Gap	-	-	-	-
Pedestrian Timings				
Walk (sec)	7.0	7.0	-	7.0
Ped Clearance (sec)	18.0	29.0	-	18.0
Miscellaneous				
Vehicle Recall	MIN	NONE	NONE	MIN
Phase Locking	LOCKING	NON-LOCKING	NON-LOCKING	LOCKING

Notes:

- Phase 4 shall be programmed with a three (3) second leading walk offset.
- All pedestrian intervals shall be programmed to include extended pedestrian clearances such that the flashing don't walk indication extends into the vehicular yellow interval but not the vehicular all red interval. A three (3) second buffer interval during which the pedestrian don't walk indication times but before a conflicting vehicular movement times shall be provided.

Split Times and Phase Mode (Permanent)

Pattern	Cycle Length (s)	Offset (s)	Phase 2 WIS 52 WBT		Phase 4 3RD AVE SBT		Phase 5 WIS 52 WBL		Phase 6 WIS 52 EBT	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
1/1/1	64	58	44	COORD	20	ACTD	11	ACTD	33	COORD
2/1/1	71	51	47	COORD	24	ACTD	11	ACTD	36	COORD
3/1/1	60	55	39	COORD	21	ACTD	11	ACTD	28	COORD

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

Traffic Event Data (Permanent)

Schedule			
Day	Hour	Minute	Pattern
1	6	0	1/1/1
1	23	0	5/5/0
2	6	0	1/1/1
2	7	0	2/1/1
2	8	0	1/1/1
2	16	0	2/1/1
2	18	0	1/1/1
2	23	0	5/5/0

Main Street: WIS 52
Cross Street: 3RD AVE
Location: City of Wausau - Marathon County
Type: Temporary Traffic Signal Timing
Date: February 1, 2016

Phase Data

	Phase			
	2	4	5	6
Approach Name	WIS 52 WBT	3RD AVE SBT	WIS 52 WBL	WIS 52 EBT
Vehicle Basic Timings				
Minimum Green (sec.)	20.0	10.0	4.0	20.0
Max 1	45.0	20.0	10.0	45.0
Passage	5.0	1.5	1.5	5.0
Yellow Change (sec)	3.0	4.0	4.0	3.0
Red Clearance (sec)	3.0	3.0	1.0	3.0
Time Before Reduction	-	-	-	-
Time to Reduce	-	-	-	-
Minimum Gap	-	-	-	-
Pedestrian Timings				
Walk (sec)	-	-	-	-
Ped Clearance (sec)	-	-	-	-
Miscellaneous				
Vehicle Recall	MIN	NONE	NONE	MIN
Phase Locking	LOCKING	NON-LOCKING	NON-LOCKING	LOCKING

Split Times and Phase Mode (Temporary)

Pattern	Cycle Length (s)	Offset (s)	Phase 2 WIS 52 WBT		Phase 4 3RD AVE SBT		Phase 5 WIS 52 WBL		Phase 6 WIS 52 EBT	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
TEMP AM	85	0	57	COORD	28	ACTD	12	ACTD	45	COORD
TEMP OFF	90	0	60	COORD	30	ACTD	11	ACTD	49	COORD
TEMP PM	105	0	69	COORD	36	ACTD	13	ACTD	56	COORD

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

Traffic Event Data (Temporary)

Schedule			
Day	Hour	Minute	Pattern
1	6	0	TEMP OFF
1	23	0	FREE
2	6	0	TEMP AM
2	9	0	TEMP OFF
2	15	0	TEMP PM
2	18	0	TEMP OFF
2	23	0	FREE

TEMPORARY AND PERMANENT TRAFFIC SIGNAL TIMING
STH 52 and 1ST AVENUE

Main Street:	WIS 52
Cross Street:	1ST AVE
Location:	City of Wausau - Marathon County
Type:	Permanent Traffic Signal Timing
Date:	February 1, 2016

Phase Data

	Phase			
N ↑	1	2	6	8
	↱	←	→	↑
Approach Name	WIS 52 EBL	WIS 52 WBT	WIS 52 EBT	1ST AVE NBT
Vehicle Basic Timings				
Minimum Green (sec.)	4.0	10.0	10.0	8.0
Max 1	7.0	31.0	31.0	12.0
Passage	0.0	5.0	5.0	2.0
Yellow Change (sec)	4.0	4.0	4.0	4.0
Red Clearance (sec)	1.0	3.0	3.0	4.0
Max Variable Initial	-	20.0	20.0	-
Sec/Actuation	-	2.5	2.5	-
Time Before Reduction	-	-	-	-
Time to Reduce	-	-	-	-
Minimum Gap	-	-	-	-
Pedestrian Timings				
Walk (sec)	-	7.0	9.0	7.0
Ped Clearance (sec)	-	18.0	18.0	15.0
Miscellaneous				
Vehicle Recall	NONE	MIN	MIN	NONE
Phase Locking	NON-LOCKING	LOCKING	LOCKING	NON-LOCKING

Notes:

- Phase 2 shall be programmed with a two (2.0) second lagging walk offset. Clearance times provided are not valid and shall not be used without specified phase 2 walk offset.
- All pedestrian intervals shall be programmed to include extended pedestrian clearances such that the flashing don't walk indication may extend into the vehicular yellow interval but not the vehicular all red interval. A three (3) second buffer interval during which the pedestrian don't walk indication times but before a conflicting vehicular movement times shall be provided.

Split Times and Phase Mode (Permanent)

Pattern	Cycle Length (s)	Offset (s)	Phase 1 WIS 52 EBL		Phase 2 WIS 52 WBT		Phase 6 WIS 52 EBT		Phase 8 1ST AVE NBT	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
1/1/1	64	25	11	ACTD	33	COORD	44	COORD	20	ACTD
2/1/1	71	25	12	ACTD	39	COORD	51	COORD	20	ACTD
3/1/1	60	25	11	ACTD	30	COORD	41	COORD	19	ACTD

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

Traffic Event Data (Permanent)

Schedule			
Day	Hour	Minute	Pattern
1	6	0	1/1/1
1	23	0	5/5/0
2	6	0	1/1/1
2	7	0	2/1/1
2	8	0	1/1/1
2	16	0	2/1/1
2	18	0	1/1/1
2	23	0	5/5/0

Main Street: WIS 52
Cross Street: 1ST AVE
Location: City of Wausau - Marathon County
Type: Temporary Traffic Signal Timing
Date: February 1, 2016

Phase Data

	Phase			
N ↑	1	2	6	8
Approach Name	WIS 52 EBL	WIS 52 WBT	WIS 52 EBT	1ST AVE NBT
Vehicle Basic Timings				
Minimum Green (sec.)	4.0	20.0	20.0	8.0
Max 1	10.0	45.0	45.0	20.0
Passage	1.5	5.0	5.0	1.5
Yellow Change (sec)	4.0	4.0	4.0	4.0
Red Clearance (sec)	1.0	3.0	3.0	4.0
Time Before Reduction	-	-	-	-
Time to Reduce	-	-	-	-
Minimum Gap	-	-	-	-
Pedestrian Timings				
Walk (sec)	-	-	-	-
Ped Clearance (sec)	-	-	-	-
Miscellaneous				
Vehicle Recall	NONE	MIN	MIN	NONE
Phase Locking	NON-LOCKING	LOCKING	LOCKING	NON-LOCKING

Split Times and Phase Mode (Temporary)

Pattern	Cycle Length (s)	Offset (s)	Phase 1 WIS 52 EBL		Phase 2 WIS 52 WBT		Phase 6 WIS 52 EBT		Phase 8 1ST AVE NBT	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
TEMP AM	85	3	12	ACTD	51	COORD	63	COORD	22	ACTD
TEMP OFF	90	0	12	ACTD	55	COORD	67	COORD	23	ACTD
TEMP PM	105	97	13	ACTD	69	COORD	82	COORD	23	ACTD

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

Traffic Event Data (Temporary)

Schedule			
Day	Hour	Minute	Pattern
1	6	0	TEMP OFF
1	23	0	FREE
2	6	0	TEMP AM
2	9	0	TEMP OFF
2	15	0	TEMP PM
2	18	0	TEMP OFF
2	23	0	FREE

PERMANENT TRAFFIC SIGNAL TIMING
STH 52 and 1ST STREET

Main Street: WIS 52
Cross Street: 1ST ST
Location: City of Wausau - Marathon County
Type: Traffic Signal Timing
Date: February 1, 2016

Phase Data

	Phase			
	2	3	4	8
Approach Name	WIS 52 WBT	WIS 52 NBL	1ST ST SBT	1ST ST NBT
Vehicle Basic Timings				
Minimum Green (sec.)	15.0	4.0	15.0	15.0
Max 1 (Permanent)	30.0	7.0	20.0	32.0
Passage	5.0	2.0	5.0	5.0
Yellow Change (sec)	4.0	4.0	4.0	4.0
Red Clearance (sec)	1.0	1.0	1.0	1.0
Time Before Reduction	-	-	-	-
Time to Reduce	-	-	-	-
Minimum Gap	-	-	-	-
Pedestrian Timings				
Walk (sec)	7.0	-	7.0	7.0
Ped Clearance (sec)	15.0	-	10.0	15.0
Miscellaneous				
Vehicle Recall	MIN	ACTD	ACTD	ACTD
Phase Locking	LOCKING	NON-LOCKING	NON-LOCKING	NON-LOCKING

Notes:

- All pedestrian intervals shall be programmed to include extended pedestrian clearances such that the flashing don't walk indication extends into the vehicular yellow interval but not the vehicular all red interval. A three (3) second buffer interval during which the pedestrian don't walk indication times but before a conflicting vehicular movement times shall be provided.

- This contract assumes no temporary signal required at Scott St. and 1st St. intersection.

Split Times and Phase Mode

Pattern	Cycle Length (s)	Offset (s)	Phase 2 WIS 52 WBT		Phase 3 WIS 52 NBL		Phase 4 1ST ST SBT		Phase 8 1ST ST NBT	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
1/1/1	64	55	31	COORD	11	ACTD	22	ACTD	33	ACTD
2/1/1	75	25	34	COORD	12	ACTD	29	ACTD	41	ACTD
3/1/1	75	15	30	COORD	15	ACTD	30	ACTD	45	ACTD

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

Traffic Event Data

Schedule			
Day	Hour	Minute	Pattern
1	6	0	1/1/1
1	23	0	5/5/0
2	6	0	1/1/1
2	7	0	2/1/1
2	8	0	1/1/1
2	16	0	3/1/1
2	18	0	1/1/1
2	23	0	5/5/0

37. Requirements for Conduit Installation – Under Railroad Tracks.

Install conduit below the railroad tracks as shown in the plans. Coordinate directly with the designated railroad contacts. Install conduit under railroad tracks according to the conditions required by the railroad. Efforts and materials required to comply with railroad requirements shall be considered incidental to the conduit special bid items.

Refer to the following conditions specified by CN Railroad: http://www.cn.ca/-/media/Files/Delivering-Responsibly/Safety/Utility-Installation/wireline-specs-US-0510.pdf

38. Install Conduit Into Existing Item, Item 652.0700.S.

A Description

This special provision describes installing proposed conduit into an existing manhole, pull box, junction box, communication vault, other existing conduit, or other structure.

B Materials
Use conduit matching existing, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

C Construction
Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for the entering conduit(s) at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place. When intercepting existing conduit, provide fittings and adaptors that are U.L. listed for electrical use.

D Measurement
The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure, or one interception of an existing conduit will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

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

ITEM NUMBER	DESCRIPTION	UNIT
652.0700.S	Install Conduit Into Existing Item	Each

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; for providing necessary fittings and adaptors; and for making inspections.
652-070 (20100709)

39. Fertilizer for Lawn Type Turf, Item SPV.0030.01.

A Description
This special provision describes furnishing and incorporating fertilizing material in the soil on areas of seeding or sod.

B Materials
Use fertilizers that are standard, commercial, packaged or bulk products, in granular or liquid form conforming to Wisconsin Statutes and the Wisconsin Administrative Code Chapter ATCP 40. Ensure that each container of packaged fertilizer is plainly marked with the analysis of the contents showing minimum percentages of total nitrogen, available phosphoric acid, and soluble potash. If furnishing the fertilizer in bulk, include an invoice

with each shipment indicating the minimum percentages of total nitrogen, available phosphoric acid, and soluble potash in the contents.

The total of nitrogen, phosphoric acid, and potash shall equal at least 41 percent. At least 80% of the nitrogen shall be water insoluble.

If using fertilizer with a nitrogen, phosphoric acid, and potash total greater than 41 percent, maintain a ratio of 4-1-2 (N-P-K) and apply at a rate that provides the equivalent amount of nitrogen, phosphoric acid, and potash that is provided by a fertilizer with a 41 percent total.

Provide a slow release type fertilizer with a 14-week residual effect after activation into the soil conforming to the following minimum requirements:

Nitrogen,..... not less than 22%
Phosphoric Acid,..... not less than 5%
Potash,.....not less than 10%

C Construction

Uniformly apply the fertilizer to the seeding areas, and incorporate it into the soil by light discing or harrowing. If applying granular fertilizer, ensure it is well pulverized and free from lumps.

If incorporating fertilizer into topsoiled areas, apply it just before, and in conjunction with, final discing or harrowing, or if hand manipulating the topsoil, apply it just before final raking and leveling.

If fertilizing areas to receive sod, spread the fertilizer at the rate specified below uniformly over the soil before placing sod, and then work the fertilizer into the soil while preparing the earth bed as specified in standard spec 631.3.1.

Apply fertilizer containing 41 percent total of nitrogen, phosphoric acid, and potash at 7 pounds per 1000 square feet of area, unless the contract specifies otherwise. For Fertilizer for Lawn Type Turf that contains a different percentage of components, determine the application rate by multiplying the specified rate by a dimensionless factor determined as follows:

Conversion Factor = 41 / New Percentage of Components

D Measurement

The department will measure Fertilizer for Lawn Type Turf by the hundred pounds (CWT) acceptably completed, and it will be measured based on an application rate of 7 pounds per 1000 square feet. The department will not measure fertilizer used for the bid items under standard spec 632. The measured quantity equals the number of hundred-weight (CWT) of material determined by multiplying the actual number of CWT. of material incorporated by the ratio of the actual percentage of fertilizer components used to 41 percent for Fertilizer for Lawn Type Turf.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0030.01	Fertilizer for Lawn Type Turf	CWT

Payment is full compensation for providing, hauling, placing, and incorporating the fertilizer into the soil.
(NCR 629.01-10152014)

40. Adjusting Water Valve Boxes, Item SPV.0060.01.

A Description
This special provision describes locating, exposing and protecting existing water valve boxes after the pavement is removed, installing city-furnished new water valve boxes if necessary, and adjusting the water valve boxes to the finished elevation.

B Materials
The city will furnish new water valve boxes when the existing boxes are damaged and cannot be repaired.

C Construction
Allen Wesolowski, Wausau City Engineer, will inspect the existing water valves prior to start of construction and will provide descriptions of the valve box conditions and a list of the valve boxes that require replacement. Notify Allen at (715) 261-6740 to re-inspect the water valve boxes after the initial removal of pavement. Install new water valve boxes furnished by the city for the valve boxes requiring replacement as necessary.

Clean out the water valve boxes as necessary to assure the valve wrench will fit completely over the valve bolt. Protect the water valve boxes during construction. Adjust the water valve boxes to the required finished elevation.

D Measurement
The department will measure Adjusting Water Valve Boxes by the unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Adjusting Water Valve Boxes	Each

Payment is full compensation for locating, exposing, and protecting the water valve boxes; notifying the local municipality; cleaning out the water valve boxes if necessary; installing city-furnished water valve boxes; and adjusting water valve boxes to the finished elevation. The contractor shall replace water valve boxes, which are damaged by the contractor's operations, in kind, at the contractor's expense.

41. Manhole Risers 2-Inch, Item SPV.0060.02; Inlet Risers 1-Inch Type H, Item SPV.0060.03; Inlet Risers 1-Inch Type Z, Item SPV.0060.04; Valve Box Risers 2-Inch, Item SPV.0060.05.

A Description

This special provision describes furnishing and installing manhole risers on existing manholes, furnishing and installing inlet risers on existing inlets, and furnishing and installing valve box risers on existing water main valve boxes as shown in the plans and hereinafter provided.

B Materials

Furnish 2-inch high steel manhole risers according to the details shown in the plans.

Furnish 2-inch high steel valve box risers according to the details shown in the plans.

Furnish 1-inch high steel inlet risers according to the details shown in the plans.

C Construction

Field measure and verify all existing manhole, inlet and valve box frames and covers prior to ordering material.

Clean all surfaces of the in-place frame by removing all loose material from frame and cover such as dirt, asphalt, and other foreign material before installation of the riser. Install the riser per manufacturer specifications. Reinstall the existing cover or grate. Any damage to the in-place cover, grate and frame by the contractor's operations shall be repaired prior to final acceptance as directed by the engineer at no cost to the department.

D Measurement

The department will measure Manhole Risers 2-Inch, Inlet Risers 1-Inch (Type), and Valve Box Risers 2-Inch by each, 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	Manhole Risers 2-Inch	Each
SPV.0060.03	Inlet Risers 1-Inch Type H	Each
SPV.0060.04	Inlet Risers 1-Inch Type Z	Each
SPV.0060.05	Valve Box Risers 2-Inch	Each

Payment is full compensation for furnishing and installing the riser; and for removal and reinstallation of the cover or grate.

42. Inlet Covers Type H-D, Item SPV.0060.06.

Furnish and install Inlet Covers Type H-D according to standard spec 611 and according to the plan details.

43. Repairing Storm Sewer Structures, Item SPV.0060.07.

A Description

This special provision describes repairing existing storm sewer manholes, inlets and catch basins as shown in the plans and hereinafter provided.

B Materials

Furnish materials conforming to the following:

Concrete……...…511
Brick masonry and concrete brick or block masonry……..519
Mortar……..…..519.2.3

Use precast adjusting riser rings conforming to AASHTO M199 for circular structures and ASTM C913 for square and rectangular structures.

C Construction

Remove the existing covers, including frames and grates or lids, prior to repairing the structure as described below. After repair is completed reinstall and adjust the cover to the required elevation in a way that prevents damage to the covers. Reinstall the covers on full mortar beds. If the plans show the cover as being replaced with a new cover remove and salvage the existing cover to the municipality. If the contractor damages covers through its own operations then the contractor shall replace them at no expense to the department.

Remove all loose and unstable material from inside the structure. The removed material shall be disposed of according to standard spec 203.3.4.

Before laying, thoroughly wet the bricks or blocks to be used in the repair and let the surface dry just enough to prevent slipping on the mortar.

Using whole bricks or blocks, and pieces of bricks and blocks as necessary, and mortar or concrete, repair and rebuild the inside walls of the structure to approximately the original wall thickness, 8” minimum. Replace deteriorated existing adjusting rings with new adjusting rings and mortar beds between the rings.

After rebuilding the walls and replacing the rings apply a plaster coat of mortar to the interior surfaces of the walls and rings. Make this plaster coat with the same mortar used in laying the bricks or blocks and rings and make it not less than 1/2 inch thick. Before applying a plaster coat to the inside surfaces, wet the surfaces with water and let the surfaces dry enough to bond to the plaster coat.

As soon after applying the plaster coat to a structure as possible, apply a uniform coating of curing compound conforming to standard spec 501.2.9 to the interior surfaces.

D Measurement
The department will measure Repairing Storm Sewer Structures by each 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.0060.07	Repairing Storm Sewer Structures	Each

Payment is full compensation for providing all materials, including all masonry, concrete bricks and blocks, concrete, and adjusting rings; for removal and disposal of deteriorated material; for any necessary excavation and backfilling; for disposing of surplus material; for removing, reinstalling and adjusting the existing covers if the existing cover is to be re-used as shown in the plans; and for removing and salvaging the existing covers to the municipality if the cover is shown as being replaced in the plans.

44. Bench, Item SPV.0060.08.

A Description
This special provision describes the furnishing and installation of metal benches as shown on the plans and specified herein.

B Materials
Furnish Flat-Steel benches with metal armor coating. The coating color shall be metal powdercoat-8 Black. The benches shall be as manufactured by Wausau Tile, Landscape Forms, Inc.; Paris Equipment Manufacturing Ltd., or approved equal.

C Construction
The benches shall have arched back with a center armrest with dimensions 74”x28”x39”. Bench weight shall be approximately 255 lbs. Install benches per manufacturer specifications at locations shown on the plans. Final locations are to be determined by city engineer. Bolt benches securely to concrete slab per manufacturer specifications. Provide shop drawings for approval before installations.

D Measurement
The department will measure Bench 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	Bench	Each

Payment is full compensation for furnishing and installing benches.

45. Salvage and Reinstall Street Light Assembly, Item SPV.0060.50.

A Description

This special provision describes salvaging and reinstalling a base mounted light pole, transformer base, arm and luminaire.

B Materials

Use all street lighting materials salvaged from the project except for pole wiring and HPS lamps.

Furnish materials to provide a concrete base with matching size, depth, bolt size, bolt circle and projection. Concrete base materials shall conform to the requirements in standard spec 654.

C Construction

Contact the appropriate personnel (as noted in *Street Lighting and Traffic Signal Systems – General Provisions* article) at least 5 business days prior to removing any street lights on City of Wausau lighting systems. Coordinate with city staff to identify the following information:

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

When removing existing street lights, carefully remove and stockpile all equipment at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground. Protect luminaires from moisture. Reinstall lights as the plans show or salvage to the City of Wausau. Properly dispose of any equipment that is not salvaged. Deliver salvaged materials to the City of Wausau public works shop.

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

Reinstall street lights according to the pertinent provisions of standard spec 657 and standard spec 659.

Construct concrete base with matching size, depth, bolt size, bolt circle and projection. Concrete base installation shall conform to the requirements in standard spec 654.

D Measurement

The department will measure Salvage and Reinstall Street Light Assembly 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.0060.50	Salvage and Reinstall Street Light Assembly	Each

Payment is full compensation for removals, salvage, delivery, stockpile and/or disposal as required above; and for furnishing and installing HPS lamps, concrete base; and for installing the salvaged pole and luminaire.

46. Utility Line Opening (ULO), Item SPV.0060.52.

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. 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 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 by the unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.52	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; and cleanup.

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, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

47. Pull Box Non-Conductive 24x36-Inch, Item SPV.0060.53; 24x42-Inch, Item SPV.0060.54.

A Description

This special provision describes furnishing and installing Pull Box Non-Conductive (size) shown on the plans.

B Materials

Furnish pull boxes, frames, and lids made of non-conductive material. Pull boxes, frames, and lids shall be suitable for Tier 15 loading as specified in ANSI/SCTE 77.

C Construction

Provide pull boxes, frames, and lids made of non-conductive materials. The contractor may extend Pull Box Non-Conductive (size) as the plan details show using the same material as the pull box. Saw extensions parallel to the extension ring. Secure extension to original box as shown in the plan details. Excavate, place coarse aggregate drain material, and backfill as the plan details show. Dispose of surplus or unsuitable materials as specified under standard spec 205.3.12.

Use covers stamped with “ELECTRIC” for traffic signal and lighting pull boxes or “COMMUNICATIONS” for communications pull boxes.

Provide one 24” length of #6 reinforcing steel to be driven vertically on the north side of the pull box.

D Measurement

The department will measure Pull Box Non-Conductive (Size) as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.53	Pull Box Non-Conductive 24x36-Inch	Each
SPV.0060.54	Pull Box Non-Conductive 24x42-Inch	Each

Payment for Pull Bon Non-Conductive (Size) is full compensation for providing and installing pull boxes, frames, lids, aggregate, fasteners, reinforcing steel; conduit extensions less than 10 feet long including fittings; and for furnishing all excavating, backfilling and disposing of surplus material.

48. Salvage Warning Flasher Assembly, Item SPV.0060.55.

A Description
This special provision describes removing and salvaging an existing warning flasher assembly as shown in the plans and as hereinafter provided.

B (Vacant)

C Construction
Contact the appropriate personnel (as noted in *Street Lighting and Traffic Signal Systems – General Provisions* article) at least 7 days prior to removing any warning flashers on City of Wausau systems. Coordinate with city staff to identify the following information:

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

When removing existing flasher assembly, carefully remove and stockpile all equipment at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground and protect from moisture. Properly dispose of any equipment that is not salvaged. Deliver salvaged materials to the City of Wausau public works shop.

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

Installation of a new warning flasher will be completed by city staff outside of this contract.

D Measurement
The department will measure Salvage Warning Flasher Assembly as each individual unit, acceptably salvaged and delivered.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.55	Salvage Warning Flasher Assembly	Each

Payment is full compensation for removing and salvaging an existing flasher assembly and components.

49. Concrete Base Type 1 with Spread Footing, Item SPV.0060.56.

A Description
This work shall be according to the requirements of standard spec 654, the plans, standard detail drawings, and as hereinafter provided.

B Materials
In accordance with the plans and standard spec 654.2.

C Construction
In accordance with the plans and standard spec 654.3 and as shown on the plans.

D Measurement
The department will measure Concrete Base Type I with Spread Footing 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.0060.56	Concrete Base Type 1 with Spread Footing	Each

Payment according to standard spec 654.5.

50. Furnish and Install 35-foot Mast Arm Assembly, Item SPV.0060.57.

A Description
This special provision describes furnishing and installing a 35-foot mast arm traffic signal assembly including a concrete base, transformer base, 20-foot pole and trombone mast arm.

B Materials
B.1 Material Qualifications
Furnish a complete list of documentation according to standard spec 651.2 and the following requirements. Furnish the following list of documentation detailing the characteristics of the assembly:

- Documentation showing the signal pole, transformer base, trombone arm, and concrete base design criteria, structural ratings and verification of compatibility
- Cut sheets, warranty information and parts list for all equipment

The information required in the above list must be furnished to the engineer after letting. The engineer will not approve any materials prior to bid letting. Do not order materials until the engineer approves the list.

B.2 Concrete Base
Furnish concrete masonry, bar steel reinforcement, anchor rods, nuts, washers, conduit, grounding electrode and all incidental materials according to the pertinent provisions in standard spec 654.2.

B.3 Pole
Furnish a 20-foot traffic signal pole according to the pertinent provisions in standard spec 657 and as required for compatibility with the other components of the assembly.

B.4 Transformer Base
Furnish a transformer base according to the pertinent provisions in standard spec 657 and as required for compatibility with the other components of the assembly.

B.4 Trombone Arm
Furnish trombone arms according to the pertinent provisions in standard spec 657 and structurally rated and compatible with attaching all signal faces and other equipment shown on the plans, including additional capacity for one future street name sign with a maximum sign area of 14.5 square feet.

C Construction
Install 35-foot Mast Arm Assembly unit according to the pertinent provisions of standard spec 654 and 657, the plans and as the manufacturer directs.

D Measurement
The department will measure Furnish and Install 35-foot Mast Arm Assembly per each completed installation.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.57	Furnish and Install 35-foot Mast Arm Assembly	Each

Payment is full compensation for furnishing and installing all materials.

51. Concrete Curb and Gutter 42-Inch Type A, Item SPV.0090.01; 66-Inch with 6-Inch Curb Type A, Item SPV.0090.02; 66-Inch with 7-Inch Curb Type A, Item SPV.0090.03.

A Description
This special provision describes constructing concrete curb and gutter according to the details shown in the plans, the requirements of standard spec 601, and as hereinafter provided.

B Materials.
Provide materials that conform to the requirements of standard spec 601.2.

C Construction
Construct according to the requirements of standard spec 601.3.

D Measurement
The department will measure Concrete Curb and Gutter 42-Inch Type A, Concrete Curb and Gutter 66-Inch with 6-Inch Curb Type A, and Concrete Curb and Gutter 66-Inch with 7-Inch Curb Type A in length 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(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 42-Inch Type A	LF
SPV.0090.02	Concrete Curb and Gutter 66-Inch with 6-Inch Curb Type A	LF
SPV.0090.03	Concrete Curb and Gutter 66-Inch with 7-Inch Curb Type A	LF

Payment is full compensation for furnishing all foundation excavation and preparation; providing all materials, including concrete, expansion joints, and reinforcement tie bars unless specified otherwise; placing, finishing, protecting, and curing; sawing joints; disposing of surplus excavation material, restoring the work site.

The department will adjust pay for crack repairs on as specified in standard spec 416.5.2 for ancillary concrete.
(NCR 601.03-10152014)

52. Pavement Marking Diagonal Epoxy 4-Inch, Item SPV.0090.04.

Furnish and install Pavement Marking Diagonal Epoxy 4-Inch according to standard spec 646 and according to the plan details.

53. Clean and Repair Concrete Pavement, Item SPV.0090.05.

A Description

This special provision describes cleaning and repairing existing concrete joints and cracks by removing unstable material at joints and cracks in the concrete pavement and patching the resulting voids with asphaltic mixture.

The unstable material encountered may be a combination of materials including but not limited to asphaltic mixture, joint filler, and deteriorated concrete.

The overlay placed over the concrete pavement after the repairs are completed will be paid for separately under the pertinent contract bid item.

B Materials

Furnish asphaltic mixture meeting the requirements specified under standard spec 465.2.

C Construction

Clean the existing deteriorated joint or crack by removing all loose or unstable material in a manner that precludes damage to the remaining pavement. Water-blasting will not be allowed.

Any damage to the in-place concrete pavement by the contractor's operations shall be repaired prior to final acceptance as directed by the engineer and at no expense to the department.

Prevent the discharge of any loosened material into adjacent properties, work areas, inlets, or live traffic lanes using shrouds, barriers, or other engineer-approved methods.

Minimize dust dispersion during all operations associated with this bid item. Application of water or other dust control material requires the approval of the engineer.

Store removed material on the roadway only in conjunction with a continuous removal and pick-up operation. During non-working hours, clear the roadway of all materials and equipment.

The removed material shall become the property of the contractor and be disposed of according to standard spec 203.3.4.

Clean the voids with compressed air immediately prior to patching. The void walls shall be clean and dry prior to patching. Do not use tack coat on the void walls. Fill the voids with asphaltic mixture and consolidate the mixture over its full depth. Use multiple layers when necessary. Do not exceed a 4 inch thickness for any layer. Compact each layer separately.

The asphaltic mixture may be placed by engineer-approved hand methods. Regardless of the placement technique, spread and shape the material to the required contour without segregation.

Immediately after placement, compact the mixture to produce a dense smooth surface using ordinary compaction procedures specified in standard spec 450.3.2.6.

The finished surface shall be smooth and contoured as the plans show or engineer directs.

Sweep existing surfaces to remove dust, dirt, or other objectionable material from all affected areas.

D Measurement

The department will measure the Clean and Repair Concrete Pavement bid item by the linear foot, acceptably completed. The department will not measure asphaltic mixture or asphaltic material separately.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Clean and Repair Concrete Pavement	LF

Payment is full compensation for removing and disposing of the unsound material; cleaning and drying the exposed surfaces; dust control, including the application of water or other material, when allowed; furnishing, placing, and compacting the asphaltic mixture, including the asphaltic material; and sweeping and removing dirt and material.

54. Fiber Optic Cable Outdoor Plant 36-CT, Item SPV.0090.50.

A Description

This special provision describes furnishing and installing fiber optic cable 36-count suitable for outdoor installation.

B Materials

Provide single-mode 36-count fiber optic cable suitable for outdoor installation. Fiber optic cable should have a polyethylene outer jacket and a dielectric central element and ripcord.

B.1 Fiber Characteristics

All fibers in the cable must be usable fibers and meet required specifications. Each optical fiber shall consist of a doped silica core surrounded by a concentric silica cladding. The fiber shall be matched clad design.

	Single Mode
Cladding Diameter:	125.0 $\pm$ 1.0 μm.
Core-to-Cladding Offset:	<0.8 μm.
Cladding Non-Circularity:	<1.0%
Coating Diameter:	245 $\pm$10 μm.
Colored Fiber Diameter:	nominal 250 μm.
Attenuation Uniformity:	No point discontinuity greater than 0.10 dB at either1310 nm or 1550 nm.
Attenuation at the Water Peak:	The attenuation at 1383 at 3 nm shall not exceed 2.1 dB/km.
Cutoff Wavelength:	<1260 nm
Mode-Field Diameter:	9/30 $\pm$ 0.50 μm at 1310 nm, 10.50 $\pm$ 1.00 μm at 1550 nm.

The coating shall be a dual layered, UV-cured acrylate applied by the fiber manufacturer, and shall be mechanically strippable.

B.2 Fiber Parameters

Fiber Type: Single Mode
Required Fiber Grade – Maximum Individual Fiber Attenuation

The maximum dispersion shall be <3.2 ps/(nm · km) from1285 nm to 1330 nm and shall be <18ps/(nm· km) at 1550 nm.

The fiber manufacturer shall proof-test 100% of the optical fiber to a minimum load of 100 kpsi.

B.3 Fiber Construction

Optical fibers shall be placed inside a loose buffer tube. Each buffer tube shall contain up to 12 fibers. The fibers shall not adhere to the inside of the buffer tube.

Each fiber shall be distinguishable by means of color coding according to the TIA/EIA-298 Specifications, "Optical Fiber Cable Color Coding." Buffer tubes containing fibers shall be color-coded with distinct and recognizable colors according to the above references specification.

In buffer tubes containing multiple fibers, the colors shall be stable across the specified storage and operating temperature range and not subject to fading or smearing onto each other or into the gel filling material. Colors shall not cause fibers to stick together.

Buffer tubes shall be kink resistant within the specified minimum bend radius.

Fillers may be included in the cable core to lend symmetry to the cable cross-section where needed.

The central anti-buckling member shall consist of a glass reinforced plastic rod. The purpose of the central member is to prevent buckling of the cable.

Each buffer tube shall be filled with a non-hygroscopic, non-nutritive to fungus, electrically non-conductive, homogenous gel. The gel shall be free from dirt and foreign matter. The gel shall be readily removable with conventional nontoxic solvents. Buffer tubes shall be stranded around a central member using the reverse oscillation, or "S-Z", stranding process.

The cable core shall contain a water-blocking material. The water blocking material shall be non-nutritive to fungus, electrically non-conductive and homogenous. It shall also be free from dirt and foreign matter and shall be readily removable with conventional (nontoxic) solvents.

Binders shall be applied with sufficient tension to secure the buffer tubes to the central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking and dielectric with low shrinkage. The cable shall contain at least one ripcord under the sheath for easy sheath removal. Tensile strength shall be provided by a combination of high tensile strength dielectric yarns. The high tensile strength dielectric yarns shall be helically stranded evenly around the cable core.

All-dielectric cables (with no armoring) shall be sheathed with medium density polyethylene (MDPE). The minimum nominal jacket thickness shall be 1.4 mm Jacketing material shall be applied directly over the tensile strength members and water blocking material. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.

The jacket or sheath shall be free of holes, splits, and blisters. The cable jacket shall contain no metal elements and shall be of a consistent thickness. Cable jackets shall be marked with manufacturer's name, sequential foot markings, year of manufacture, and a telecommunication handset symbol, as required by Section 350G of the National Electrical Safety Code (NESC). The actual length of the cable shall be within –0/+1% of the length

markings. The marking shall be in contrasting color to the cable jacket. The height of the marking shall be approximately 2.5 mm.

The maximum pulling tension shall be 2700 N (608 lbf) during installation (short term) and 890 N (200 lbf) long term installed.

The shipping, storage, and operating temperature range of the cable shall be 40° C to +70° C. The installation temperature range of the cable shall be –30° C to +70° C.

When tested according to FOTP-3, "Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components," the average change in attenuation at extreme operational temperatures (-40° C to +70° C) shall not exceed 0.05 dB/km at 1550 nm for single-mode fiber. The magnitude of the maximum attenuation change of each individual fiber shall not be greater than 0.15 dB/km at 1550 nm.

B.4 General Cable Performance Specifications

When a one-meter static head or equivalent continuous pressure is applied at one end of a one meter length of unaged cable for 24 hours, no water shall leak through the open cable end. When a one-meter length of aged cable for one hour, no water shall leak through the open cable end. The aging cycle is defined as exposing the cable to +85° $\pm$2° C for 168 hours and two cycles of –40° C to +70° C with cable held at these temperatures for 24 hours. At the end of this cycle, the cable will be decreased to +23° C and held for 24 hours. The water penetration test is completed at the end of the 24-hour hold. Testing shall be performed according to the industry standard test, FOTP-82, "Fluid Penetration Test for Fluid-Blocked Fiber Optic Cable."

When tested according to FOTP-81, "Compound Flow (Drip) Test for Filled Fiber Optic Cable", the cable shall exhibit no flow (drip or leak) of filling and/or flooding material at +65° C.

The cable shall withstand a minimum compressive load of 440N/cm (250 lbf/in) for armored cables and 220 N/cm (125 lbf/in) for non-armored cables applied uniformly over the length of the compression plate. The cable shall be tested according to FOTP-41, "Compressive Loading Resistance of Fiber Optic Cables," except that the load shall be applied at the rate of 3 mm to 20 mm per minute and maintained for ten minutes. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. No fibers shall exhibit a measurable change in attenuation after load removal.

When tested according to FOTP-104, "Fiber Optic Cable Cyclic Flexing Test," the cable shall withstand 25 mechanical flexing cycles at a rate of 30 cycles per minute around a sheave diameter not greater than 20 times the cable diameter. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at

1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. No fibers shall exhibit a measurable change in attenuation after load removal.

When tested according to FOTP-25, "Repeated Impact Testing of Fiber Optic Cables and Cable Assemblies," the cable shall withstand 25 impact cycles. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. The cable jacket shall not exhibit evidence of cracking or splitting at the completion of the test.

When tested according to FOTP-33, "Fiber Optic Cable Tensile Loading and Bending Test," using a maximum mandrel and sheave diameter of 560 mm, the cable shall withstand a tensile load of 2700 N (608 lbf) applied for one hour (using "Test Condition II" of the procedure). In addition, the cable sample, while subjected to a minimum load of 2660 N (600 lbf), shall be able to withstand a twist of 360 degrees in a length of less than 3 meters (9.9 feet). The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. The cable shall not experience a measurable increase in attenuation when subjected to the rated residual tensile load, 890 N (200 lbf).

When tested according to FOTP-85, "Fiber Optic Cable Twist Test," a length of cable no greater than 2 meters will withstand 10 cycles of mechanical twisting. The magnitude of the attenuation change will be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers will not experience an attenuation change greater than 0.1 dB at 1550 nm. The repeatability of the measurement system is typically 0.05 dB or less. The average increase in attenuation for the fibers shall be <0.40 dB at 1300 nm. The cable jacket will exhibit no cracking or splitting when observed under 5X magnification after completion of the test.

When tested according to FOTP-181, "Lightning Damage Susceptibility Test for Optic Cables with Metallic Components," the cable shall withstand a simulated lightning strike with a peak value of the current pulse equal to 105 kA. A damped oscillatory test current shall be used with a maximum frequency of 30 kHz. The time to half-value of the waveform envelope shall be from 40 70 μs.

B.5 Quality Assurance Provision

All cabled optical fibers >1000 meters in length shall be 100% attenuation tested. The attenuation of each fiber shall be provided with each cable reel. The cable manufacturer shall be ISO 9001 registered. The cable manufacturer shall provide installation procedures and technical support concerning the items contained in this specification. The manufacturer shall certify that the supplied cable meets all requirements of these specifications.

B.6 Packaging
The completed cable shall be packaged for shipment on non-returnable wooden reels. Top and bottom ends of the cable shall be available for testing. Both ends of the cable shall be sealed to prevent the ingress of moisture. Each reel shall have a weatherproof reel tag attached identifying the reel and cable.

A cable data sheet shall accompany each cable. The following information shall be included:

Cable Number
Factory Order Number
Customer Purchase Order Number
Measured Attenuation of Each Fiber (for lengths>1000 m)
Ordered Length
Actual Shipped Length

C Construction
Install fiber optic cable according to the pertinent provisions of standard spec 678.

D Measurement
The department will measure Fiber Optic Cable Outdoor Plant 36-CT in length by the linear foot, measured along the centerline of the conduit.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.50	Fiber Optic Cable Outdoor Plant 36-CT	LF

Payment is full compensation for furnishing, installing, and testing the cable.

55. Fiber Optic Tracer Cable, Item SPV.0090.51.

A Description
This special provision describes furnishing and installing tracer cable in empty conduit lengths and in all conduit containing fiber optic cable.

B Materials
Provide the tracer cable with a black insulation cover, No. 12 AWG, XLP, USE rated, 600 VAC, single conductor, copper wire.

C Construction
Install the tracer cable in empty conduit lengths and in all conduit containing fiber optic cable, running continuously through all pull boxes. Install the tracer cable to each control cabinet, but do not enter the cabinet. The tracer cable may be spliced only in pull boxes. Make splices only between full rolls of wire. For the cable splice use a Western Union Splice soldered with resin core flux. All exposed surfaces of the solder shall be smooth. Solder splices using a soldering iron. Cover the splice with a WCSMW 30/100 heat shrink tube,

minimum length 4-inches, and with a minimum one-inch coverage over the XLP insulation, underwater grade.

D Measurement
The department will measure Fiber Optic Tracer Cable in length by the linear foot of cable, measured along the centerline of the conduit.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.51	Fiber Optic Tracer Cable	LF

Payment is full compensation for furnishing and installing the tracer cable; splicing; and properly disposing of surplus materials.

56. Furnish and Install Equivalent Lighting Conductors, Item SPV.0090.52.

A Description
This special provision describes furnishing and installing electrical conductors to match existing street lighting circuits.

B Materials
Furnish electrical conductors equivalent to conductors in existing lighting circuits and incidentals according to the pertinent requirements of standard spec 655.2. Furnish various sizes/types of electrical conductors to match all existing systems within the project limits. All sizes and types of electrical conductors shall be paid under this bid item.

C Construction
Perform a pre-construction site assessment with the City of Wausau and the engineer for all areas where this item is used. The site assessment shall include written documentation of existing service points, circuiting patterns, number of conductors and the conductor size/type.

This item includes the removal and abandonment of any existing conductors which preclude the ability to run new conductors in existing conduit.

Install electrical conductors according to the pertinent requirements of standard spec 655.3.

D Measurement
The department will measure Furnish and Install Equivalent Lighting Conductors in length by the linear foot, measured along the centerline of the conduit multiplied by the number of conductors used.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.52	Furnish and Install Equivalent Lighting Conductors	LF

Payment is full compensation for determining existing lighting conductors, and, furnishing and installing equivalent lighting conductors.

57. Concrete Pavement Joint Layout (6999-03-79), Item SPV.0105.01; (6999-03-80), Item SPV.0105.02; (6999-03-81), Item SPV.0105.03.

A Description

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

B (Vacant)

C Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer before paving each intersection. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

The department will measure Concrete Pavement Joint Layout (Project) as a single lump sum unit for all joint layout designs and marking acceptably completed under 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.0105.01	Concrete Pavement Joint Layout (6999-03-79)	LS
SPV.0105.02	Concrete Pavement Joint Layout (6999-03-80)	LS
SPV.0105.03	Concrete Pavement Joint Layout (6999-03-81)	LS

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

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

58. Research and Locate Existing Property Monuments (6999-03-79), Item SPV.0105.04; (6999-03-80), Item SPV.0105.05; (6999-03-81), Item SPV.0105.06.

A Description

This special provision describes researching and locating existing property monuments located within permanent easement, temporary easement or construction permit areas, within the construction limits, that may be lost or disturbed by construction operations.

This provision does not relinquish the contractor of his responsibility under standard spec 107.11.

B (Vacant)

C Construction

Prior to construction, research, locate and document the adjacent property monuments located within permanent easement, temporary easement and construction permit areas. Tie the located property monuments in with coordinates accurate to 1:3000 and tied to at least two adjacent section corners that will not be disturbed by any project.

Prepare a property monument location map showing the type of monuments originally found with their coordinates. A legible tax map or right-of-way plat is acceptable as a base map for the property monument location map. Provide a copy of the property monument location map to the engineer and region right of way plat coordinator.

All work under this item is to be performed by, or under the direction of, a professional land surveyor registered in the State of Wisconsin.

After construction is completed property monument locations will be verified and reset, if necessary, under the item titled "Verify and Replace Existing Property Monuments (Project)".

D Measurement

The department will measure Research and Locate Existing Property Monuments (Project) as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Research and Locate Existing Property Monuments (6999-03-79)	LS
SPV.0105.05	Research and Locate Existing Property Monuments (6999-03-80)	LS
SPV.0105.06	Research and Locate Existing Property Monuments (6999-03-81)	LS

Payment is full compensation for all research, field survey, locating, and recording of field data necessary to locate and determine coordinates for existing property monuments within the construction limits prior to construction; furnishing a professional land surveyor; preparing, annotating and delivering the property monument location map to the engineer. (NCR 650.01-04302015)

59. Verify and Replace Existing Property Monuments (6999-03-79), Item SPV.0105.07; (6999-03-80), Item SPV.0105.08; (6999-03-81), Item SPV.0105.09.

A Description

This special provision describes verifying the location of, and replacing existing property monuments, which were previously located under the item "Research and Locate Existing Property Monuments", that are determined to be lost or disturbed.

This provision does not relinquish the contractor of his responsibility under standard spec 107.11.

B Materials

Provide replacement property monuments that are one-inch inside diameter by 24-inch long iron pipe or ¾-inch diameter iron rod or rebar that are 24 inches long in locations outside of pavement areas, a Berntsen Steel Nail Marker for placement in asphalt pavement, or a Berntsen BP1 Brass Marker with anchoring plug for placement in concrete pavement.

C Construction

After construction is completed, verify the location of all property monuments previously located under the item "Research and Locate Existing Property Monuments (Project)". Replace or reset as necessary, any property monuments that are lost or disturbed.

Prepare a property monument location map showing the type of monuments originally found, and the type of replacement monument used to replace or reset the lost or disturbed monuments, with their coordinates. A legible tax map or right-of-way plat is acceptable as a base map for the property monument location map. The property monument location map shall explicitly state that the replaced or reset monuments are not being certified as an actual property monument, only that evidence of a property monument was found and reset. Provide a copy of the property monument location map to the engineer and the county surveyor.

All work under this item is to be performed by, or under the direction of, a professional land surveyor registered in the State of Wisconsin.

D Measurement

The department will measure Verify and Replace Existing Property Monuments (Project) as a single lump sum unit of work acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.07	Verify and Replace Existing Property Monuments (6999-03-79)	LS
SPV.0105.08	Verify and Replace Existing Property Monuments (6999-03-80)	LS
SPV.0105.09	Verify and Replace Existing Property Monuments (6999-03-81)	LS

Payment is full compensation for all survey work necessary to verify the location of all property monuments previously located under the item "Research and Locate Existing Property Monuments (Project)"; replacing or resetting, as necessary, property monuments that are lost or disturbed from their original location; furnishing property monuments; furnishing a professional land surveyor; preparing, annotating and delivering the property monument location map.

(NCR 650.02-04302015)

60. Salvage Traffic Signal (STH 52 and 3rd Avenue), Item SPV.0105.50; Salvage Traffic Signal (STH 52 and 1st Avenue), Item SPV.0105.51; Salvage and Reinstall Traffic Signal (STH 52 and 1st Street), Item SPV.0105.52.

A Description

This special provision describes removing, salvaging and/or reinstalling existing traffic signals (by intersection) according to the pertinent provisions of standard spec 204 and as hereinafter provided. Work under this item also includes transporting or disposing of the existing equipment, including removal of existing electrical service as well as required utility coordination, as directed in this special provision. Items included under this bid item include transformer/pedestal bases, poles, standards, signal heads, backplates and signal mounting hardware.

The Salvage and Reinstall bid item includes reinstallation of existing traffic signal equipment at the STH 52 and 1st Street intersection.

B (Vacant)

C Construction

Arrange for the de-energizing of the traffic signals and removal of existing electrical service with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the City of Wausau at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the city.

Carefully disconnect, disassemble, remove and stockpile all traffic signal equipment. Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact.

Dispose of the underground signal cable, internal wires and street lighting cable off the right-of-way. Remove and/or salvage existing cables and wiring as required. Salvage and retain all cables and wiring unless construction activities require reconstruction of an existing section of conduit. Remove cables and wiring from sections of conduit which are to be removed. Quantities for new cable and wire are included for new relocated bases and sections of conduit only.

Reinstall all items according to the pertinent provisions of standard spec 657, 658 and 659.

D Measurement

The department will measure Salvage Traffic Signal (Location) and Salvage and Reinstall Traffic Signal (Location) as a single lump sum unit of work for each intersection, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.50	Salvage Traffic Signal (STH 52 and 3rd Avenue)	LS
SPV.0105.51	Salvage Traffic Signal (STH 52 and 1st Avenue)	LS
SPV.0105.52	Salvage and Reinstall Traffic Signal (STH 52 and 1st Street)	LS

Payment is full compensation for removing and disassembling traffic signals, scrapping of some materials, disposing of scrap material, for delivering the requested materials to the city, and for reinstalling existing equipment.

61. Salvage and Reinstall Emergency Vehicle Preemption Equipment (STH 52 and 3rd Avenue), Item SPV.0105.53; (STH 52 and 1st Avenue), Item SPV.0105.54.

A Description
This special provision describes salvaging, storing, reinstalling and testing Emergency Vehicle Preemption (EVP) equipment as shown in the plans, and as hereinafter provided. This item includes installation and operation on both temporary and permanent traffic signals.

B Materials
Salvage and reinstall all existing equipment.

Traffic Signal EVP Detector Cable to be paid for separately.

Mounting equipment for the EVP detector shall be considered incidental to this item.

C Construction
Install salvaged EVP equipment as the plans show for both temporary and permanent traffic signals. Dispose of existing cables and terminations.

D Measurement
The department will measure Salvage and Reinstall Emergency Vehicle Preemption Equipment (location) as a single lump sum unit for all services, acceptably completed under 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.0105.53	Salvage and Reinstall Emergency Vehicle Preemption Equipment (STH 52 and 3rd Avenue)	LS
SPV.0105.54	Salvage and Reinstall Emergency Vehicle Preemption Equipment (STH 52 and 1st Avenue)	LS

Payment is full compensation for removing, storing, and installing salvaged EVP equipment.

62. Furnish and Install Traffic Signal Cabinet (STH 52 and 3rd Avenue), Item SPV.0105.55; (STH 52 and 1st Avenue), Item SPV.0105.56.

A Description
This specification describes furnishing and installing an equipped NEMA TS2 Type 1 traffic signal control cabinet at intersections. Cabinet components, including, but not limited to the traffic signal controller, malfunction management unit (MMU), bus interface units (BIU), flash transfer relays, battery backup system, and railroad preemption interface will also be furnished and installed as part of these bid items as appropriate.

The traffic signal cabinets for the 1st and 3rd Avenue intersections shall include an EPAC3108M52 SEPAC ECOM traffic signal controller. The controller for the 3rd Avenue intersection shall be loaded with SEMARC software to run concurrently with the SEPAC software. The controller for the 3rd Ave intersection shall be configured to operate both as the intersection controller for the 3rd Avenue intersection and as the master controller for the 1st Avenue and the 3rd Avenue intersection traffic signal controllers. The cabinet for the 1st Avenue intersection shall be equipped with battery backup and configured for railroad preemption.

B Materials

Furnish and install equipment and assemble the cabinet conforming to the latest revision of NEMA Standards Publication TS 2-2003, *Traffic Controller Assemblies with NTCIP Requirements*, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard, except where modified in this specification. Conform all work to the Wisconsin State Electrical Code (WSEC).

Provide cabinets designed for TS2 Type 1 operation. Pre-wire cabinets for a minimum of sixteen phases as specified herein.

Furnish and install at no extra cost any equipment, software, and materials not specifically described but required in order to perform the intended functions in the cabinet.

C Construction

C.1 Cabinet

C.1.1 Design

Furnish a door-in-door ground mounted (without anchor bolts) aluminum cabinet of clean-cut design and appearance. Provide a cabinet of minimum size 44 inches wide, minimum 24 inches deep, and minimum 52 inches to maximum 60 inches high. The size of the cabinet shall provide ample space for housing the controller, all of the associated devices which are to be furnished with the controller, all other auxiliary devices herein specified, and all equipment to be furnished and installed by others as listed in the Description section of this specification.

The cabinet shall comply with the environmental and operating standards outlined in the NEMA TS2 Standard. The cabinet shall provide reasonable vandalism protection. The cabinet shall have a NEMA 3R rating.

Construct the cabinet from type 5052-H32 aluminum with a minimum thickness of 0.125 inches. Furnish the cabinet with a natural, uncoated, aluminum finish inside and a black exterior finish, anodized and factory applied to match the existing traffic signal equipment. Continuously weld all seams. The surface shall be smooth, free of marks and scratches. Use stainless steel for all external hardware.

On the top of the cabinet, incorporate a 1-inch slope toward the rear to prevent rain accumulation. Incorporate a rain channel into the design of the main door opening to prevent liquids from entering the enclosure.

Include an exhaust plenum with a vent screen into the roof of the cabinet. Perforations in the vent screen shall not exceed 0.125 inches in diameter.

Equip the lower section of the cabinet door with a louvered air entrance. The air inlet shall be large enough to allow sufficient air flow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for Type 3R ventilated enclosures. Secure a washable, fiberglass, removable air filter to the air entrance. The filter shall fit snugly against the cabinet door wall. Attach an aluminum, easily removable, gasketed cover over the air filter and louver.

C.1.2 Doors

The cabinet door opening shall be a minimum of 80 percent of the front surface of the cabinet. The main door and police door-in-door shall each close against a weatherproof and dust-proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.188 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.188 inches thick by 0.500 inches wide. Permanently bond the gaskets to the cabinet.

Equip the main door with a three-point latching mechanism. The upper and lower locking points of the latching mechanism shall each have a pair of nylon rollers. The handle on the main door shall utilize a shank of stainless steel 3/4 inches minimum diameter. The handle shall include a hasp for the attachment of an optional padlock. The cabinet door handle may turn either clockwise or counterclockwise to open, and shall not extend outwards past the edge of the door at any time. Position the lock assembly so the key will not cause any interference with the handle, or a person's hand on the handle, when opening the cabinet door.

Include on the main door a solid stainless steel rod stop and catch mechanism capable of rigidly holding the door open at approximately 90, 120, and 180 degrees under windy conditions. The operator must be able to engage and disengage the catch with a shoed or booted foot.

The main door hinge shall be a one-piece, continuous piano hinge with a minimum 0.25 inch stainless steel pin running the entire length of the right side of the door (right-handed). Attach the hinge in such a manner that no rivets or bolts are exposed.

Equip the main door with a brass Corbin tumbler lock No. 2, swing away dust cap, and provide two keys No. 2. Equip the police door-in-door with a standard police lock and provide one key.

C.1.3 Shelves and Mountings

Mount a minimum of three vertical "C" channels, compatible with Unistrut channel nuts, on each interior side wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring mounted nuts or studs. Install three vertical "C" channels or three slotted rails on the interior back wall of the cabinet. All mounting channels

and rails shall extend to within 7 inches of the top and bottom of the cabinets and shall be of sufficient strength to rigidly hold specified shelves and equipment.

Provide two full-width, 11-inch deep, fully adjustable, aluminum shelves to support the controller and other equipment. Mount the lower shelf at a height above the bottom of the cabinet such that the shelf and attached drawer does not interfere with the ability to tilt the terminal facility forward on its hinges for maintenance purposes. Mount the top shelf at least 13 inches above the surface of the lower shelf.

Locate the controller and MMU on the top shelf. Locate the loop detector racks and other auxiliary equipment on the lower shelf. The power supply may be mounted on either shelf.

Provide an under-shelf drawer under the lower shelf. The drawer shall be approximately 20 inches wide and the full depth of the shelf. The drawer shall operate easily and smoothly, and shall have a stop to prevent inadvertently pulling the drawer out of its support. Design the stop to allow purposeful complete removal of the drawer without the use of tools.

C.1.4 Auxiliary Cabinet Equipment

Ventilate the cabinet by means of a 120 VAC, 60HZ, tube axial compact type fan located in the top of the cabinet plenum. The fan's free delivery airflow shall be equal to or greater than 100 cubic feet per minute. The magnetic field of the fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp, or have bearing failure within a seven year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The thermostat's turn on setting shall be adjustable from 90 to 120 degrees F. The fan shall run until the cabinet temperature decreases below the turn-on temperature setting by approximately 30 degrees F. The fan shall be fused.

Mount an incandescent lamp and socket in the cabinet to sufficiently illuminate the field terminals. Wire the lamp to a 15-amp ON/OFF toggle switch mounted as specified in the Cabinet Switches section of this specification.

Provide a 250 watt element heater. Install the heater on the face of the aluminum, louvered air filter cover such that feed air is supplied through the cover. Provide a protective, ventilated cover over the heater. Provide a cord and twist-off plug to an electrical receptacle on the cabinet door. Provide a thermostat with an adjustable setting from 0 to 100 degrees F. Install the thermostat on the interior ceiling of the cabinet well away from the cabinet light or any heat source. Provide a thermal limit switch to prevent the heater's protective cover from exceeding 170 degrees F.

C.2 Terminals and Facilities

C.2.1 Terminal Facility

The terminal facility panel constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and formed so as to eliminate any flexing when plug-in components are installed.

Mount the bottom of the terminal facility a minimum of nine inches from the bottom of the cabinet. Hinge the terminal facility at the bottom to allow easy access with simple tools to all wiring on the rear of the panel. It shall not be necessary to remove the lower shelf, the shelf drawer, or any shelf-mounted equipment to hinge down the terminal facility. Provide sufficient slack in the load bay wiring to allow for dropping the load bay.

Fully wire the terminal facility with sixteen load switch sockets: eight phases of vehicular, four phases of pedestrian, and four phases of overlap operation; eight flash transfer relay sockets; one flasher socket; and two terminal facility BIU rack slots. The use of printed circuit boards is not acceptable on the terminal facility, except printed circuit boards are acceptable for the BIU interface with the load bay. Position the 16 load switch sockets in two horizontal rows of eight sockets each. Support the load switches and flasher by a bracket or shelf extending at least three inches from the terminal facility.

Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silk-screening on the front and rear of the terminal facility to match drawing designations.

Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

Provide two each 16-channel, 8-position, TS2 detector racks, each with an integrally mounted BIU mounting. Racks shall be addressable. Power each detector rack by the cabinet power supply. Fasten the loop detector racks towards the left side of the lower shelf.

For BIU rack connectors, provide pre-wired address pins or jumper plugs corresponding to the requirements of the NEMA TS2 Standard. The address pins or jumper plugs shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

For the terminal facility, contain all field wires within one or two rows of horizontally-mounted Marathon heavy duty terminal blocks. Terminate all field output circuits on an unfused terminal block with a minimum rating of 10 amps. Use mechanical connector lugs rated for copper wire. Angle the lower section of the terminal block out from the back of the cabinet at approximately a 45 degree angle.

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.

All field flash sequence programming at the field terminals shall be able to be accomplished with the use of only a screwdriver.

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).

Wire one RC network in parallel with each flash transfer relay coil.

Permanently label all logic-level, NEMA-controller and MMU input and output terminations on the terminal facility. Identity the function of each terminal position on the cabinet drawings.

Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum. Functions to be terminated shall be as specified in the listing of Input/ Output Terminals in Section 5 of the NEMA TS2 Standard.

Conform all terminal facility and cabinet wiring to the WSEC. The green/ walk, yellow, and red/ don't walk load switch outputs shall be minimum 16 gauge wire. The MMU (other than AC power), controller I/O, and logic ground shall be minimum 22 gauge wire. All wire colors shall be consistent in all cabinets furnished in one order.

C.3 Auxiliary Panels

C.3.1 Vehicle Detection Interface Panel

Provide a 32-position interface panel or two 16-position panels. Each interface panel shall allow for the connection of 32 or 16 independent field loops, respectively. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque. Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop lead-in cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet.

Provide a cable consisting of 20 AWG twisted pair wires to enable connection to and from the interface panel to a detector rack. The twisted pair wires shall be color-coded wires. Provide a cable of sufficient length to allow the detector rack to be placed on either shelf.

Identify all termination points by a unique number silk screened on the panel.

C.3.2 Intersection Lighting Control Panel

Provide an intersection lighting control panel as described. The intersection lighting control panel shall consist of an aluminum panel 0.125 inches thick and approximately 5 inches by 10 inches. Determine the actual panel size by the cabinet’s mounting rail placement. Attach to the panel a 2 pole-30 amp contactor-120vac coil (Square D #8910DPA32V02 or equal), and a heavy duty six position terminal block (Marathon DJ1606 or equal). Use wire sizes 10AWG for power and load wiring, and 16AWG for control wires. Wire the terminal strip as follows:

- Control coil
- L1 in
- L2 in
- Neutral in and control coil
- L1 out
- L2 out

Protect each output by a MOV (V150LA20A) wired between the output and neutral. Include a photo control (Intermatic #K4021C or equal). Mount the photo control just above the cabinet door and approximately 12 inches from the right side of the cabinet. Wire the photo control to a 3 position terminal switch using 16AWG wire color coded to match the photo control wiring connected to the intersection lighting control panel.

C.3.3 Conductors and Cabling

All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MIL-W-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.

Provide controller and MMU cables of sufficient length to allow the units to be placed on either cabinet shelf in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. Exposed tie-wraps and interwoven cables are unacceptable.

Provide the cabinet configuration with enough SDLC RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.

Pre-wire the terminal facility for a Type 16 MMU.

All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

Optoisolate all pedestrian pushbutton inputs from the field to the controller through the BIU and operate at 12 VAC.

Hook or loop all wire, size 16 AWG or smaller, at solder joints around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

C.3.4 Cabinet Switches

Locate the following switches on a maintenance panel on the inside of the cabinet door:

a. Controller On/Off
b. Cabinet Light
c. Stop Time (Three Position)
d. Manual Detector Switches (Three Position)

Position	Switch Label	Function
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove the stop time input to the controller
Lower	Normal	Connects the MMU to the controller stop time input

Provide manual detector switches. Provide a minimum of 16 vehicle detector switches, and four pedestrian detector switches. The switches shall be spring loaded and automatically return to the center position. Wire the vehicle detector switches to detector BIU slot 1. Wire the pedestrian switches to the T&F BIU slot 1. The switches shall operate as follows:

Position	Function
Up	Detector Disabled
Center	Detector Enabled
Down	Detector Called

C.3.5 Railroad Preemption Interface Panel

Furnish equipment conforming to the latest revision of NEMA Standards Publication TS 2-2003, *Traffic Controller Assemblies with NTCIP Requirements*, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard, except where modified in this specification. Conform all work to the Wisconsin State Electrical Code (WSEC). Conform all work to standard spec 651, as supplemented in this specification.

Provide a railroad preempt interconnect panel built to meet WisDOT and railroad requirements for the intersection where the railroad preempt is being installed. Contact the WisDOT electrical shop supervisor in Madison at (608) 246-3269 to request the requirements. The interconnect panel shall be capable of providing a full 8-wire interconnect with both advance and gate-down preempt sequences. The interface panel shall also be capable of operating with a minimum 2-wire interconnect, single sequence preempt.

Install the interface panel on the left inside wall of the signal cabinet. Furnish and install any cabling necessary for interconnection with the devices in the signal cabinet with which the interface panel is intended to communicate. Make the interface panel fully operational.

Contact WisDOT State Traffic Signal Systems Engineer, Joanna Bush, at (608) 261-5845 to request a review and approval of the traffic signal controller programming for the railroad preemption operation. WisDOT personnel shall be present at the time of final traffic signal turn on. Contact Joanna Bush at least two weeks prior to final traffic signal turn on to make arrangements.

C.4 Power Panel

C.4.1 Design

The power panel shall consist of a separate module, securely fastened to the interior right side wall of the cabinet. Wire the power panel to provide the necessary power to the cabinet, controller, MMU, cabinet power supply, and all auxiliary equipment. Manufacture the power panel from 0.090-inch, 5052-H32 aluminum. Panel layout shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

Provide a light, tough, transparent, weather-resistant, non-yellowing, thermoplastic cover, rigidly mounted over the full power panel, with access holes for circuit breakers and other equipment, and open on the sides for ventilation.

C.4.2 Bus Bar

Provide a minimum 20-position neutral bus bar capable of connecting three #12 AWG wires per position.

C.4.3 Circuit Breakers

House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz, circuit breakers, with the ON position being up:

- One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted. Breakers shall be thermal magnetic type, UL listed, with a minimum of 22,000 amp interrupting capacity.
- One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater**.**
- One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.
- One 20-amp circuit breaker for future use.

Power the cabinet light through the GFI fuse, not a circuit breaker.

C.4.4 Radio Interference Suppressor

Equip each control cabinet with a single radio interference suppressor (RIS) of sufficient ampere rating to handle the load requirements. Install the RIS at the input power point. The RIS shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50 DB over a frequency range from 200 KHZ to 75 MHZ, when used in connection with normal installations. The RIS shall be hermetically sealed in a substantial metal case filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two #8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall be rated at minimum 50 amperes. Design the RIS for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and to meet the standards of UL and Radio Manufacturer's Association.

C.4.5 Bus Relay

Provide a normally-open, 60 amp, solid state relay.

C.4.6 Surge Protector

Install a plug-in type EDCO SHA-1250, or Atlantic/Pacific approved equal, surge protector across the load terminal of the 10-amp circuit breaker. Install a General Electric Varistor, catalog #V130PA20A, at the load terminals of the circuit breaker from the hot line to the grounded current carrying neutral conductor. Provide one additional uninstalled surge protector for every 20 cabinets delivered.

C.4.7 Power receptacles

Mount a 120 VAC 20 amp**,** NEMA 5-20R GFCl convenience duplex outlet at each of these two locations:

- On the interior right side wall above the power panel. The outlet shall be fully operational and fuse protected.
- Near the power panel where it will not interfere with power panel maintenance**.** This outlet is to be wired by field installation personnel.

C.4.8 Suppressors and RC Network

Provide a suppressor for each 120 VAC circuit that serves an inductive device, such as a fan motor or a mechanical relay, to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point. Wire one RC network in parallel with each inductive device.

C.5 Auxiliary Devices

C.5.1 Load Switches

Provide solid state load switches conforming to the requirements of Section 6.2 of the NEMA TS2 Standard.

Supply all 16 load switches with each cabinet.

C.5.2 Flashers

Provide a solid state flasher conforming to the requirements of section 6.3 of the NEMA TS2 Standard.

C.5.3 Cabinet Power Supply

Supply one cabinet power supply with each cabinet, meeting the requirements of Section 5.3.5 of the NEMA TS2 Standard. Provide LED indicators for the 12 VDC, 12 VAC, and 24 VDC outputs. Provide jack plugs on the front panel for access to the +24 VDC for test purposes.

C.5.4 Battery Backup System (BBS)

Furnish a BBS at the 1st Avenue traffic signal control cabinet that will provide uninterruptible reliable emergency power to a traffic signal system in the event of a power failure or interruption. The BBS shall be capable of providing power for full run-time operation and for flashing mode operation of all traffic signals at an intersection. The BBS system shall have a shelf mounted configuration and shall include:

- Inverter/charger

- Automatic power transfer switch
- Automatic bypass switch
- Manually operated non-electronic bypass switch
- Manually operated non-electronic generator transfer switch
- All auxiliary equipment, hardware, and wiring to provide a complete operating BBS system
- Cabinet and cabinet equipment
- Batteries and battery equipment

The system shall be designed for outdoor applications, shall meet the environmental requirements of NEMA Standards Publication TS2 – 2003v02.06 – Traffic Controller Assemblies with NTCIP Requirements, except as modified herein, and shall be capable of receiving power from a generator.

Configure the BBS to provide a minimum of two hours of full run-time operation for an intersection using LED traffic signals, LED pedestrian signals, and LED blank out message signs with a total operating load of 1500 watts minimum.

C.5.4.1 Uninterruptible Power Supply

C.5.4.1.1. Features

The UPS shall be an inverter/charger complying with UL 1778.

When utilizing battery power, the BBS output voltage shall be between 110 VAC and 125 VAC, pure sine wave output with THD < 3% at 60 Hz +/- 3 Hz.

Provide buck and boost capability to provide constant output voltage without battery input.

The range of operating temperatures for the inverter/charger shall be -34° C to +74° C.

The UPS shall be fully programmable and controllable, both locally using the UPS touch pad and remotely using a standard personal computer USB interface with Windows XP operating system, including all UPS features listed in this specification; all settings, controls, logs, tests, and counters; and all other electronic features.

Provide a backlit LCD display to indicate current battery charge status, input/output voltages, power output, battery temperature, faults, alarms, date, time, and settings of the various relays.

UPS shall be fully SNMP Ethernet ready, including a RJ-45 (also known as an 8P8C) Ethernet connector port, for future activation. A SNMP card is not required with this specification.

Provide on the UPS a resettable inverter event counter and a cumulative inverter timer.

All controls and external connections shall be on the front panel. The UPS unit shall sit horizontally on a shelf. All controls and labels shall be oriented to read horizontally.

Provide lightning/ surge protection complying with ANSI/IEEE C.62.41 and C.62.45 Cat A & B and UL 1449.

Equip the UPS with an event log for at minimum the last 100 events. The events shall be time and date stamped. The event log shall be retrievable via the USB port and the last event in the log shall be viewable from the LCD screen.

The UPS shall be capable of performing a SELF-TEST of the BBS. The duration of the SELF-TEST shall be programmable in 1-minute increments from 1 minute to 4 hours.

The operation of the flash mode shall be field programmable to activate at various times, battery capacities, or alarm conditions.

Provide password protection for certain maintenance controls such as Battery Test, BBS inverter ON/OFF, viewing the Event log, and changing default settings. Furnish the UPS with a default password and the ability for the user to change the password.

Use the following LED lights conditions to indicate current status:

Red LED Flashing	for ALARM
Red LED steady ON	for FAULT
Green LED Flashing	for battery back-up mode
Green LED steady ON	for normal line mode operation

Provide on the UPS at least four sets of NO / NC panel-mounted and potential free contact relays rated 1 Amp, 120 VAC, and labeled 1 through 4. Each relay's setting shall be either preset or programmable to activate under any number of conditions. The available settings for the relays shall be:

- ON BATTERY – relay activates when BBS switches to battery power
- LOW BATTERY – relay activates when batteries have reached a certain level of remaining useful capacity while on battery power. This number is adjustable by battery voltage.
- TIMER – relay activates after being on battery power for a given amount of time. This number is adjustable from 0 to 8 hours.
- UPS FAILURE – relay activates in the event of UPS inverter/charger failure to be able to run according to these specifications

C.5.4.1.2 Specifications

Battery String Voltage	48 Vdc

Input Specifications

Nominal Input Voltage	120 VAC, Single Phase
Input Voltage Range	120 VAC +/- 25%
Input Frequency	60 Hz +/- 5%

Output Specifications

Nominal Output Voltage	120 VAC, Single Phase
Power Rating	2000 VA minimum at 25° C (1500 Watts at 74° C)
Output Frequency	60 Hz (+/- 3%)
Voltage Wave Form	Pure Sine Wave, THD < 3.0%
Efficiency (nominal)	Minimum 85% at 100% load

C.5.4.2 Switches

The four switches listed in this section may be in separate units or may be integrated into one or more units.

The range of operating temperatures for all switches shall be -34° C to +74° C.

C.5.4.2.1 Automatic Transfer Switch

Provide an automatic transfer switch to transfer the critical load to the UPS when the utility line fails or is out of tolerance range. The transfer from utility power to battery power shall not interfere with the normal operations of the traffic controller, conflict monitor, or any other peripheral devices within the traffic control system. The automatic transfer switch shall automatically disconnect the battery heater pads when the critical load is operating from the UPS.

Input / Output Specifications

Nominal Voltage	120 VAC, Single Phase
Voltage Range	92 to 135 VAC
Input Frequency	60 Hz +/- 5%
Current	20 A minimum

C.5.4.2.2 Automatic Bypass Switch

Furnish an automatic bypass switch to transfer the critical load to the utility line if there is a fault on the UPS, if there is battery failure, and upon complete battery discharge. The transfer from battery power to utility power shall not interfere with the normal operations of the traffic controller, conflict monitor, or any other peripheral devices within the traffic control system.

Input / Output Specifications

Nominal Voltage	120 VAC, Single Phase
Voltage Range	92 to 135 VAC
Input Frequency	60 Hz +/- 5%
Current	20 A minimum

C.5.4.2.3 Manual Bypass Switch

Furnish a manual bypass switch to provide a mechanical bypass of the UPS without any interruption of power to the intersection.

Input / Output Specifications

Nominal Voltage	120 VAC, Single Phase

Voltage Range	92 to 135 VAC
Input Frequency	60 Hz +/- 5%
Current	20 A minimum

C.5.5.2.4 Generator Transfer Switch

Furnish a generator transfer switch to automatically transfer the input to the UPS from the utility line to a portable AC generator. The switch shall break both line and neutral to the utility, and prevent back-feeding the utility lines.

Input / Output Specifications

Nominal Voltage	120 VAC, Single Phase
Voltage Range	92 to 135 VAC
Input Frequency	60 Hz +/- 5%
Current	20 A minimum

C.5.4.3 Other Equipment

Furnish all equipment, mounting hardware, wire, cable, fasteners, and connectors not otherwise specified to provide a complete and operational BBS, including but not limited to, the cable connections to the batteries.

C.5.4.4 Operation

C.5.4.4.1 Loss / Restoration of Utility Power

The BBS shall transfer the load to battery power when the utility line voltage is outside the High and Low Limits. Set the default high and low limits as 130 & 100 VAC, respectively. Operate in the Buck and Boost modes for partial line voltage correction.

For the low line voltage condition, the BBS shall return to line mode when the utility power has been restored to above 105 VAC for the specified line qualification time. This line qualification time shall be user adjustable from 3 to 30 seconds.

For the high line voltage condition, the BBS shall return to line mode when the utility power has been restored to below 125 VAC for the specified line qualification time. This line qualification time shall be user adjustable from 3 to 30 seconds. In cases where the nominal voltage is between 125 and 130 VAC, the BBS shall return to line mode when the utility power is back to nominal.

The maximum transfer time allowed, from disruption of normal utility line voltage to stabilized inverter line voltage from batteries, shall be 65 milliseconds. The same maximum allowable transfer time shall also apply when switching from inverter line voltage to utility line voltage.

C.5.4.4.2 Battery Operation

In the event of UPS failure, battery failure, or complete battery discharge, the automatic power transfer switch shall revert to the NC (and de-energized) state, where utility power is supplying the cabinet.

Provide a temperature compensated battery charging system. The charging system shall compensate over a wide range of 2.5 to 4 mV / °C / Cell. The charger shall be rated 10 amps at 48 VDC. Batteries shall not be charged when battery temperature exceeds manufacturer's recommendations for the specific batteries being used. The charging system shall fully recharge the batteries within 20 hours.

C.5.4.4.3 Product Compatibility
The BBS shall be compatible with all of the following for full phase operation mode, flash operation mode, or a combination of both full and flash mode operation:

- NEMA TS2 controllers and cabinet components

The complete BBS system including batteries shall fit inside and be compatible with a NEMA type traffic control cabinet of minimum size 26-inch wide X 40-inch high X 13-inch deep and maximum size 32-inch wide X 51-inch high X 18-inch deep, with minimum 3-inches in the front and minimum 1-inch air space on the top, back, and sides of a shelf mounted UPS.

C.5.4.4.4 Electrical Protections
The BBS shall be equipped to prevent a malfunction feedback to the cabinet or from feeding back to the utility service per UL 1778, Section 48 "Back-feed Protection Test". The upstream back-feed voltage from the BBS system shall be less than 1 volt AC.

C.5.4.4.5 Maintenance
The individual BBS parts shall be easily replaced and installed (complete turnkey system with all necessary hardware). The BBS shall not require any special tools for removal or installation.

C.5.4.4.6 Cabinet
Furnish a non-ground mounted, aluminum, outdoor rated, NEMA type 3R traffic control cabinet of minimum size 26-inch wide X 40-inch high X 13-inch deep and maximum size 32-inch wide X 51-inch high X 18-inch deep. The size of the cabinet shall be of sufficient size to provide ample space for housing all equipment specified herein, all equipment furnished with the Uninterruptible Power Supply (UPS) specification, and all batteries. Provide a minimum clear space of 3-inches in the front of a shelf mounted UPS, and minimum 1-inch on both sides, back, and top of the UPS. Slope the top of the cabinet towards the door with a 2-inch drip lip over the door and cabinet front. All sheet metal parts shall be 0.125-inch thick aluminum of type 5052-H32. All seams shall be continuously welded.

Provide an access door on the front of the cabinet with a continuous hinge, door latch assembly with 3-point locking mechanism, #2 Corbin lock, dust cap, and two #2 keys. The door shall have a closed-cell neoprene gasket on all four edges. The continuous hinge shall be heavy gauge aluminum with ¼-inch diameter stainless steel hinge pin. Secure hinge with 1/4-inch X 20 TPI stainless steel carriage bolts and stainless steel nylon locking nuts. The 3-point locking system shall have ½-inch X ¼-inch X length required latch bars and nylon rollers. Door

handle shall be a ¾-inch solid stainless steel inward-turning handle with provisions for padlocking. Provide a steel rod door holder. All hardware shall be stainless steel, unless otherwise specified.

Provide ventilation louvers on the front of the cabinet of sufficient open area to provide air flow for the cabinet fan. Provide a 1/2-inch air filter over all the louver area. Air filter shall slide into a channel and shall be easily removed and replaced.

Provide installed a minimum of three full width and depth, aluminum shelves sufficient to hold all equipment furnished with the Uninterruptible Power Supply specification, and all batteries. All shelves shall have neoprene (or similar material) pads. The shelves shall not be the swing out type. The shelf locations shall be adjustable to within six inches of the top of the cabinet and 12 inches from the bottom of the cabinet. The shelves shall be capable of supporting up to 180 pounds.

C.5.4.4.7 Cabinet Equipment

Provide and install a power distribution terminal block for wire connections, wire size up to #8AWG, from the traffic signal cabinet. Locate the block on one side of the UPS cabinet between one and two feet from the top of the cabinet.

Provide a generator connection outlet installed on one side of the cabinet placement shall not interfere with the installation or use of batteries, UPS, or any switches. The outlet shall be a Marinco 125/250 V 50A turn and pull or equivalent, back wired, surface mounted, twist lock receptacle with a watertight cover and meter seal tabs, or equal.

Ventilate the UPS cabinet by means of an installed 120 VAC, 60HZ, tube axial compact type fan. The fan's free delivery airflow shall be greater than 2.83 cubic meters per minute. The magnetic field of the fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp, or have bearing failure within a 7-year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The fan shall be thermostatically controlled. Thermostat shall be set to manufacturer required settings. The fan shall be fused.

Provide installed and operational heating pads for the batteries. Heating pads shall be 120 volt, 70 watt, polyester, G30200X, P07141A2 D0452, PowerBack pads from Hi-Heat, Industries, Inc., Lewiston, MT, or equal. Provide a temperature sensor bonded to the pad, electrical power cord, and a thermal fuse in each power cord.

Provide a battery voltage balancer, battery cable for each battery, and interface cable of the size compatible with the battery string. Balancer shall be ALPHAGuard Charge Management SC, 48-volt, compatible with the battery string, or equal.

In all controller cabinets and auxiliary cabinets, the AC common, the logic ground, and the chassis ground shall be isolated from each other as detailed by NEMA Standard.

Each 120 VAC circuit that serves an inductive device, such as a fan motor or a mechanical relay, shall have a suppressor to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.

C.5.4.4.8 Batteries

Furnish four batteries for each cabinet as recommended by the UPS supplier. Batteries shall be newly built and fully charged when delivered.

C.5.4.4.9 Equipment Installation

Install the furnished BBS, batteries, and battery equipment according to manufacturer's requirements. Bolt the BBS cabinet firmly to the back or side of the traffic signal control cabinet as required by the design of each signal cabinet. Use a minimum of four bolts of the size recommended by the BBS cabinet manufacturer. Use fender washers on the inside of both cabinets. Use all stainless steel hardware.

Furnish and install from the electrical service to the BBS cabinet and back to the signal cabinet, the larger of 1) #10 AWG, 600 volt, electric wire, 2) the wire size recommended by the UPS manufacturer, 3) the largest size wire used in the signal cabinet for the power connections, or 4) the wire size required by WSEC. Install the wire through a 3/4-inch hole drilled between the cabinets and install two ¾-inch bushings in the hole. Provide grounding, suppressors and lightning arrestors according to the WSEC requirements.

Program and/or enter configuration settings for the equipment and make the equipment fully operational.

C.5.4.4.10 Certification

Provide a written certification with the cabinet delivery that the equipment meets the requirements of the plans and specifications and will fully operate the traffic signal cabinet. The certification shall be on the contractor's company letterhead, shall be addressed to both the City of Wausau and the construction contractor, if there is one, and shall be signed by a company officer authorized to legally obligate the company. Cabinet testing and quality control documents may accompany the certification.

C.5.4.4.11 Documentation

Submit detailed equipment layout drawings and inter-equipment wiring diagrams furnished under this specification to WisDOT and the City of Wausau for approval. Two sets of approved equipment layout drawings and inter-equipment wiring diagrams shall be contained in a heavy-duty clear plastic envelope mounted on the inside of the front door.

For the cabinet and cabinet equipment, at the time of the delivery, furnish two printed sets, and one .pdf file on a CD-ROM or flash drive, of cabinet installation, operations, and maintenance manuals per cabinet and an itemized price list for each type of equipment, and their replacement parts. The manuals shall as a minimum include the following information: a) table of contents, b) operating procedure, c) step-by-step maintenance and trouble-shooting information for the entire assembly, d) part numbers, and e) maintenance

checklists. Also provide two prints and the .dgn or CADD file of the as-built cabinet design and layout.

For the installed equipment, at the time of the delivery, furnish two printed sets, and one .pdf file on a CD-ROM or flash drive, of equipment installation, operations, and maintenance manuals per cabinet and an itemized price list for each type of equipment, their sub-assemblies, and their replacement parts. The manuals shall as a minimum include the following information for each piece of equipment: a) table of contents, b) startup procedure, c) operating procedure, d) step by step maintenance and trouble-shooting information for the entire assembly, e) circuit wiring diagrams, f) pictorial diagrams of parts locations, g) part numbers, h) theory of operation, and i) maintenance checklists. The instructional manuals shall include an itemized parts list. The itemized parts list shall include the manufacturer's name and part numbers for all components (such as IC's, diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross-references to part numbers of other manufacturers who make the same replacement parts. Also provide the .dgn CAD files for the equipment layout drawings and inter-equipment wiring diagrams.

C.5.4.4.12 Warranty

Certify in writing at the time of delivery that the cabinet and all equipment meet the required specification and supply a complete catalog description.

Provide manufacturer’s three year factory-repair warranty for 100% parts and labor on the UPS and all switches. Turn over to the City of Wausau warranties and guarantees that are offered by the manufacturer as a customary trade practice. Name the City of Wausau as the obligee on all manufacturers’ warranties and guarantees.

Batteries shall be warranted by the manufacturer against failure for a minimum of five years. Failure is inability to hold a full charge for an extended period of time, or any defect that does not allow the battery to be functional for the purpose intended in the BBS, as determined by the City of Wausau.

The warranty shall provide for full repair or replacement, as determined by the City of Wausau, of the failed item or cabinet system, including removal and installation, at no cost to the City of Wausau, within 20 calendar days of notification by the City of Wausau.

Work by others in the cabinet to install the modems and autodialers will not void or alter the warranty in any way.

C.6 Documentation

C.6.1 Shop Drawings

For each cabinet order, submit two sets of 22X34-inch detailed printed shop/drawings of the control cabinet, equipment layout drawings, and wiring diagrams of all equipment installed in the controller cabinet to WisDOT and the City of Wausau for review and approval, a minimum of 60 days before the designated cabinet delivery date. Also provide all drawings as .dgn or .dwg files. Revise the files and drawings in accordance with WisDOT or City of Wausau comments and resubmit, both printed and .dgn/.dwg files. If cabinet designs change within an

order with the permission of the City of Wausau, resubmit all drawings and files for review, comment, and approval.

C.6.2 Manuals

At the time of the cabinet delivery, furnish the following:

- One set of installation, operations, and maintenance manuals per cabinet for each type of equipment and their replacement parts. The manuals shall as a minimum include the following information: a) table of contents, b) operating procedure, c) step-by-step maintenance and trouble-shooting information for the entire assembly, d) part numbers, and e) maintenance checklists.
- Two sets of cabinet wiring diagrams per cabinet

C.7 Cabinet Delivery

Deliver the fully wired and equipped cabinets the project site and securely store the materials if not immediately installing the equipment. Contact the construction leader a minimum of one 24-hour business day ahead of the desired delivery date to confirm the site is ready for installation.

C.8 Warranty

The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description.

Turn over to the City of Wausau warranties and guarantees that are offered by the manufacturer as a customary trade practice. Name the City of Wausau as the obligee on all manufacturers' warranties and guarantees.

D Measurement

Furnish and Install Traffic Signal Cabinet (location) will be measured as a lump sum complete unit of work for each intersection.

E Payment

Furnish and Install Traffic Signal Cabinet and Controller (Location) will be paid for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.55	Furnish and Install Traffic Signal Cabinet (STH 52 & 3rd Avenue)	LS
SPV.0105.56	Furnish and Install Traffic Signal Cabinet (STH 52 & 1st Avenue)	LS

Payment is full compensation for furnishing and installing the signal controller and conflict monitor together with cabinet, all required control units, battery backup system, software installation, all additional harnesses for preemption, switches for flashing operation, and fittings as are necessary to assure that the controller will perform the said functions.

63. Furnish and Install Communications Equipment in Traffic Signal Cabinet (STH 52 and 3rd Avenue), Item SPV.0105.57; (STH 52 and 1st Avenue), Item SPV.0105.58.

A Description

This special provision describes furnishing and installing communications equipment in traffic signal cabinets.

B Materials

Furnish one fiber optic termination panel, one Ethernet switch, two SFP modules, one Ethernet jumper cable, and one fiber patch cord at each cabinet. The termination panel shall accommodate the termination of 6 single mode fibers with single mode ST type connectors. The Ethernet switch shall have a minimum of three 10/100/1000BASE-T ports and a minimum of two SFP compatible ports. SFP modules shall be capable of transmitting and receiving transmissions at the 1550 nm wavelength and shall be of an appropriate model for the length of the proposed interconnect system and to ensure compatibility with the Ethernet switch.

Provide 1-meter lengths of ST-LC single mode fiber patch cord (2 fibers per patch cord) from the patch panel to the Ethernet switch. Provide a 1-meter length of Cat-5e cable capable of connecting the Ethernet switch to the traffic signal controller. Provide all patch panel, Ethernet switch, and Interface Panel attachment hardware.

C Construction

Install the patch panel and Ethernet switch on the side of the traffic signal cabinet opposite the electrical service at a location as approved by the engineer. With approval by the engineer, the Ethernet switch may be placed on a shelf near the patch panel. Terminate 6 fibers entering the cabinet in the fiber termination panel. Coil excess fibers and encase in a protective enclosure. Fiber optic cable ends shall be covered securely to protect open ends during installation in raceways.

Install the fiber jumpers and Cat-5e cable and provide a communications link between the traffic signal controllers at the STH 52 intersections with 3rd Avenue and 1st Avenue.

D Measurement

The department will measure Furnish and Install Communications Equipment in Traffic Signal Cabinet (Location) as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.57	Furnish and Install Communications Equipment in Traffic Signal Cabinet (STH 52 and 3rd Avenue)	LS
SPV.0105.58	Furnish and Install Communications Equipment in Traffic Signal Cabinet (STH 52 and 1st Avenue)	LS

Payment is full compensation for furnishing and installing fiber termination panels, terminating fiber, Ethernet switches, and fiber optic cable in conduit; furnishing and installing attachment hardware, fiber jumpers, and Cat-5e cable.

64. Traffic Signal Systems Integrator, Item SPV.0105.61.

A Description

This special provision describes personnel qualifications, contract roles, construction methods, testing and documentation requirements used to perform traffic signal work.

B Materials

Materials shall be according to standard spec 651.2 and as hereinafter provided:

Facilitate all contractor and department-furnished item approvals and orders for scheduling of installation activities.

C Construction

Construction shall be according to standard spec 670.3 with the exception of the term "ITS" being replaced by "Traffic Signal", and as hereinafter provided:

Delete the requirement for the Integrator to be selected from the department's approved field system integrator list. The Traffic Signal Systems Integrator may be on the list but shall also demonstrate qualifications necessary to provide management, assistance and expertise in the areas listed under standard spec 670.3.2.1. The Integrator shall also have experience with assembling components of traffic signal systems to include the following:

- Standard equipment for standard traffic signals
- Emergency vehicle and railroad traffic signal preemption equipment and installation
- Street lighting controls
- Signal Timing

Provide an ongoing role as Integrator beginning with the compilation, review and approval of material submittals; through installation, testing, trouble-shooting and final acceptance of the working traffic signal system and all components. Ensure all equipment is delivered and properly installed within the specified timeframes enforced under this contract.

D Measurement

The department will measure Traffic Signal Systems Integrator as a single lump sum unit for all services, acceptably completed under 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.0105.308	Traffic Signal Systems Integrator	LS

Payment is full compensation for providing specified expertise, assistance, assembly and documentation. The department will pay separately for other traffic signal work under the various bid items in the contract.

65. Salvage and Reinstall Brick Pavers, Item SPV.0165.01.

A Description

This special provision describes salvaging and reinstalling existing brick pavers, and installing any additional brick pavers furnished by the City of Wausau, according to the details shown in the plans, and as hereinafter provided.

B Materials

The City of Wausau will provide additional brick pavers needed to complete the installation after all salvageable brick pavers are used.

Furnish sand bedding that meets the following gradation requirements:

ASTM No. 8 Sand Bedding

Sieve Size	Percent Passing
12.5 mm (1/2 in.)	100
9.5 mm (3/8 in.)	85 to 100
4.75 mm (No. 4)	10 to 30
2.36 mm (No. 8)	0 to 10
1.16 mm (No. 16)	0 to 5

C Construction

Remove existing pavers, handle, store, and reinstall to the locations shown in the plans in a way that prevents damaging the brick pavers. Any additional brick pavers needed to complete the installation will be provided by the City of Wausau. Contact Allen Wesolowski, Wausau City Engineer, (715) 261-6740, with the quantity of pavers needed at least three business days prior to needing the extra brick pavers.

Prior to installing the pavers, moisten, spread and screed the sand bedding material to the depth shown in the plans on top of the concrete sidewalk base. Fill voids left by removed screed rails with sand bedding. Do not allow disturbance of screeded bedding material before paving unit installation begins.

Install the brick paving units in the pattern(s) that matches the existing paver patterns already in place. Fill gaps at the edges of the paved area with cut units. Cut pavers and place along the edges with a masonry saw. Fill the openings and joints with the sand bedding, or approved substitute material.

Remove excess aggregate on the surface by sweeping pavers clean. Compact and seat the pavers into the bedding material using a low-amplitude plate compactor. At least two passes with the plate compactor shall be required. Apply additional sand to the openings and joints as needed, filling them completely. Remove excess sand by sweeping then compact the

pavers. This requires at least two passes with the plate compactor. All pavers within 6 feet of the laying face must be left fully compacted at the completion of each day.

D Measurement
The department will measure Salvage and Reinstall Brick Pavers by the square foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Salvage and Reinstall Brick Pavers	SF

Payment is full compensation for removing the existing brick pavers; for cleaning, transporting and storing; for installing the salvaged brick pavers; for hauling and installing city furnished brick pavers; for furnishing and installing sand bedding; and for disposal of brick pavers not incorporated into the work.

The department will pay separately for the concrete sidewalk base under the Concrete Sidewalk 5-Inch bid item according to standard specification 602.

66. Preparing Topsoil for Lawn Type Turf, Item SPV.0180.01.

A Description
This special provision describes preparing the bed of topsoil or salvaged topsoil, for seeding or placing sod.

B (Vacant)

C Construction
Prepare and finish the subgrade so that rocks, concrete debris, or wood larger than three inches in diameter are not present within 1 foot of the finished surface of the topsoil.

Remove or break down all clods and lumps in the topsoil by using harrows or discs, screening, or other appropriate methods to provide a uniformly textured soil, in which 100 percent of the topsoil passes a one-inch sieve and at least 90 percent passes a No. 10 sieve.

Remove rocks, twigs, clods, and other foreign material that will not break down, and dress the entire surface to present a uniform appearance.

Shape the topsoil so that the horizontal or sloped surface between any two points ten feet apart does not vary by more than one inch. Roll with a turf type roller to a uniform minimum compacted depth of 6 inches.

Shape and compact the topsoil adjacent to pavements, sidewalks and curbs to 1 inch below the top of the abutting surface. Before seeding, correct locations that vary by more than ¼-inch.

D Measurement
The department will measure Preparing Topsoil for Lawn Type Turf, acceptably completed in area by the square yard.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Preparing Topsoil for Lawn Type Turf	SY

Payment is full compensation for preparing the subgrade and topsoil bed for sod or seed as described above.
(NCR 625.01-04302015)

ADDITIONAL SPECIAL PROVISION 1 (ASP 1)
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

TrANS is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of $5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

   Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __2__ *(number)* TrANS Graduate(s) be utilized on this contract.

2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of $5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __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 PROGRAM

1. Description

General

a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.

b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:

   i. Produce accurate and complete quotes.
   ii. Understand highway plans applicable to their work.
   iii. Understand specifications and contract requirements applicable to their work.
   iv. Understand contracting reporting requirements.

c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

   http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

2. Definitions

a. Interpret these terms, used throughout this additional special provision, as follows:

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

3. DBE Percentage Required at Bid Submission

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

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

4. Department's DBE Evaluation Process

a. Documentation Submittal

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

i. Bidder Meets DBE Goal

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

ii. Bidder Does Not Meet DBE Goal

(1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.

(2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:

a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.

b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

5. Department's Criteria for Good Faith Effort

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

a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they

have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

c. Prime Contractors should:

i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.

ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A*. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, ***as required by federal rules***. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.

(1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.

(2) SBN is the preferred outreach tool. https://www.bidx.com/wi/main Other acceptable means include postal mail, email, fax, phone call.

a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.

b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.

(3) Second solicitation should take place within 5 days

a. An email solicitation is highly recommended for this second solicitation

(4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.

(5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.

(6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:

a. Email to all prospective DBE firms in relevant work areas
b. Phone call log to DBE firms who express interest via written response or call.
c. Fax/letter confirmation
d. Copy of the DBE quotes
e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.

   i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, ***a discussion with the DBE firm*** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.

   ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

   iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.

      (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.

      (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.

   i. Provide the following information along with department form DT1202:

      (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.

      (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.

      (3) Photocopies or electronic copies of all written solicitations to DBE's.

      (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.

      (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office
6150 Fond du Lac Ave.
Milwaukee, WI 53218
Phone: 414-438-4583 / 608-266-6961
Fax: 414-438-5392
E-mail: DOTDBESupportServices@dot.wi.gov

6. Bidder's Appeal Process

a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

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

7. Department's Criteria for DBE Participation

Department's DBE List

a. The department maintains a DBE list on the department's website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx

b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

8. Counting DBE Participation

Assessing DBE Work

a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:

b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.

c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.

d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.

e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

9. Commercially Useful Function

a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
b. A DBE is performing a commercially useful function if the following conditions are met:
c. For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
d. For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

10. Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

11. Manufacturers and Suppliers

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

12. DBE Prime

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

13. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces.

14. Mentor Protégé

a. If a DBE performs as a participant in a mentor protégé agreement, the department will credit the portion of the work performed by the DBE protégé firm
b. On every other project that the mentor protégé team identifies itself on.
c. For no more than one half of the total contracted DBE goal on any WisDOT project.

15. DBE Replacement

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf

16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

17. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

18. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: **REQUEST FOR DBE QUOTES**

LET DATE & TIME

DATE: MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at http://roadwaystandards.dot.wi.gov/hcci/

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. ***Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.*** We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at http://roadwaystandards.dot.wi.gov/hcci/

All questions should be directed to:

Project Manager, John Doe,
Phone: (000) 123-4567
Email: Joe@joetheplumber.com
Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ☐ Yes, we will be quoting on the projects and items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have some one contact me at this number

Prime Contractor 's Contact Person		DBE Contractor Contact Person	
Phone:		Phone	
Fax:		Fax	
Email:		Email	

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B
BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE 'training session' Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C
Types of Efforts considered in determining GFE
This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E
Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
    a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
    a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
    b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
    c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
    d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
    a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
    b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
    a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
    b. Easily locate pre-qualified and certified small and disadvantaged businesses
    c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
    d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
    a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
    a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
    b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
    c. Add attachments to a sub-quote
3. Create and send unsolicited sub-quotes to specific contractors:
    a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
    a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
    b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
    c. Add attachments to a sub-quote
    d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
    a. Receive a confirmation that your sub-quote was opened by a prime
    b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
    c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
    a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
    b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

550.5.2 Piling

Add the following as paragraph three effective with the December 2015 letting:

(3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:

Percent of Contract Length Driven	Pay Adjustment
< 85	(85% contract length - driven length) x 20% unit price
> 115	(driven length - 115% contract length) x 5% unit price

643.2.1 General

Replace paragraph two with the following effective with the December 2015 letting:

(2) Use reflective sheeting from the department's approved products list on barricades, drums, and flexible tubular marker posts.

Errata

Make the following corrections to the standard specifications:

641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

(1) Provide commercially fabricated overhead sign supports conforming to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years with a wind importance factor of 1.00. Design to withstand a 3 second gust wind speed of 90 mph. Do not use the methods of appendix C of those AASHTO standards.

(2) Design structures, listed as applicable structure types in the AASHTO standards, to the fatigue category criteria as follows:

1. Structures carrying variable message signs:
   - Category I criteria for structures over all roadway types.
2. Structures carrying type II or III signs:
   - Category I criteria for structures used over highways and free flow ramps.
   - Category II criteria for structures with arms greater than 30 feet used over local roads and city streets.
   - Category III criteria for structures with arms 30 feet or less used over local roads and city streets.

(3) Use the posted speed limit of the roadway beneath the structure for truck-induced gusts.

(4) Submit shop drawings identified by structure number, design computations, and material specifications, to the engineer before erecting sign supports. Provide tightening procedures for mast arm or luminaire arm to pole shaft connections on the shop drawings. Have a professional engineer registered in the state of Wisconsin sign, seal, and date the shop drawings and certify that the design conforms to AASHTO standards and the contract.

(5) Provide steel pole shafts and mast arms zinc coated according to ASTM A123. Provide tapered pole and arm shafts with a minimum taper of 0.14 inch per foot for single-member vertical and single-member horizontal structure components. Provide bolts and other hardware conforming to 641.2.2.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.

B. Costs for conforming to this special provision are incidental to the contract.

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.

2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	County	%	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

   As referred to in this section, the Director means:

   Director
   Office of Federal Contract Compliance Programs
   Ruess Federal Plaza
   310 W. Wisconsin Ave., Suite 1115
   Milwaukee, WI 53202

   The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this “Buy America” provision.

http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

Effective February 2016 letting

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses.* "Use of United States-flag vessels: The contractor agrees—"

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
MARATHON COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2015

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	31.43	17.19	48.62
Carpenter	32.72	16.00	48.72
Future Increase(s): Add $1.42/hr on 6/1/2015; Add $1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	33.86	17.96	51.82
Future Increase(s): Add $1.87 on 6/1/15;Add $1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	29.20	17.42	46.62
Future Increase(s): Add $.75/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	31.50	20.01	51.51
Line Constructor (Electrical)	39.50	16.07	55.57
Painter	21.87	14.37	36.24
Pavement Marking Operator	26.52	20.15	46.67
Piledriver	33.24	16.00	49.24
Future Increase(s): Add $1.44/hr on 6/1/2015; Add $1.44/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Roofer or Waterproofer	18.25	8.05	26.30
Teledata Technician or Installer	22.25	12.24	34.49

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Tuckpointer, Caulker or Cleaner	31.43	17.03	48.46
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.98	46.58
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38
TRUCK DRIVERS			
Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add $1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	24.52	16.99	41.51
Articulated, Euclid, Dumptor, Off Road Material Hauler	25.28	18.31	43.59
Future Increase(s): Add $1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Pavement Marking Vehicle	23.31	17.07	40.38
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	16.99	41.51
LABORERS			
General Laborer	30.13	15.14	45.27
Future Increase(s): Add $1.05/hr eff. 06/01/2015; Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	24.13	14.61	38.74
Landscaper	30.13	15.14	45.27
Future Increase(s): Add $1.05/hr eff. 06/01/2015; Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	26.76	15.14	41.90
Future Increase(s): Add $1.05/hr eff. 06/01/2015; Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under			

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.00	5.39	23.39
Railroad Track Laborer	14.50	3.59	18.09
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).	37.72	21.15	58.87
Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
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.	37.22	21.15	58.37
Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
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	36.72	21.15	57.87

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
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 $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
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 Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: March 11, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	$30.67	15.55
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	30.77	15.55
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	30.82	15.55
Group 4: Line and Grade Specialist	31.02	15.55
Group 5: Blaster and Powderman	30.87	15.55
Group 6: Flagperson; Traffic Control	27.30	15.55

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	25.63	18.96
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	25.63	18.96

CLASSES OF LABORER AND MECHANICS

Bricklayer	32.14	16.56
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker	32.85	21.84
Cement Mason/Concrete Finisher	34.16	16.38
Electrician		See Page 3
Line Construction		
Lineman	42.14	32% + 5.00
Heavy Equipment Operator	40.03	32% + 5.00
Equipment Operator	33.71	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	23.18	32% + 5.00
Painters	23.74	11.72
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 January 8, 2016; Modification #1 dated January 29, 2016; Modification #2 dated February 26, 2016; Modification #3 dated March 11, 2016.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: March 11, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

POWER EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer	$38.27	$21.55
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.	$37.77	$21.55
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator.	$37.27	$21.55
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.	$37.01	$21.55
Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro-portioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.	$36.72	$21.55
Group 6: Off – road material hauler with or without ejector	$30.82	$21.55

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 WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: March 11, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$29.60	26.5%+ 9.15
Area 2:		
Electricians	31.21	18.92
Area 3:		
Electrical contracts under $130,000	28.96	18.26
Electrical contracts over $130,000	31.16	18.34
Area 4:	29.84	29.50% + 9.37
Area 5	28.96	24.85% + 9.70
Area 6	37.02	29%+9.77
Area 8		
Electricians	31.90	24.95% + 10.46
Area 9:		
Electricians	35.75	19.87
Area 10	29.64	20.54
Area 11	33.90	24.47
Area 12	34.98	19.89
Area 13	35.13	23.26
Teledata System Installer		
Area 14		
Installer/Technician	22.50	12.72
Sound & Communications		
Area 15		
Installer	16.47	14.84
Technician	26.00	17.70

Area 1 - CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.

Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES

Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.

Area 5 - ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Area 6 - KENOSHA COUNTY

Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES

Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES

Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Area 11 - DOUGLAS COUNTY

Area 12 - RACINE (except Burlington township) COUNTY

Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES

Area 14 - Statewide.

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

FEBRUARY 1999

NOTICE TO BIDDERS
WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omision of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 Contract Items					
0010	204.0100 Removing Pavement	13,104.000 SY		.		.
0020	204.0105 Removing Pavement Butt Joints	3,243.000 SY		.		.
0030	204.0109.S Removing Concrete Surface Partial Depth	9,050.000 SF		.		.
0040	204.0150 Removing Curb & Gutter	136.000 LF		.		.
0050	204.0155 Removing Concrete Sidewalk	1,794.000 SY		.		.
0060	204.0195 Removing Concrete Bases	30.000 EACH		.		.
0070	204.0210 Removing Manholes	1.000 EACH		.		.
0080	204.0220 Removing Inlets	26.000 EACH		.		.
0090	204.0245 Removing Storm Sewer (size) 01. 12-Inch	284.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	204.0245 Removing Storm Sewer (size) 02. 18-Inch	140.000 LF		.		.
0110	204.0245 Removing Storm Sewer (size) 03. 24-Inch	39.000 LF		.		.
0120	204.0245 Removing Storm Sewer (size) 04. 30-Inch	122.000 LF		.		.
0130	204.0245 Removing Storm Sewer (size) 05. 36-Inch	36.000 LF		.		.
0140	204.0291.S Abandoning Sewer	5.000 CY		.		.
0150	205.0100 Excavation Common	4,282.000 CY		.		.
0160	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 6999-03-79	LUMP	LUMP			.
0170	213.0100 Finishing Roadway (project) 01. 6999-03-79	1.000 EACH		.		.
0180	213.0100 Finishing Roadway (project) 02. 6999-03-80	1.000 EACH		.		.
0190	213.0100 Finishing Roadway (project) 03. 6999-03-81	1.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0200	305.0110 Base Aggregate Dense 3/4-Inch	41.000 TON		.		.
0210	305.0120 Base Aggregate Dense 1 1/4-Inch	2,489.000 TON		.		.
0220	320.0150 Concrete Base 8 1/2-Inch	318.000 SY		.		.
0230	320.0350 Concrete Base HES 8 1/2-Inch	183.000 SY		.		.
0240	415.0080 Concrete Pavement 8-Inch	108.000 SY		.		.
0250	415.0085 Concrete Pavement 8 1/2-Inch	7,891.000 SY		.		.
0260	415.0410 Concrete Pavement Approach Slab	528.000 SY		.		.
0270	415.1085 Concrete Pavement HES 8 1/2-Inch	1,039.000 SY		.		.
0280	416.0160 Concrete Driveway 6-Inch	178.000 SY		.		.
0290	416.0610 Drilled Tie Bars	1,609.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0300	416.0620 Drilled Dowel Bars	701.000 EACH		.		.
0310	440.4410 Incentive IRI Ride	8,933.000 DOL	1.00000		8933.00	
0320	455.0605 Tack Coat	2,055.200 GAL		.		.
0330	460.2000 Incentive Density HMA Pavement	2,990.000 DOL	1.00000		2990.00	
0340	460.4000 HMA Cold Weather Paving	2,134.000 TON		.		.
0350	460.6424 HMA Pavement 4 MT 58-28 H	4,660.000 TON		.		.
0360	465.0105 Asphaltic Surface	23.000 TON		.		.
0370	465.0125 Asphaltic Surface Temporary	20.000 TON		.		.
0380	520.8000 Concrete Collars for Pipe	27.000 EACH		.		.
0390	601.0405 Concrete Curb & Gutter 18-Inch Type A	957.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0400	601.0409 Concrete Curb & Gutter 30-Inch Type A	3,532.000 LF		.		.
0410	601.0411 Concrete Curb & Gutter 30-Inch Type D	135.000 LF		.		.
0420	602.0410 Concrete Sidewalk 5-Inch	16,311.000 SF		.		.
0430	602.0515 Curb Ramp Detectable Warning Field Natural Patina	484.000 SF		.		.
0440	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	328.000 LF		.		.
0450	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	137.000 LF		.		.
0460	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	39.000 LF		.		.
0470	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	69.000 LF		.		.
0480	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	34.000 LF		.		.
0490	611.0420 Reconstructing Manholes	8.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0500	611.0430 Reconstructing Inlets	1.000 EACH		.		.
0510	611.0530 Manhole Covers Type J	11.000 EACH		.		.
0520	611.0600 Inlet Covers Type A	1.000 EACH		.		.
0530	611.0624 Inlet Covers Type H	6.000 EACH		.		.
0540	611.0639 Inlet Covers Type H-S	10.000 EACH		.		.
0550	611.0666 Inlet Covers Type Z	19.000 EACH		.		.
0560	611.1003 Catch Basins 3-FT Diameter	17.000 EACH		.		.
0570	611.1004 Catch Basins 4-FT Diameter	3.000 EACH		.		.
0580	611.1005 Catch Basins 5-FT Diameter	2.000 EACH		.		.
0590	611.1230 Catch Basins 2x3-FT	11.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0600	611.2003 Manholes 3-FT Diameter	1.000 EACH		.		.
0610	611.2004 Manholes 4-FT Diameter	2.000 EACH		.		.
0620	611.2005 Manholes 5-FT Diameter	4.000 EACH		.		.
0630	611.2007 Manholes 7-FT Diameter	1.000 EACH		.		.
0640	611.8110 Adjusting Manhole Covers	29.000 EACH		.		.
0650	611.8115 Adjusting Inlet Covers	10.000 EACH		.		.
0660	611.9710 Salvaged Inlet Covers	1.000 EACH		.		.
0670	619.1000 Mobilization	1.000 EACH		.		.
0680	620.0300 Concrete Median Sloped Nose	99.000 SF		.		.
0690	624.0100 Water	40.000 MGAL		.		.
0700	625.0100 Topsoil	2,702.000 SY		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0710	628.1504 Silt Fence	2,348.000 LF		.		.
0720	628.1520 Silt Fence Maintenance	4,691.000 LF		.		.
0730	628.1905 Mobilizations Erosion Control	8.000 EACH		.		.
0740	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH		.		.
0750	628.2008 Erosion Mat Urban Class I Type B	2,702.000 SY		.		.
0760	628.7005 Inlet Protection Type A	65.000 EACH		.		.
0770	628.7015 Inlet Protection Type C	118.000 EACH		.		.
0780	630.0140 Seeding Mixture No. 40	49.190 LB		.		.
0790	630.0200 Seeding Temporary	66.800 LB		.		.
0800	631.0300 Sod Water	65.900 MGAL		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0810	634.0805 Posts Tubular Steel 2x2-Inch X 5-FT	1.000 EACH		.		.
0820	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	64.000 EACH		.		.
0830	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	27.000 EACH		.		.
0840	637.1220 Signs Type I Reflective SH	168.000 SF		.		.
0850	637.2210 Signs Type II Reflective H	616.130 SF		.		.
0860	637.2215 Signs Type II Reflective H Folding	111.900 SF		.		.
0870	637.2230 Signs Type II Reflective F	386.030 SF		.		.
0880	638.2102 Moving Signs Type II	2.000 EACH		.		.
0890	638.2602 Removing Signs Type II	97.000 EACH		.		.
0900	638.3000 Removing Small Sign Supports	53.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0910	642.5201 Field Office Type C	1.000 EACH		.		.
0920	643.0100 Traffic Control (project) 01. 6999-03-79	1.000 EACH		.		.
0930	643.0100 Traffic Control (project) 02. 6999-03-80	1.000 EACH		.		.
0940	643.0100 Traffic Control (project) 03. 6999-03-81	1.000 EACH		.		.
0950	643.0300 Traffic Control Drums	87,262.000 DAY		.		.
0960	643.0410 Traffic Control Barricades Type II	9,434.000 DAY		.		.
0970	643.0420 Traffic Control Barricades Type III	6,589.000 DAY		.		.
0980	643.0705 Traffic Control Warning Lights Type A	19,228.000 DAY		.		.
0990	643.0715 Traffic Control Warning Lights Type C	5,839.000 DAY		.		.
1000	643.0800 Traffic Control Arrow Boards	2.000 DAY		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1010	643.0900 Traffic Control Signs	17,071.000 DAY		.		.
1020	643.0920 Traffic Control Covering Signs Type II	16.000 EACH		.		.
1030	644.1420.S Temporary Pedestrian Surface Plywood	2,244.000 SF		.		.
1040	644.1601.S Temporary Curb Ramp	51.000 EACH		.		.
1050	646.0106 Pavement Marking Epoxy 4-Inch	12,168.000 LF		.		.
1060	646.0116 Pavement Marking Epoxy 6-Inch	3,982.000 LF		.		.
1070	646.0126 Pavement Marking Epoxy 8-Inch	2,810.000 LF		.		.
1080	646.0690.S Removing Pavement Markings Water Blasting	2,024.000 LF		.		.
1090	647.0110 Pavement Marking Railroad Crossings Epoxy	1.000 EACH		.		.
1100	647.0156 Pavement Marking Arrows Epoxy Type 1	5.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1110	647.0166 Pavement Marking Arrows Epoxy Type 2	12.000 EACH		.		.
1120	647.0176 Pavement Marking Arrows Epoxy Type 3	2.000 EACH		.		.
1130	647.0206 Pavement Marking Arrows Bike Lane Epoxy	26.000 EACH		.		.
1140	647.0306 Pavement Marking Symbols Bike Lane Epoxy	26.000 EACH		.		.
1150	647.0336 Pavement Marking Symbols Bike Shared Lane Epoxy	12.000 EACH		.		.
1160	647.0356 Pavement Marking Words Epoxy	13.000 EACH		.		.
1170	647.0406 Pavement Marking Words Bike Lane Epoxy	3.000 EACH		.		.
1180	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	404.000 LF		.		.
1190	647.0656 Pavement Marking Parking Stall Epoxy	10.000 LF		.		.
1200	647.0716 Pavement Marking Diagonal Epoxy 8-Inch	1,042.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1210	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	2,429.000 LF		.		.
1220	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	1,057.000 LF		.		.
1230	647.0990.S Removing Special Pavement Markings Water Blasting	8.000 EACH		.		.
1240	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	6,932.000 LF		.		.
1250	649.0600 Temporary Pavement Marking Removable Tape 6-Inch	1,130.000 LF		.		.
1260	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	376.000 LF		.		.
1270	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	20.000 LF		.		.
1280	649.1800 Temporary Pavement Marking Arrows Removable Tape	20.000 EACH		.		.
1290	650.4000 Construction Staking Storm Sewer	41.000 EACH		.		.
1300	650.4500 Construction Staking Subgrade	3,428.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1310	650.5000 Construction Staking Base	58.000 LF		.		.
1320	650.5500 Construction Staking Curb Gutter and Curb & Gutter	135.000 LF		.		.
1330	650.7000 Construction Staking Concrete Pavement	2,325.000 LF		.		.
1340	650.8000 Construction Staking Resurfacing Reference	6,163.000 LF		.		.
1350	650.8500 Construction Staking Electrical Installations (project) 01. 6999-03-79	LUMP	LUMP			.
1360	650.8500 Construction Staking Electrical Installations (project) 02. 6999-03-80	LUMP	LUMP			.
1370	650.8500 Construction Staking Electrical Installations (project) 03. 6999-03-81	LUMP	LUMP			.
1380	650.9910 Construction Staking Supplemental Control (project) 01. 6999-03-79	LUMP	LUMP			.
1390	650.9910 Construction Staking Supplemental Control (project) 02. 6999-03-80	LUMP	LUMP			.

CONTRACT: 20160510036
PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81
FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1400	650.9910 Construction Staking Supplemental Control (project) 03. 6999-03-81	LUMP	LUMP			.
1410	650.9920 Construction Staking Slope Stakes	3,428.000 LF		.		.
1420	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	1,734.000 LF		.		.
1430	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	290.000 LF		.		.
1440	652.0240 Conduit Rigid Nonmetallic Schedule 40 4-Inch	222.000 LF		.		.
1450	652.0605 Conduit Special 2-Inch	380.000 LF		.		.
1460	652.0615 Conduit Special 3-Inch	188.000 LF		.		.
1470	652.0625 Conduit Special 4-Inch	865.000 LF		.		.
1480	652.0700.S Install Conduit into Existing Item	4.000 EACH		.		.
1490	652.0800 Conduit Loop Detector	1,404.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1500	652.0900 Loop Detector Slots	505.000 LF		.		.
1510	653.0105 Pull Boxes Steel 12x24-Inch	8.000 EACH		.		.
1520	653.0900 Adjusting Pull Boxes	6.000 EACH		.		.
1530	653.0905 Removing Pull Boxes	9.000 EACH		.		.
1540	654.0101 Concrete Bases Type 1	10.000 EACH		.		.
1550	654.0102 Concrete Bases Type 2	15.000 EACH		.		.
1560	654.0217 Concrete Control Cabinet Bases Type 9 Special	2.000 EACH		.		.
1570	655.0230 Cable Traffic Signal 5-14 AWG	1,424.000 LF		.		.
1580	655.0240 Cable Traffic Signal 7-14 AWG	75.000 LF		.		.
1590	655.0250 Cable Traffic Signal 9-14 AWG	5,160.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1600	655.0260 Cable Traffic Signal 12-14 AWG	1,361.000 LF		.		.
1610	655.0270 Cable Traffic Signal 15-14 AWG	528.000 LF		.		.
1620	655.0305 Cable Type UF 2-12 AWG Grounded	1,596.000 LF		.		.
1630	655.0515 Electrical Wire Traffic Signals 10 AWG	3,107.000 LF		.		.
1640	655.0610 Electrical Wire Lighting 12 AWG	1,476.000 LF		.		.
1650	655.0700 Loop Detector Lead In Cable	7,422.000 LF		.		.
1660	655.0800 Loop Detector Wire	4,232.000 LF		.		.
1670	655.0900 Traffic Signal EVP Detector Cable	358.000 LF		.		.
1680	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.
1690	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.

CONTRACT: 20160510036
PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81
FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1700	657.0100 Pedestal Bases	11.000 EACH		.		.
1710	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	13.000 EACH		.		.
1720	657.0305 Poles Type 2	5.000 EACH		.		.
1730	657.0310 Poles Type 3	6.000 EACH		.		.
1740	657.0315 Poles Type 4	2.000 EACH		.		.
1750	657.0405 Traffic Signal Standards Aluminum 3. 5-FT	1.000 EACH		.		.
1760	657.0420 Traffic Signal Standards Aluminum 13-FT	4.000 EACH		.		.
1770	657.0425 Traffic Signal Standards Aluminum 15-FT	3.000 EACH		.		.
1780	657.0430 Traffic Signal Standards Aluminum 10-FT	4.000 EACH		.		.
1790	657.0585 Trombone Arms 15-FT	4.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1800	657.0590 Trombone Arms 20-FT	3.000 EACH		.		.
1810	657.0595 Trombone Arms 25-FT	5.000 EACH		.		.
1820	657.0704 Luminaire Arms Truss Type 4-Inch Clamp 10-FT	11.000 EACH		.		.
1830	658.0110 Traffic Signal Face 3-12 Inch Vertical	18.000 EACH		.		.
1840	658.0115 Traffic Signal Face 4-12 Inch Vertical	7.000 EACH		.		.
1850	658.0120 Traffic Signal Face 5-12 Inch Vertical	1.000 EACH		.		.
1860	658.0155 Traffic Signal Face 3-12 Inch Horizontal	3.000 EACH		.		.
1870	658.0160 Traffic Signal Face 4-12 Inch Horizontal	1.000 EACH		.		.
1880	658.0165 Traffic Signal Face 5-12 Inch Horizontal	1.000 EACH		.		.
1890	658.0215 Backplates Signal Face 3 Section 12-Inch	21.000 EACH		.		.

CONTRACT: 20160510036
PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81
FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1900	658.0220 Backplates Signal Face 4 Section 12-Inch	7.000 EACH		.		.
1910	658.0225 Backplates Signal Face 5 Section 12-Inch	2.000 EACH		.		.
1920	658.0416 Pedestrian Signal Face 16-Inch	22.000 EACH		.		.
1930	658.0500 Pedestrian Push Buttons	19.000 EACH		.		.
1940	658.0600 Led Modules 12-Inch Red Ball	25.000 EACH		.		.
1950	658.0605 Led Modules 12-Inch Yellow Ball	25.000 EACH		.		.
1960	658.0610 Led Modules 12-Inch Green Ball	23.000 EACH		.		.
1970	658.0615 Led Modules 12-Inch Red Arrow	6.000 EACH		.		.
1980	658.0620 Led Modules 12-Inch Yellow Arrow	14.000 EACH		.		.
1990	658.0625 Led Modules 12-Inch Green Arrow	12.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2000	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	22.000 EACH		.		.
2010	658.5069 Signal Mounting Hardware (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.
2020	658.5069 Signal Mounting Hardware (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.
2030	659.0125 Luminaires Utility HPS 250 Watts	11.000 EACH		.		.
2040	661.0200 Temporary Traffic Signals for Intersections (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.
2050	661.0200 Temporary Traffic Signals for Intersections (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.
2060	673.0105 Communication Vault Type 1	2.000 EACH		.		.
2070	678.0400 Fiber Optic Termination	12.000 EACH		.		.
2080	690.0150 Sawing Asphalt	290.000 LF		.		.
2090	690.0250 Sawing Concrete	10,311.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2100	715.0415 Incentive Strength Concrete Pavement	3,026.000 DOL	1.00000		3026.00	
2110	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	1,200.000 HRS	5.00000		6000.00	
2120	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	600.000 HRS	5.00000		3000.00	
2130	SPV.0030 Special 01. Fertilizer For Lawn Type Turf	2.060 CWT	.		.	
2140	SPV.0060 Special 01. Adjusting Valve Boxes	6.000 EACH	.		.	
2150	SPV.0060 Special 02. Manhole Risers 2-Inch	33.000 EACH	.		.	
2160	SPV.0060 Special 03. Inlet Risers 1-Inch Type H	31.000 EACH	.		.	
2170	SPV.0060 Special 04. Inlet Risers 1-Inch Type Z	20.000 EACH	.		.	
2180	SPV.0060 Special 05. Valve Box Risers 2-Inch	35.000 EACH	.		.	
2190	SPV.0060 Special 06. Inlet Covers Type H-D	1.000 EACH	.		.	

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2200	SPV.0060 Special 07. Repairing Storm Sewer Structures	19.000 EACH		.		.
2210	SPV.0060 Special 08. Bench	2.000 EACH		.		.
2220	SPV.0060 Special 50. Salvage and Reinstall Street Light Assembly	1.000 EACH		.		.
2230	SPV.0060 Special 52. Utility Line Opening (ULO)	6.000 EACH		.		.
2240	SPV.0060 Special 53. Pull Box Non-conductive 24X36-Inch	5.000 EACH		.		.
2250	SPV.0060 Special 54. Pull Box Non-conductive 24X42-Inch	30.000 EACH		.		.
2260	SPV.0060 Special 55. Salvage Warning Flasher Assembly	1.000 EACH		.		.
2270	SPV.0060 Special 56. Concrete Base Type 1 With Spread Footing	1.000 EACH		.		.
2280	SPV.0060 Special 57. Furnish and Install 35-Foot Mast Arm Assembly	1.000 EACH		.		.
2290	SPV.0090 Special 01. Concrete Curb & Gutter 42-Inch Type A	249.000 LF		.		.

CONTRACT: 20160510036
PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81
FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2300	SPV.0090 Special 02. Concrete Curb & Gutter 66-Inch With 6-Inch Curb Type A	2,628.000 LF		.		.
2310	SPV.0090 Special 03. Concrete Curb & Gutter 66-Inch With 7-Inch Curb Type A	413.000 LF		.		.
2320	SPV.0090 Special 04. Diagonal Epoxy 4-Inch	2,725.000 LF		.		.
2330	SPV.0090 Special 05. Clean and Repair Concrete Pavement	22,681.000 LF		.		.
2340	SPV.0090 Special 50. Fiber Optic Cable Outdoor Plant 36-CT	1,462.000 LF		.		.
2350	SPV.0090 Special 51. Fiber Optic Tracer Cable	983.000 LF		.		.
2360	SPV.0090 Special 52. Furnish and Install Equivalent Lighting Conductors	5,800.000 LF		.		.
2370	SPV.0105 Special 01. Concrete Pavement Joint Layout 6999-03-79	LUMP	LUMP			.
2380	SPV.0105 Special 02. Concrete Pavement Joint Layout 6999-03-80	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2390	SPV.0105 Special 03. Concrete Pavement Joint Layout 6999-03-81	LUMP	LUMP			.
2400	SPV.0105 Special 04. Research and Locate Existing Property Monuments 6999-03-79	LUMP	LUMP			.
2410	SPV.0105 Special 05. Research and Locate Existing Property Monuments 6999-03-80	LUMP	LUMP			.
2420	SPV.0105 Special 06. Research and Locate Existing Property Monuments 6999-03-81	LUMP	LUMP			.
2430	SPV.0105 Special 07. Verify and Replace Existing Property Monuments 6999-03-79	LUMP	LUMP			.
2440	SPV.0105 Special 08. Verify and Replace Existing Property Monuments 6999-03-80	LUMP	LUMP			.
2450	SPV.0105 Special 09. Verify and Replace Existing Property Monuments 6999-03-81	LUMP	LUMP			.
2460	SPV.0105 Special 50. Salvage Traffic Signal STH 52 & 3rd Ave	LUMP	LUMP			.
2470	SPV.0105 Special 51. Salvage Traffic Signal STH 52 & 1st Ave	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2480	SPV.0105 Special 52. Salvage and Reinstall Traffic Signal STH 52 & 1st St	LUMP	LUMP			.
2490	SPV.0105 Special 53. Salvage and Reinstall Emergency Vehicle Preemption Equipment STH52 & 3rd	LUMP	LUMP			.
2500	SPV.0105 Special 54. Salvage and Reinstall Emergency Vehicle Preemption Equipment STH52 & 1st	LUMP	LUMP			.
2510	SPV.0105 Special 55. Furnish and Install Traffic Signal Cabinet STH 52 & 3rd Ave	LUMP	LUMP			.
2520	SPV.0105 Special 56. Furnish and Install Traffic Signal Cabinet STH 52 & 1st Ave	LUMP	LUMP			.
2530	SPV.0105 Special 57. Furnish and Install Communications Equipment in Signal Cabinet STH 52 & 3rd	LUMP	LUMP			.
2540	SPV.0105 Special 58. Furnish and Install Communications Equipment in Signal Cabinet STH 52 & 1st	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2550	SPV.0105 Special 61. Traffic Signal Systems Integrator 6999-03-79	LUMP	LUMP			.
2560	SPV.0165 Special 01. Salvage And Reinstall Brick Pavers	216.000 SF		.		.
2570	SPV.0180 Special 01. Preparing Topsoil For Lawn Type Turf	2,702.000 SY		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE