

HIGHWAY WORK PROPOSAL

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

Proposal Number: **002**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Grant	1650-07-71	WISC 2019003	Madison Street, C Lancaster; Cherry Street To City Limits Street	USH 061
Grant	1650-07-81	N/A	Madison Street, C Lancaster; Cherry Street To City Limits Street	USH 061

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

Proposal Guaranty Required: \$100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: December 11, 2018 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time November 22, 2019	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 12%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work: Excavation, Base, Concrete Pavement, HMA Pavement, Asphaltic Surface, Curb and Gutter, Sidewalk, Signs, Pavement Marking, Sanitary Sewer and Water Main, Storm Sewer, Street Lighting, Retaining Walls	For Department Use Only
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

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

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

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

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

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

B Submitting Electronic Bids

B.1 On the Internet

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

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

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

[illegible]

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

Table of Contents

Article	Description	Page #
1.	General.....	4
2.	Scope of Work.....	4
3.	Prosecution and Progress.....	4
4.	Traffic.	5
5.	Holiday Work Restrictions.....	6
6.	Utilities.....	6
7.	Referenced Construction Specifications.....	9
8.	Municipality Acceptance of Sanitary Sewer and Water Main Construction.....	10
9.	Municipality Acceptance of Street Lighting Construction.....	10
10.	Information to Bidders, WPDES General Construction Storm Water Discharge Permit.....	10
11.	Environmental Protection.....	10
12.	Erosion Control.....	10
13.	Coordination with Businesses and Residents.....	10
14.	Sanitary Sewer and Water Main Disposal of Material & Salvage.....	11
15.	Removing Concrete Steps, Item 204.9165.S.01.....	11
16.	Removing Wood Steps, Item 204.9165.S.02.....	11
17.	Colored Crosswalk Paving Operations.....	11
18.	Stamping Colored Concrete, Item 405.1000.....	12
19.	Concrete Pavement Joint Layout, Item 415.5110.S.....	12
20.	Rout and Seal, Item 415.6000.S.....	13
21.	Fence Safety, Item 616.0700.S.....	14
22.	Temporary Pedestrian Surface Plywood, Item 644.1420.S.....	15
23.	Temporary Curb Ramp, Item 644.1601.S.....	15
24.	Temporary Pedestrian Safety Fence, Item 644.1616.S.....	16
25.	Lighting Systems, General.....	17
26.	Electrical Service Meter Breaker Pedestal, Cabinet L1, Item 656.0200.01; Electrical Service Meter Breaker Pedestal, Cabinet L2, Item 656.0200.02.....	18
27.	Optimized Aggregate Gradation Incentive, Item 715.0710.....	18
29.	Crack and Damage Survey, Item 999.1500.S.....	21
30.	Research and Locate Existing Land Parcel Monuments, Item SPV.0060.01.....	22
31.	Verify and Replace Existing Land Parcel Monuments, Item SPV.0060.02.....	22
32.	Removing Electrified Sign, Fireball Lanes, Item SPV.0060.03.....	23
33.	Decorative Oxford Style Sign Post with Breakaway Mount, Item SPV.0060.04.....	24
34.	Round Black Sign Post with Breakaway Mount, Item SPV.0060.05.....	24
35.	Manhole Special 4-FT Diameter, Item SPV.0060.14; Manhole Special 5-FT Diameter, Item SPV.0060.15; Manhole Special 6-FT Diameter, Item SPV.0060.16; Manhole Special 7-FT Diameter, Item SPV.0060.17.....	25
36.	Removing Lighting Units, Item SPV.0060.21.....	25

37.	Removing Existing Lighting Services, Item SPV.0060.22.	26
38.	Removing Existing Lighting Control Cabinets, Item SPV.0060.23.	26
39.	Decorative Arm Mounted Lighting Units 57W, Item SPV.0060.24; Decorative Arm Mounted Lighting Units 83W, Item SPV.0060.25.....	27
40.	Decorative Post Top Lighting Units, Item SPV.0060.26; Decorative Post Top Lighting Units Without Appurtenances, Item SPV.0060.27.	29
41.	Black Standard Lighting Units, Item SPV.0060.28.	32
42.	Decorative Arm Mounted Lighting Unit Concrete Bases, Item SPV.0060.29; Decorative Post Top Lighting Unit Concrete Bases, Item SPV.0060.30; Standard Lighting Unit Concrete Bases, Item SPV.0060.31.	33
43.	Lighting Pull Boxes, Item SPV.0060.32.	34
44.	Fire Hydrant, Item SPV.0060.41.	34
45.	Fire Hydrant with Auxiliary Valve and Valve Box, Item SPV.0060.42.	35
46.	Remove and Replace Fire Hydrant with Auxiliary Valve and Valve Box, Item SPV.0060.43.....	36
47.	Water Main Valve and Valve Box, 8-Inch, Item SPV.0060.44.....	37
48.	Water Service Corporation, Curb Stop, and Box, 1-Inch, Item SPV.0060.47; Water Service Corporation, Curb Stop, and Box, 2-Inch, Item SPV.0060.48.	38
49.	Replace Water Service Curb Stop and Box, Item SPV.0060.49.	39
50.	Replace Water Service Curb Box, Item SPV.0060.50.....	39
51.	Adjust Water Service Curb Box, Item SPV.0060.51.....	40
52.	Replace Upper Section Valve Box, Item SPV.0060.52.	41
53.	Replace Full Valve Box, Item SPV.0060.53.....	41
54.	Connect to Existing Water Main, Item SPV.0060.54.	42
55.	Connect to Existing Water Service, Item SPV.0060.55.	43
56.	Sanitary Sewer Manhole, 4-Foot Diameter, Item SPV.0060.56.	43
57.	Connect to Existing Sanitary Sewer Main or Manhole, Item SPV.0060.57.	46
58.	Connect to Existing Sanitary Sewer Lateral, Item SPV.0060.58.	46
59.	Remove Existing Sanitary Sewer Manhole, Item SPV.0060.59.	47
60.	Remove and Replace Manhole Casting and Adjusting Rings, Item SPV.0060.60.....	47
61.	Reconstruct Existing Sanitary Sewer Manhole, Item SPV.0060.61.....	48
62.	Adjust Existing Manhole Casting, Item SPV.0060.62.	49
63.	Sidewalk Trench Drain, Item SPV.0090.01.....	49
64.	HDPE Duct 2-Inch Schedule 40 In Trench, Item SPV.0090.21; HDPE Duct 2-Inch Schedule 40 Directional Bored, Item SPV.0090.22.	50
65.	Water Main, Ductile Iron (DI), 6-Inch, Item SPV.0090.41; Water Main, Ductile Iron (DI), 8-Inch, Item SPV.0090.42.	50
66.	Water Service, Copper, 1-Inch, Item SPV.0090.43; Water Service, Copper, 2-Inch, Item SPV.0090.44.	58
67.	Water Main Insulation, Item SPV.0090.45.	59
68.	Rock Excavation Water Main, Item SPV.0090.46.	60
69.	Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 8-Inch, Item SPV.0090.47.	60
70.	Sanitary Sewer Lateral, 6-Inch, Item SPV.0090.48.	65
71.	Remove, Store and Reinstall Step Railing, Sta. 21+50 "J" LT Item SPV.0105.01; Remove, Store and Reinstall Step Railing, Sta. 21+30 "J" LT Item SPV.0105.02.	67

72.	Rectangular Rapid Flashing Beacon, Item SPV.0105.03.	67
73.	Lighting Control Cabinet L1, Item SPV.0105.21; Lighting Control Cabinet L2, Item SPV.0105.22.....	69
74.	Discontinue Existing Water Main and Services, Item SPV.0105.41.....	71
75.	Discontinue Existing Sanitary Sewer and Laterals, Item SPV.0105.42.....	72
76.	Wall Modular Block Gravity Landscape (Sta. 38+57 LT), Item SPV.0165.01; Wall Modular Block Gravity Landscape (Sta. 44+40 LT) Item SPV.0165.02.....	72
77.	Excavation, Hauling, and Disposal of Contaminated Soil (Direct Landfill), Item SPV.0195.01; Excavation, Hauling, and Disposal of Contaminated Soil (Bioremediation), Item SPV.0195.02.....	77

STSP'S Revised June 28, 2018

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Projects 1650-07-71 and 1650-07 81, Madison Street, C of Lancaster, Cherry Street to City Limits Street, USH 61, Grant County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2019 Edition, as published by the department, and these special provisions.

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

100-005 (20180628)

2. Scope of Work.

The work under this contract shall consist of grading, storm sewer, base courses, concrete pavement, HMA pavement, concrete sidewalk, decorative and standard lighting, water main, sanitary sewer, pavement making, permanent signing, minor retaining walls and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Provide the Erosion Control Implementation Plan (ECIP) 14 days prior to the Pre-Construction Conference.

Provide the City Public Works Director with a 7 day notice prior to the removal of street lighting and city street signs.

Complete construction operations on Madison Street, Station18+30 – Station23+50, Maple Street, Cherry Street and Jefferson Street to the stage necessary to reopen it to through traffic prior to 12:01 AM June 29, 2019. Do not reopen until completing the following work: Grading, storm sewer, base course, pavement, curb and gutter, and permanent pedestrian sidewalk. Complete all pavement marking and signing, excepting for signing that is in conflict with Stage 2 and Stage 3 detours. Allow local traffic two-way access on Maple Street excepting for a 14 calendar day period within the April 1 to June 29, 2019 time frame.

If the contractor fails to complete the work necessary to reopen Madison Street, Station18+30 – Station23+50, Maple Street, Cherry Street and Jefferson Street (Stage 1A and 1B) to through traffic prior to 12:01 AM June 29, 2019, the department will assess the contractor \$2,070 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, June 29, 2019. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Complete construction operations on Elm Street, Station7+80"E" – Station11+95"E" (Stage 2) to the stage necessary to reopen it to through traffic prior to 12:01 AM July 31, 2019. Do not reopen until completing the following work: Grading, storm sewer, base course, pavement, curb and gutter and permanent sidewalk. Complete all pavement marking and signing, excepting for signing that is in conflict with the Stage 3 detour.

If the contractor fails to complete the work necessary to reopen Elm Street, Station 7+80"E" – Station 11+95"E", to through traffic prior to 12:01 AM July 31, 2019, the department will assess the contractor \$2,070 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Utilize the Dust Control Surface Treatment to minimize a dust nuisance to the public resulting from construction or traffic on base aggregate.

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

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

Do not access or store equipment in the County Courthouse parking lots excepting to complete the work operations required for the lighting system, driveway and sidewalk removals and construction. Contact Robert Keeney, Grant County Board Chair, at (608) 723-2711, seven days prior to accessing the property for the removals and construction operations.

Notify residents and businesses 48 hours in advance if their direct access will be closed.

Prosecution and progress meetings will be held once a week, the contractor's superintendent or appointed representative shall attend and provide a written or linear schedule of the next week's operations that conforms to standard spec 108.4. Subcontractor's representatives for ongoing subcontract work or work beginning within the next two weeks shall also attend the meeting. Agenda items at the meeting will include a review of the contractor's linear schedule, an evaluation of progress, and revisions to the schedule if necessary.

4. Traffic.

Perform this work according to standard spec 643, the Manual of Uniform Traffic Control Devices (MUTCD) and as hereinafter provided.

Construct this project using the three detours as shown in the plans. Maintain local street access as shown in the Traffic Staging Plans. Maintain a minimum of 12 feet of width and a drivable aggregate surface on all roads for local access at all times.

Place PCMS signs one week (7 days) prior to construction operations on USH 61 as shown in the detour plan.

Maintain access to all businesses and private properties at all times. Additional intermediate construction staging or staging gaps, not shown on the plans, may be necessary to maintain continuous access to all properties.

Maintain pedestrian access within areas of existing sidewalk and crosswalks, as shown on the pedestrian access plan, and according to the Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG) along USH 61, Maple Street, Jefferson Street, and Cherry Street by means of existing or new sidewalk or temporary pedestrian surface as shown in the plan details.

The First Congregational Church, 225 Madison Street, has two existing ADA accessible entrances. Provide one ADA accessible entrance to the Church at all times.

Provide temporary crosswalk access as shown in the pedestrian access plan and under bid items Temporary Curb Ramp and Temporary Pedestrian Surface Plywood, according to the ADAAG, which are free from mud, sand, and other construction debris.

If the contractor coordinates the closure of any vehicular and/or pedestrian access to a business or private property with the owner(s), provide written documentation of coordination with the owner(s) to the engineer.

The pedestrian access plan details allow for continuous access to property pedestrian entrance locations (front doors). The contractor may develop an alternate pedestrian plan that includes: soliciting input from property owners the city and the engineer to determine other access arrangements; or a short duration closure that is acceptable to the property owners, the city, and the engineer. The alternate pedestrian access plan shall have the signatures of all property owners that are affected by the alternate plan and the approval of the city prior to submitting to the department for approval. The contractor shall submit, in

writing, the alternate pedestrian access plan, along with the property owner signatures agreeing to the alternate plan, to the department for approval not less than 14 days prior to implementing the alternate pedestrian plan.

No operations shall take place until all vehicular and pedestrian traffic control devices for such work are in the proper location.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 61 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 24, 2019 to 6:00 AM Tuesday, May 28, 2019, for Memorial Day;
- From noon Wednesday, July 3, 2019 to 6:00 AM Monday, July 8, 2019, for Independence Day;
- From noon Friday, August 30, 2019 to 6:00 AM Tuesday, September 3, 2019, for Labor Day;
- From noon Wednesday, November 27, 2019 to 6:00 AM Monday, December 2, 2019, for Thanksgiving.

stp-107-005 (20050502)

6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220. All utilities within the construction limits of Project 1650-07-81 were coordinated under the project 1650-07-71.

There are underground and overhead utility facilities located within the project limits. Coordinate construction activities with a call to Digger's Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

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

Alliant Energies – Electric has existing overhead and underground facilities within the project limits. Overhead lines are typically parallel to the roadway on the west side of the road. The overhead lines also supply power to existing street lighting. Some street lights and their power will be removed immediately prior to construction.

Relocation of poles in conflict with the proposed construction and the installation of new underground facility is expected to be completed prior to construction.

The field contact is Al Mumm, (608) 732-7925, allanmumm@alliantenergy.com

An itemized list of the new installations and the facility removals is shown below:

Station 48+80 – Station 52+36, 29' LT, Install new underground primary under sidewalk (west edge) beginning at Station 48+80 to Station 52+36.

Station 6+50"C" 25' RT, Remove OH Street light cable from Alliant pole to city owned street light at Station 7+10"C" RT. Alliant power pole to remain.

Station 8+28"C" LT and RT, Discontinue existing underground primary in place. Existing primary is 43" deep and appears to be in a concrete duct. Install new underground primary in plastic conduit- 54" deep.

Station 9+62"P" 20' RT, Remove OH Street Light. Power Pole to remain.

Station 38+55 29' RT, Remove pole and street light prior to construction. Remove OH secondary and install OH primary and neutral from pole Station 38+55 RT to new pole at 38+55 76' LT.

Station 41+82 23' LT, TDS pole, Alliant to remove street light and light cable.

Station 43+11 22' LT, This is not an Alliant pole.

Station 44+31 22' LT, Remove pole and remove street light cable from Station 44+31LT to Station 45+31 LT.

Station 45+31 22' LT, TDS owned pole, Alliant to remove contacts.

Station 46+83 22' LT, TDS owned pole, Alliant to remove street light and contacts. Remove OH cable from Station 45+31 to Station 46+83 LT.

Station 48+19 23' LT TDS owned pole, Alliant to remove contacts. Remove OH electric cable from Station 46+83 to Station 48+19 LT.

Station 48+87 23' LT TDS owned pole, Alliant to remove contacts. Remove OH electric cable from Station 48+19 to Station 49+98 LT.

Station 49+98 24' LT, Remove pole and street light prior to construction. Remove OH electric cable from Station 49+98 to Station 51+12 LT.

Station 51+12 24' LT, Remove pole prior to construction. Remove OH electric cable from Station 51+12 to Station 52+35 LT

Station 52+35 25' LT, Remove pole and anchor, new anchors at Station 52+05 LT, and 52+12 25' LT. Hold pole at Station 52+35 LT if necessary for installation of manhole. Remove street light.

Station 53+83 23' LT, Pole to Remain.

Station 55+46 24' LT, Remove street light. Pole to remain.

Station 56+36 24' LT, Pole to remain.

Station 57+85 28' LT, Remove street light. Pole to remain.

ATC – Electric has no facilities in the project area.

The field contact is Tony Marciniak, (262)506-6814, tmarciniak@atcllc.com

City of Lancaster – Sanitary Sewer has existing underground facilities throughout the project. WisDOT Project 1650-07-81 shows all sanitary facilities to be replaced, or adjusted during the WisDOT roadway construction project.

The field contact is John Hauth, (608) 723-7543, johnh@lancasterwisconsin.com

City of Lancaster – Water has existing underground facilities throughout the project. WisDOT Project 1650-07-81 shows all water facilities to be replaced, or adjusted during the WisDOT roadway construction project.

The field contact is John Hauth, (608) 723-7543, johnh@lancasterwisconsin.com

Lancaster Schools - Communication has existing underground fiber optic in the project area, crossing under Madison Street just north of the Elm Street intersection. Relocation of the fiber optic communication line in conflict with the proposed construction is expected to be completed prior to construction.

The field contact is Dan Yoose, (608) 330-0554, yoused@lancastersd.k12.wi.us

An Itemized list of the adjustments is shown below.

Station 31+38 LT and RT, fiber optic crossing under USH 61 (Madison Street) is 3 feet below the existing ground surface. Prior to construction the fiber optic line will be lowered from the west side of USH 61 to the east side of USH 61.

TDS Telecom - Communications has existing overhead and underground, copper and fiber optic, communication facilities throughout the project area. The relocation of facilities in conflict will take place during the construction project, but prior to the planned stage of roadway construction. The contractor shall coordinate with the TDS to locate the construction plan items that may cause conflicts with TDS facilities noted in the itemized lists below. The contractor shall coordinate with TDS of any construction schedule changes, giving TDS a five day notice of conflicts allowed to be relocated by TDS during the same stage as the contractors work stages. Each conflict will require a one day to complete.

The field contact is Ken Klaas (608) 778-5134, kenneth.klaas@tdstelecom.com.

An itemized list of the new installations and the facility removals is shown below:

The TDS conflicts below will be addressed by May 1, 2019, prior to the start of Stage1B.

Station 21+25 "J" – 22+30"J" RT, TDS has discontinued cable and pay station.

Station 22+25"J" – Station 22+35"J" LT and RT Pair of copper and fiber optic in 4-inch conduit are to be adjusted prior to Stage 1B construction. Contractor to use caution for compaction on select fill for TDS facilities.

Station 23+15"J" – Station 24+35"J" LT and RT Pair of copper and fiber optic in 4-inch conduit in 4-inch conduit are to be adjusted prior to Stage 1B construction. Contractor to use caution for compaction on select fill for TDS facilities.

Station 24+12"J" RT Pair of copper and fiber optic in 4-inch conduit are to be adjusted prior to Stage 1B construction.

Station 9+20"H" – Station 11+00"H" LT and RT, 3-inch x 2-inch duct pack to remain in place. No conflict is anticipated.

The TDS conflicts below will be addressed by August 1, 2019, prior to the start of Stage 3 construction.

Station 9+65"P" – Station 10+65"P" RT, Pair of copper and fiber optic in 4-inch conduit are to be adjusted prior to Stage 3 construction.

Station 34+50 – Station 34+50 RT, Pair of copper and fiber optic in 4-inch conduit are to be adjusted prior to Stage 3 construction.

Station 41+60 - Station 46+80 LT, TDS has no attachments to these utility poles. Charter has aerial service along and on the poles. Charter is responsible for the pole removal.

Station 9+50"L" – 10+50"L" – LT and Station 38+55 RT, Pair of copper and fiber optic are to be adjusted prior to Stage 3 construction.

Station 50+82- Station 57+85 – LT, Underground copper cable and pedestal. The pedestal is in conflict with the sidewalk and will be moved 3' from the back of the sidewalk prior to Stage 3 construction.

Station 53+81 – LT, Underground copper cable and pedestal. The pedestal is in conflict with the sidewalk and will be moved 5' from the back of the sidewalk prior to Stage 3 construction.

Station 53+83 – LT, Underground copper cable and pedestal. The pedestal is in conflict with the sidewalk and will be moved 3' from the back of the sidewalk prior to Stage 3 construction.

Station 9+65"A" – LT and RT, Underground copper and fiber optic are to be adjusted prior to Stage 3 construction.

Station 59+64 – RT, Service line to Car Wash will not be in conflict with construction.

Station 59+70 – LT and RT, Underground fiber optic to be adjusted prior to Stage 3 construction.

Station 10+00"K" – 12+00"K" LT and RT, Underground fiber optic to be adjusted prior to Stage 3 construction.

Station 11+55"K" LT, Pedestal will be lowered.

Station 10+00"CL" – 12+35 "CL" LT, Two vacant ducts and existing cables to be adjusted prior to Stage 3 construction. Pedestals height will be adjusted prior to Stage 3 construction.

We Energies – Gas has existing underground facilities the project area. Relocation of gas facilities in conflict with the proposed construction and the installation of new underground facility is expected to be completed prior to construction.

The field contact is Adam Maring, (608) 328-5679.

An itemized list of the new installations and the facility removals is shown below:

Existing 1-1/4" PE service for the Grant County Courthouse at approximately Station 8+54 will likely be in conflict with proposed storm and street lighting. We Energies plans to install a short section of 2" PE gas main between Station 7+85 – 8+48 and install a new 2" PE service at approximately Station 7+90.

Existing 1-1/4" ST main from Station 7+75 – 9+07 will likely be in conflict with the new subgrade. This section of gas main will be discontinued in place.

Existing 1-1/4" ST gas main from Station 32+25 – 34+60 will be replaced with new 2" PE due to age and type of material. The existing 1-1/4" main will be discontinued in place.

A majority of the existing gas facilities from Station 34+60 – 59+84 will likely have conflicts with proposed storm, grading, or proposed street lighting. We Energies plans to replace all facilities in this area, and all existing facilities will be discontinued in place. The new 2" PE main on the west side will run 29'-30'LT except between Station 49+69-Station 50+03 where we will run at 27'LT so Alliant can run new UG Elec closer to the right-of-way.

Any facilities not explicitly identified as being relocated have been deemed to be not in conflict and will remain in place as is. It is expected that contractors will work safely around any facilities left within the work-zone.

Charter Communications – Communication Line has existing overhead and underground cable, fiber optic in duct and pedestals within the project limits. Relocation of facilities in conflict with the proposed construction is expected to be completed prior to construction.

The field contact is Steve Hegge, (608) 576-2613, steve.hegge@charter.com.

Charter will generally relocate facilities along the west side of USH 61. An itemized list of the new installations and the facility removals is shown below:

Station 41+82 - Station 48+80, 24' - 29' LT. Cable in a single 2" duct with various pedestals will be constructed. Charter will remove the existing poles in this section.

Station 42+15, 24' LT to 120' RT Cable in a single 2" duct will be constructed from a pedestal, LT to the existing Alliant pole on the north side of Birch Street

Station 48+80 – Station 52+35, 29' LT. Duct will be installed in a joint trench with Alliant, where it will connect to a new Alliant pole, Station 52+35, 25' LT.

Station 22+18"J", a new duct for fiber optic be installed crossing Jefferson Street.

Wisconsin Independent Network, LLC – Communication has existing underground facilities on Elm Street and Jefferson Street. Minor adjustments will be completed after hard surfaces have been removed. The minor adjustments will be made by shifting the duct horizontally or vertically to eliminate the conflict.

The field contact is Jim Birkenheier, (715) 838-4007, jbirkenheier@wins.net.

Contact Jim Birkenheier three days prior to an onsite visit for coordination of the utility adjustment. WIN, LLC will start work within 10 days of notification by the contractor. The estimated time required for the adjustments is 3-6 days.

An itemized list of the facility adjustments is shown below:

Elm St - WIN existing facility consists of (1) 1.25" HDPE duct with (1) 48ct fiber-optic cable, the running line is shown correctly on the prints. Between Station 7+80"E" to 9+00"E" the facility is approximately 40" deep at approximately 26' RT. Between Station 9+00"E" to 11+50"E" the facility is approximately 53" deep at 23' RT. After the existing curb and gutter, pavement, and sidewalk are removed WIN plans to shift the facility to 32+00' RT and to a depth of 60" from Station 8+50E to 10+00E and then taper in to the existing location at Station 10+50E 24' RT.

Jefferson St - WIN existing facility consists of (2) 1.25" HDPE ducts with (1) 48ct Fiber-optic cable from the northern project extent on Jefferson at approximately 24+35"J" south to the project extent at approximately 19+75"J". WIN also has a fiber cable in the existing Grant County owned 4" duct that crosses Jefferson at roughly 22+27"J". The existing WIN facility is approximately 38"-40" deep and 3' back of curb between 22+25"J" and 25+00"J", WIN will lower this facility in place to a depth of 60" from 24+30"J" to 23+25"J" and also move the facility to 27' RT from 22+28"J" to 23+25"J". The existing facility is located between 4' and 7' back of curb at a depth of approximately 4' from 19+75"J" to 22+28"J". At Station 20+35"J", WIN will lower in place to eliminate conflict with proposed storm sewer excavation.

7. Referenced Construction Specifications.

Construct the work enumerated below conforming to the City of Lancaster Standard Specifications for Utility and Street Construction. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs. Contact John Hauth, City of Lancaster Public Works Director, (608) 723-7543, for a copy.

Conform to the referenced construction specifications for the following:

- Water main construction

- Sanitary main construction

- Street Lighting Construction

stp-105-002 (20130615)

Construct the work enumerated below conforming to the Standard Specifications for Sewer and Water Construction in Wisconsin, current edition. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

Water main construction

Sanitary main construction

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

Both the department and City of Lancaster personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by the City of Lancaster.

stp-105-001 (20140630)

9. Municipality Acceptance of Street Lighting Construction.

Both the department and City of Lancaster personnel will observe and inspect the construction of the street lighting under this contract. Compliance testing shall be performed by the contractor in the presence of City of Lancaster personnel or its designated representatives. Final acceptance of the street lighting construction will be by City of Lancaster personnel.

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

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Craig Fisher at (608) 785-9946. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

11. Environmental Protection.

The Grant County Courthouse 126 W Maple Street, the Lancaster Post Office, 236 W Maple Street and the Lancaster Municipal Building, 206 S Madison Street are individually listed on the National Register of Historic Places. No equipment or materials are allowed to be stored in the areas beyond the temporary easement limits of the properties. Do not enter the properties beyond the defined temporary limited easements (TLE's).

12. Erosion Control.

Add the following to standard spec 107.20 (3):

The ECIP shall discuss how the surface water drainage will be accommodated during construction operations as required by standard spec 205.3.3. Accumulation of surface water within the project grading limits shall be limited to a 24 hour period. The ECIP shall include specific detailed information on what temporary drainage installations will be utilized and an implementation plan to meet this 24 hour requirement. All temporary drainage installations shall be in conformance with all state and federal rules and regulations. If the contractor fails to implement the temporary drainage installations, as described in the ECIP, and surface water drainage is allowed to accumulate within the grading limits for longer than a 24 hour period, the contractor will be responsible for the cost of all work and materials required to correct the resulting saturated subgrade. This shall include but is not limited to any EBS that becomes necessary, as well as any grade stabilization measures such as geogrid and Select Crushed Material utilized to backfill the EBS area. Constructing and removing temporary drainage installations, as specified under standard spec 205.3.3, is incidental to the work under standard spec 205.

13. Coordination with Businesses and Residents.

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

stp-108-060 (20141107)

14. Sanitary Sewer and Water Main Disposal of Material & Salvage.

Surplus or unsuitable excavated material, and materials from sanitary sewer and water main structures to be abandoned shall be disposed of in a legal manner at a site to be provided by the contractor as per section 2.2.11 of the Wisconsin S&W Specifications. The contractor is solely responsible for securing a site and disposal of all materials from this project per all Wisconsin DNR and Federal regulations. Owner has first right to all salvageable items. Deliver all materials chosen to be salvaged to a location designated by the owner. Include all costs associated with disposal of materials and salvage in the bid price for which this work is associated.

15. Removing Concrete Steps, Item 204.9165.S.01.

A Description

This special provision describes removing concrete steps conforming to standard spec 204.

B (Vacant)

C Construction

Conform to standard spec 204.

D Measurement

The department will measure Removing Concrete Steps by the square feet, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9165.S.01	Removing Concrete Steps	SF
stp-204-025 (20150630)		

16. Removing Wood Steps, Item 204.9165.S.02

A Description

This special provision describes removing concrete steps conforming to standard spec 204.

B (Vacant)

C Construction

Conform to standard spec 204.

D Measurement

The department will measure Removing Wood Steps by the square feet, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9165.S.02	Removing Wood Steps	SF
stp-204-025 (20150630)		

17. Colored Crosswalk Paving Operations.

Construct the colored concrete crosswalk pavement according to standard spec 405 and 415, the special provisions, and as hereinafter provided.

The location for the sawed joints at the colored concrete crosswalks will be defined per the plan details and the concrete pavement joint layout item, and approved by the engineer, prior to mainline paving operations. Construct a full depth saw cut at the transverse joint lines limits of the colored crosswalk pavement.

For the colored crosswalks on the mainline of USH 61, pave through the intersections with the mainline concrete paving, and then saw cut at full depth at the predetermined joint lines where the colored crosswalk will be constructed. Saw the concrete pavement prior to constructing the curb and gutter to prevent having to saw into the new curb and gutter. Make a double saw cut to prevent the

abutting concrete pavement from chipping. Remove the new concrete pavement where the crosswalk will be constructed. Install pavement ties, construction joints, and dowel bars as directed by the engineer.

Colored concrete mixes for the entire project are to be consistent. If the contractor chooses to provide mixes with High Early Strength, then all colored concrete will be provided as High Early Strength. Switching from regular colored concrete to High Early Strength colored concrete or High Early Strength colored concrete to regular colored concrete will not be allowed.

Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete pavement. Remove and replace discolored concrete as the engineer directs.

Excess concrete pavement to be wasted by the colored crosswalk paving operation, sawing, pavement ties, construction joints, and removing excess concrete pavement required to construct the colored crosswalk paving areas will be incidental to the pay item Concrete Pavement 8 ½-inch.

18. Stamping Colored Concrete, Item 405.1000.

This special provision describes stamping and coloring concrete WisDOT Red for work constructed under other contract bid items. Conform to standard spec 405 as modified in this special provision.

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

- (1) Provide stamping patterns and create a running bond used brick pattern, approximating a 4"x8" brick size.

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

- (1) Color concrete full-depth conforming to standard spec 405.3.1
- (2) Provide a sample of the running bond used brick pattern to confirm installation method. The sample shall be a minimum size of each 4-foot square. The sample shall not be incorporated into the work and shall remain on-site for comparison until completion of the work.

While concrete is still in a plastic state, apply the selected texturing pattern to the surface of the concrete. Pattern shall be properly tamped into the surface to achieve the desired texture.

Control joints shall be cut at the proper intervals as soon as practical following placement.

Concrete shall be inspected for cracks, deficiencies, and shall be compared to the full-scale sample for appearance and quality. Concrete found to be deficient or of inferior quality shall be removed and replaced at the contractor's expense.

After concrete has been stamped and the sheet has left the surface, seal the colored stamped concrete. Apply per manufacturer's recommendations.

stp-405-100 (20160607)

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

A Description

This special provision describes providing a concrete pavement or concrete base joint layout design for intersections, including the location of the transverse saw cut locations for the colored concrete crosswalks, and marking the location of joints in the field.

B (Vacant)

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
415.5110.S	Concrete Pavement Joint Layout	LS

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

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

20. Rout and Seal, Item 415.6000.S.

A Description

This special provision describes routing, cleaning, drying, and sealing the longitudinal edge of pavement joints in new asphaltic pavement shoulders immediately adjacent to the edge of the concrete mainline pavement.

B Materials

Furnish material that conforms to the requirements of the Specifications for Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements, ASTM Designation: D 6690, Type II, modified to require that the bond strength test be run at -20 degrees F. (The unmodified ASTM D 6690, Type II allows this test to be run at either 0 degrees F or -20 degrees F.)

Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the safe heating temperature. Present the manufacturer's certification stating that the compound meets the requirements of this specification. Before applying the sealant, furnish to the engineer a certificate of compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

Heat the sealing compound to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. If and when using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure heat is not radiated to the pavement surface.

Make rout cuts in a single pass. Two-pass cutting will not be allowed. Use a self-propelled mechanical router capable of routing the bituminous pavement to provide a 1.0:1.0 depth to width ratio of all routed cracks. The router blade or blades shall be of such size and configuration to cut the desired joint reservoir in one pass. No spacers between blades shall be allowed unless the contractor can demonstrate to the engineer that the desired reservoir and rout cut can be obtained with them. Either wet or dry routing will be permitted provided the above conditions are met. Use a pressure distributor for applying sealing material through a hand-operated wand or nozzle according to sealant manufacturer's instructions.

C.2 Methods

Conduct the operation so that the routing, cleaning, and sealing are continuous operations. Traffic shall not be allowed to knead together or damage the routed joints. Rerout, if necessary, routed joints not sealed before traffic is allowed on the pavement when routing and sealing operations resume. Do not perform rout cutting, cleaning, and sealing, within 48 hours of the placement of the shoulder's surface course.

Rout the longitudinal joint to a minimum width of 3/4 inches and a minimum depth of 3/4 inches. Use a power vacuum or equivalent to immediately remove any routing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity, or both. Before sealing, dry the cleaned joints either by air-drying or by using a high capacity torch. Immediately before sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor shall be required to clean the joint again.

If cleaning operations could cause damage to, or interfere with, traffic in adjacent lanes, or both, provide protective screening that is subject to the approval of the engineer to the cleaning operation.

Following cleaning, dry the routed joints and warm them with a hot air lance. Take care not to burn the pavement surface. Under no circumstances shall more than two minutes elapse between the time the hot air lance is used and the sealant is placed.

Provide positive temperature control and mechanical agitation. Do not heat the sealant to more than 20 degrees F below the safe heating temperature. The safe heating temperature can be obtained from the manufacturer's shipping container. Provide a direct connecting pressure type extruding device with nozzles shaped for insertion into the joint. Immediately remove sealant spilled on the surface of the pavement.

Seal the joints when the sealant material is at the pouring temperature recommended by the manufacturer. Fill the joint such that after cooling, the sealant is flush with the adjacent pavement surface. Do not overfill the joint; the engineer may allow a very slight overband. Sand shall not be spread on the sealed joints to allow for opening to traffic. Before opening to traffic, the sealant shall be tack free.

D Measurement

The department will measure Rout and Seal in length by the linear foot, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
415.6000.S	Rout and Seal	LF

Payment is full compensation for rout cutting; cleaning the joint; and rerouting as required under C.2.
stp-415-100 (20140630)

21. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

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

Furnish fence fabric meeting the following requirements.

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

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

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

stp-616-030 (20160607)

22. 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.
- 1/4 inch minimum steel plate or commercially available prefabricated plates with skid resistant surface coating conforming to Americans with Disabilities Act Accessibility Guidelines. If placed in the roadway, must be able to handle a vehicle weight of 88,000 lbs.

C Construction

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

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

Construct conforming to the following:

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

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

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

D Measurement

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

E Payment

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

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

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

stp-644-010 (20150630)

23. Temporary Curb Ramp, Item 644.1601.S.

A Description

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

B Materials

Furnish materials as follows:

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

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

C Construction

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1601.S	Temporary Curb Ramp	EACH

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

stp-644-020 (20150630)

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

A Description

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

B Materials

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

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

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

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

C Construction

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

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

D Measurement

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

E Payment

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

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

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

stp-644-025 (20150630)

25. Lighting Systems, General.

A General

Work shall conform to standard spec 651, 652, 653, 654, 655, 656, 657 and 659 and Standard Detail Drawings ("SDD") as referenced, and these special provisions.

B Splices

Lighting units:

Splices shall accept (4) #14-#2 conductors, be underground/overhead rated and include gel filled hinged splice closure. Utilize NSI Easy-Splice Gel Tap Splice Kit series connectors (ESGTS-2) or equal by T&B or Penn Union. Provide two layers of electrical tape around closure. Split bolts are not allowed.

Pull boxes:

Splices shall accept quantity and size of conductors required at individual pull boxes (which may be of differing configurations), be direct burial and submersible rated. Utilize multi-cable compression connectors with the splice encased in a flexible film plastic mold using multi-mold 2104 electrical insulating permanent resin compound. Split bolts are not allowed. No splices are allowed in pull boxes, unless indicated on the plans.

C Branch Circuit Tagouts

Any circuit which the contractor does not personally tag out at the disconnect shall be considered live and is subject to being activated by another person with no notice to the contractor. Tagouts shall be made with manufactured tags, and shall be endorsed with the date and the name of the contractor. Tagouts shall be cleared at the end of the work day.

D Threaded Fasteners

All threaded fasteners (i.e. anchor bolts, screws, bolts, etc.) shall be liberally coated with an approved anti-seize compound, excess shall be wiped off. Excepting fasteners inside control cabinets, fasteners up to half an inch in diameter shall be stainless steel.

E Circuit Identification

Color coding shall be accomplished by use of cable jackets of the proper color. All tails of all splices shall be coded. Secondary distribution circuits shall be color-coded as shown on the plans; the ground conductor shall be green.

Each accessible location of underground cable in control cabinets, pull boxes and pole/transformer bases shall have a permanent embossed 304 stainless steel tag with 3/16" characters attached in a "flag" manner using a black outdoor rated nylon tie. The tag shall include information identifying the cabinet and conductor circuit number (i.e. L1-1).

F Existing Underground Wiring

Existing underground conduit or duct shown or indicated to be removed, shall be removed and disposed of properly to extent possible, otherwise it shall be abandoned below grade. All conductors within underground conduits, structure conduits or duct shall be removed and disposed of. Work shall be incidental to other related work.

26. Electrical Service Meter Breaker Pedestal, Cabinet L1, Item 656.0200.01; Electrical Service Meter Breaker Pedestal, Cabinet L2, Item 656.0200.02.

Add the following to standard spec 656:

The municipality (City of Lancaster) will apply for utility service and will pay for all required utility extension fees.

Provide circuit breaker as indicated on plans.

The pedestal shall be professionally painted to match the color of the lighting control cabinet. Painting is incidental to this item.

This modifies a standard item.

27. Optimized Aggregate Gradation Incentive, Item 715.0710.

Description

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

Optimized Aggregate Gradation

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

Proportions for each aggregate fraction conforming to table 1.

Individual gradations for each aggregate fraction.

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

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

TABLE 1 TARANTULA CURVE GRADATION BAND

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

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

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

TABLE 2 JMF WORKING RANGE

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

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

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

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

The department will take independent QV samples using the same sampling method the contractor uses for QC sampling. QV samples may be taken by the contractor's QC personnel if witnessed by the department's QV personnel. The department will split each QV sample and retain half for all dispute resolutions. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

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

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

TABLE 3 ALLOWABLE JMF ADJUSTMENTS

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

Dispute Resolution

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

Sublot and Lot Size

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

Optimized Concrete Mixtures

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

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

Measurement

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

Payment

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

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

28. Flexural Strength for Concrete Mix Design.

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

Add the following to standard spec table 701-2:

TEST	TEST STANDARD
Flexural Strength of Concrete	AASHTO T97

Replace standard spec 715.2.3.1(1) with the following:

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

stp-715-010 (20170615)

29. Crack and Damage Survey, Item 999.1500.S.

A Description

This special provision describes conducting a crack and damage survey of the residences and business located at all properties with existing concrete sidewalk or other concrete slabs or steps, and steps made of other materials, abutting the work area.

This Crack and Damage Survey shall consist of two parts. The first part, performed before construction activities, shall include a visual inspection, digital images, and a written report describing the existing defects in the building(s) being inspected. Include inspections and digital images of all property entrance steps adjacent to the project work area. The second part, performed after the construction activities, shall also include a visual inspection, digital images, and written report describing any change in the building's condition.

B (Vacant)

C Construction

Before any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Electronically submit a written report with the inspector's name, date of inspection, descriptions and locations of defects, and digital images. The intent of the written report and digital images is to procure a record of the general physical condition of the building's exterior walls, foundation and steps.

Use a digital camera capable of producing sharp, grain free, high-contrast colored digital images with good shadow details. Label each digital image with the following information:

ID: _____
Building Location: _____
View looking: _____
Date: _____
Photographer: _____

Before the start of any construction activities related to this survey, submit a copy of the written report and digital images to the engineer electronically.

After the construction activities are complete, conduct another survey in the same manner, take digital images, and submit another written report to the engineer electronically.

Instead of digital images, a digital video camera capable of producing sharp, high contrast, colored digital video with good shadow detail may be used to perform this work.

D Measurement

The department will measure Crack and Damage Survey as single complete 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
999.1500.S	Crack and Damage Survey	LS

Payment is full compensation for providing the before and after written reports, and for photographs or video.

30. Research and Locate Existing Land Parcel Monuments, Item SPV.0060.01.

A Description

This special provision describes researching and locating existing land parcel or boundary monuments located in permanent easements, temporary easements or construction permit areas, which may be lost or disturbed by construction operations.

This provision does not relinquish the contractor's responsibility of standard spec 107.11.

B (Vacant)

C Construction

Perform work by, or under the direction of, a professional land surveyor licensed in the State of Wisconsin.

Prior to construction, research, locate and document monuments located in permanent easements, temporary easements and construction permit areas. Establish coordinate ties to the monuments accurate to current minimum state survey standards.

Prepare a monument location map showing the type of monuments found and their coordinates. The transportation project plat (TPP) is acceptable as a base map for the monument location map. Provide a copy of the monument location map to the engineer and region right-of-way plat coordinator.

Verify and reset monument locations after construction is complete under the item titled "Verify and Replace Existing Land Parcel Monuments."

D Measurement

The department will measure Research and Locate Existing Land Parcel Monuments as each individual monument, 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	Research and Locate Existing Land Parcel Monuments	EACH

Payment is full compensation for furnishing all research, field survey, locating, and data recording necessary to locate and establish coordinates for existing monuments within the construction limits prior to construction; furnishing a professional land surveyor; preparing, annotating and delivering the monument location map.

31. Verify and Replace Existing Land Parcel Monuments, Item SPV.0060.02.

A Description

This special provision describes verifying the final location of, and replacing existing land parcel or boundary monuments, previously located under the item "Research and Locate Existing Land Parcel Monuments" that are lost or disturbed by construction operations. This provision does not relinquish the contractor's responsibility of standard spec 107.11.

B Materials

Provide minimum sized replacement monuments as follows:

- Locations outside of pavement areas:
 - 1-inch inside diameter by 24-inch long iron pipe
 - ¾-inch diameter by 24-inch long rod or rebar
- Locations in asphalt pavement areas:
 - Survey spike
 - Mag nail

· Locations in concrete pavement areas:

- Drilled hole
- Chiseled mark

C Construction

Perform work by, or under the direction of, a professional land surveyor licensed in the State of Wisconsin.

After construction is completed, verify the location of all monuments previously located with the item "Research and Locate Existing Land Parcel Monuments". Replace any monuments that were disturbed or destroyed to current minimum state survey standards.

Prepare a monument location map showing the type of monuments originally found, the type of replacement monuments used to replace the disturbed or destroyed monuments, and monument coordinates. The transportation project plat (TPP) is acceptable as a base map for the monument location map. Create the location map with a PDF editing tool such as Adobe or Bluebeam. The monument location map shall explicitly state that the replaced monuments are not being certified as actual land parcel or boundary monuments, only that evidence of monuments were found and replaced. Attach a cover letter to the location map that contains a brief synopsis of the work completed. The cover letter shall be signed, stamped, and dated by a professional land surveyor. Provide a copy of the monument location map and cover letter to the engineer, the county surveyor, and the region plat coordinator.

D Measurement

The department will measure Verify and Replace Existing Land Parcel Monuments as each individual monument, 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	Verify and Replace Existing Land Parcel Monuments	EACH

Payment is full compensation for furnishing all survey work necessary to verify the location of all monuments previously located under the item "Research and Locate Existing Land Parcel Monuments"; replacing monuments that were disturbed or destroyed from their original location; furnishing monuments or other necessary tools; furnishing a professional land surveyor; preparing, annotating and delivering the monument location map and cover letter.

32. Removing Electrified Sign, Fireball Lanes, Item SPV.0060.03.

A Description

This special provision describes removing commercial signs according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C Construction

Notify the property owner two weeks before the commercial sign is removed. Sign removal shall be reviewed and approved by the engineer before removal work begins. Coordinate with the property owner and electric utility to disconnect power to the commercial sign being removed. Remove the conduit from the existing sign to the easement line and place a temporary marker at the end of the remaining conduit. Remove the wire from the building to the removed sign. Sign poles, sign assemblies, and wiring shall become property of the contractor. Remove all removed items from the project site. The contractor is responsible for the legal hauling and disposal of the removed items.

D Measurement

The department will measure Removing Commercial Sign as each individual sign, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Removing Electrified Sign, Fireball Lanes	EACH

Payment is full compensation for disconnecting power, removing sign poles, sign assemblies, conduit, and wiring, hauling and disposal of items.

33. Decorative Oxford Style Sign Post with Breakaway Mount, Item SPV.0060.04.

A Description

This special provision describes furnishing and installing decorative sign posts, complete with installation of breakaway mount in concrete or soil and appurtenances. The sign posts will be based upon the details in the plan and as described herein.

B Materials

(1) Furnish and deliver Decorative Oxford Style Sign Posts conforming to the details as shown on the plans and as follows:

- 1) Breakaway Mount for installation in concrete or soil.
- 2) Black, 3-inch round steel post, 14 Gauge.
- 3) 27-inch cast aluminum post base.
- 4) Spear Finial.
- 5) Dogwood Sign Arm Brackets (36-inch).
- 6) Double-Sided Sign Blades (White on Green).
- 7) U-Bolt Clamps to attach stop sign.
- 8) Traffic Sign Backer for stop sign.

C Construction

Conform to standard spec 634.3.

D Measurement

The department will measure Decorative Oxford Style Sign Post as each individual post assembly, including each section and anchor, 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.0060.04	Decorative Oxford Style Sign Post with Breakaway Mount	EACH

Payment is full compensation for providing, hauling, and placing the posts; treating cut post ends; and providing hardware and anchors. The department will not pay for replacing damaged posts or upper tube cut-offs.

34. Round Black Sign Post with Breakaway Mount, Item SPV.0060.05.

A Description

This special provision describes furnishing and installing round black sign posts, complete with installation of breakaway mount in concrete or soil and appurtenances. The sign posts will be based upon the details in the Plan and as described herein.

B Materials

(1) Furnish and deliver round black sign posts conforming to the details as shown on the plans and as follows:

- 1) Breakaway Mount for installation in concrete or soil.
- 2) Black, 3-inch round steel post, 14 Gauge.
- 3) Spear Finial.

C Construction

Conform to standard spec 634.3.

D Measurement

The department will measure Round Black Sign Post with Breakaway Mount as each individual post assembly, including each section and anchor, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Round Black Sign Post with Breakaway Mount	EACH

Payment is full compensation for providing, hauling, and placing the posts; treating cut post ends; and providing hardware and anchors. The department will not pay for replacing damaged posts or upper tube cut-offs.

- 35. Manhole Special 4-FT Diameter, Item SPV.0060.14;
Manhole Special 5-FT Diameter, Item SPV.0060.15;
Manhole Special 6-FT Diameter, Item SPV.0060.16;
Manhole Special 7-FT Diameter, Item SPV.0060.17.**

A Description

The work under these items consists of providing and constructing manholes where the rise over pipe, is less than six-inches at locations as shown in the plans, according to the applicable provisions of standard spec 611, and as hereinafter provided. This work includes providing cast-in-place or precast manholes as required to ensure the final product meets reinforcement and material requirements at the rise over pipe sections. The Manhole Special, X-FT Diameter, if precast, may have limited strength at the rise over pipe and will require special consideration during delivery and installation.

B Materials

Manhole Special X-FT Diameter, provide precast or cast in place manholes according to the plans. Provide drawings stamped by a professional engineer for steel reinforcing for both cast-in-place and precast manholes.

C Construction

Manhole Special X-FT Diameter, shall be installed according to standard spec 611.3. If providing a precast manhole, extreme care must be exercised in the delivery and installation of the manhole to uphold the integrity of the structure at the rise over pipe.

D Measurement

The department will measure Manhole Special X-FT Diameter by each individual manhole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Manhole Special 4-FT Diameter	EACH
SPV.0060.15	Manhole Special 5-FT Diameter	EACH
SPV.0060.16	Manhole Special 6-FT Diameter	EACH
SPV.0060.17	Manhole Special 7-FT Diameter	EACH

Payment is full compensation for furnishing materials, including precast or cast-in-place manhole structure, storm sewer connections, steps, and other fittings, for excavating, backfilling and disposing of surplus material, and for cleaning, excavation and backfilling, bracing, concrete forms, concrete placement, and backfilling.

- 36. Removing Lighting Units, Item SPV.0060.21.**

A Description

The work under this item consists of removing lighting poles, mast arms, luminaires, transformer bases, cabling and appurtenances as shown in the plans; splicing through the circuit as required at the given site.

Work includes removal of signals, flood lights and associated wiring on lighting units.

Removal of concrete bases for anchor base type poles will be paid under a separate pay item.

B (Vacant)

C Construction

All removed decorative and standard lighting units are to be taken to the City Public Works building at 9760 Old County K. Contact John Hauth, City of Lancaster Public Works, at (608) 723-7543 prior to removing lighting units.

Remove associated underground conductors feeding lighting units being removed.

D Measurement

The department will measure Removing Lighting Units, completed according to the contract accepted, as each individual unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.21	Removing Lighting Units	EACH

Payment is full compensation for removing, transporting and/or disposing of the pole, mast arms, banners, banner arms, trombone arms, concrete ballast, traffic signals, transformer bases and luminaires; for removing related underground or above ground cable, and for splicing through the underground circuit.

37. Removing Existing Lighting Services, Item SPV.0060.22.

A Description

The work under this item consists of removing existing lighting services, disconnect switches and associated conductors/conduit on utility poles as indicated on the plans.

B (Vacant)

C Construction

Dispose of materials in appropriate manner; recycle materials where possible.

Coordinate disconnection of service with utility.

D Measurement

The department will measure Removing Existing Lighting Services, completed according to the contract accepted, as each individual unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Removing Existing Lighting Services	EACH

Payment is full compensation for removing and disposing of the electrical components and associated conduits/conductors; for removing related underground cable, and for splicing through the underground circuits.

38. Removing Existing Lighting Control Cabinets, Item SPV.0060.23.

A Description

The work under this item consists of removing lighting control cabinets and associated metering equipment.

B (Vacant)

C Construction

Dispose of materials in appropriate manner; recycle materials where possible.

Coordinate disconnection of service with utility.

D Measurement

The department will measure Removing Lighting Control Cabinets, completed according to the contract accepted, as each individual unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.23	Removing Existing Lighting Control Cabinets	EACH

Payment is full compensation for removing and disposing of the cabinet, electrical components, concrete base, and associated conduits/conductors; for removing related underground cable, and for splicing through the underground circuits.

39. **Decorative Arm Mounted Lighting Units 57W, Item SPV.0060.24; Decorative Arm Mounted Lighting Units 83W, Item SPV.0060.25.**

A Description

This special provision describes furnishing and installing a decorative lighting unit complete with a LED luminaire, fitter, decorative style luminaire arm, appurtenances, and an integral locking track style pole shaft. The lighting unit will be based upon the details in the Plan and as described herein.

Concrete base shall be paid under a separate pay item.

B Materials

B.1 Poles

The pole shall conform to the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals for a basic wind speed as specified supporting luminaires and other accessories.

The extruded pole shaft shall be equipped with an integral four-sided dovetail locking track system. The exterior of the track profile shall accommodate modular accessory attachments which can be moved to different locations on the pole or changed after initial installation. The interior of the track lock profile shall allow for five independent and separate wiring raceways for initial assembly and post installation wiring flexibility.

The shaft shall be constructed of extruded tube of 6061-T6 aluminum according to requirements of ASTM B221-02. The pole shall be of sufficient nominal thickness to meet the design requirements without use of internal reinforcing sleeve. No longitudinal shaft welds shall be allowed. The pole shall be equipped with a 3-inch outside diameter by 5-inch tall pole-top tenon.

B.2 Structural Decorative Base

The base shall be a one-piece cast decorative structural base of aluminum alloy 356 per ASTM B26 or B108. The base shall be joined to the shaft by means of a complete circumferential weld. The base shall have a cast aluminum access door fastened to the base with tamper resistant screws. The base shall have provisions for grounding by the use of a lug (with drilled and tapped hole) cast to the inside of the structural base opposite to and accessible through the hand hole door.

Welding shall be done by inert gas shielded metal arc method with consumable electrode. Aluminum alloy 4103 electrode shall be used. Welding shall be according to the American Welding Society AWS specification AWS Specification D1.2, structural welding code- Aluminum.

All nuts, bolts, and washers used in the pole assembly shall be AISI type 300 series stainless steel per ASTM A193 class 1 grade B8 except for anchorage hardware.

Construct poles of materials having sufficient rigidity so that with all material installed and in place as the plans show, the centerline of the shaft appears vertical. If pole vibration is probable, it is the manufacturer's responsibility to include dampeners where necessary.

Provide a grounding lug complete with mounting hardware as required inside the pole. Provide access to the grounding lug from the hand hole. Mount the grounding lug by welding it directly opposite the hand hole on the inside wall of the pole.

B.3 Luminaire Arm

The decorative luminaire arm shall be all aluminum, one-piece construction as detailed in plan set. It shall consist of a cast decorative post mounting with welded tube aluminum arm, an end piece for mounting and leveling the luminaire and a single decorative support strap with clamping bracket. All welding shall be per ANSI/AWS D1.2-90 and all welders shall be certified per ANSI/AWS D1.2-90 Section S.

The cast pieces shall be heavy wall, copper free and produced from ASTM 356.1 ingot per ASTM B179-95a or ASTM B26-95. The tube shall be Schedule 40 aluminum. All hardware shall be stainless steel.

The luminaire arm shall support a single luminaire as detailed in Plan. The arm shall be nominal 48" in length and accommodate a 3-inch outside diameter by 5-inch tall pole-top tenon.

B.4 Slipfitter

The slipfitter shall mate the pendant mount luminaire with Quick Lock Stem to a horizontal luminaire arm, and be constructed of heavy wall cast aluminum. The slipfitter shall provide for leveling the assembly by means of two captive hidden U-Bolts and leveling nuts. Provide ± 5 degree adjustment. A removable top cover with finial shall provide access for wiring. All mounting and locking hardware shall be stainless steel.

All components shall be alloy #356 copper free aluminum.

B.5 Teardrop Luminaires

Luminaire shall be the teardrop style as detailed in Plan. Nominal overall dimensions shall be 17" W x 34" H. Luminaire shall be provided in 57 watt and 83 watt LED configuration and operate at specified voltage.

The refractor shall be thermal resistant molded borosilicate prismatic glass cradled in a hinged cast aluminum door frame with single latch and shall have a maximum depth of 14".

The teardrop shaped refractor shall be combined with an internal COB LED's encased in a robust glass lens. The two lenses shall comprise the optical system which shall provide IES Type III Asymmetric distribution.

LED's are to be Chip-On-Board design, 4000K CCT. L70 lumen maintenance factor shall exceed 100,000hrs.

Nominal 57 watt unit shall utilize nominal 7,449 initial lumen LED output, 120-277V input voltage. BUG rating of B1-U3-G3.

Nominal 83 watt unit shall utilize nominal 10,306 initial lumen LED output, 120-277V input voltage. BUG rating of B2-U3-G3.

Plastic or non-prismatic teardrop luminaires shall be deemed unacceptable. The complete assembly shall be rated IP65 and UL\CSA Listed for Wet Locations at 40 degree C.

A unitized electrical module equipped with the LED drivers and surge protection shall be accessible via a separate chamber and be capable of being removed without entering or disturbing the optical chamber. Surge Protection shall meet ANSI 136.2 specified 10kV\5kA rating and be UL1449 listed.

An additional separate wiring chamber shall be provided complete with a three station terminal block and plug assembly connection to the removable electrical module. The wiring chamber casting shall have an integral Quick Lock Stem casting designed to provide watertight and mechanical attachment to the horizontal arm slipfitter.

All cast housings and hinged doorframe components shall be copper free aluminum. All other hardware shall be stainless steel.

All electrical components shall have a nationally published 5-year manufacturer's warranty.

B.6 Appurtenances

The festoon receptacle shall consist of a duplex 20 amp, 125 volt commercial grade receptacle with a 2-3/8"D x 3-3/8"W x 5-3/4"H cast aluminum, lockable, UL listed cover that is suitable for wet locations while-in-use.

Banner arms and flagholders shall be as detailed in plans and mount to pole via tracnuts. All components shall be copper free aluminum. Tracnuts shall be constructed of copper free cast aluminum and machined to a dove tail configuration to fit snugly in pole shaft channels. Provide in appropriate finish and threaded for appropriate size bolt.

B.7 Pole Wiring

Conductors from the underground cable network to the luminaire shall be #12 AWG Type USE/RHW (XLP) individual conductors. In each utilized phase conductor in the handhole, there shall be installed a 1-pole secondary inline 600 VAC fuse assembly with #12AWG copper crimp connections at each end, and a fast acting, current limiting type CC fuse.

B.8 General

Furnish shop drawings as specified in standard spec 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the dimensions of all equipment shown in the plans. The City of Lancaster shall have final approval of lighting unit shop drawings.

All threaded equipment mounting hardware shall be stainless steel.

Decorative base, pole shaft and decorative arm to have Class 1 anodized black finish as defined by the Aluminum Association and the American Architectural Manufacturers Association for corrosion protection. All lighting unit components (including decorative base, shaft and decorative arm) shall have a factory finish with a polyester powder coat, semi-gloss black. A minimum coating thickness of 1-1/2 mils shall be maintained. Application of powder must be electrostatically applied by a closed loop coating system featuring automatic spray guns with computer controls to assure mil thickness conformance. The manufacturer shall warrant its factory applied powder coatings against cracking, peeling, or excessive fading due to normal climatic exposure for a period of two years from the date of shipment.

All lighting components shall be fabricated and supplied by the same manufacturer.

C Construction

C.1 General

The lighting unit shall be assembled and installed per the manufacturer's instructions. The contractor shall install unit with proper luminaire orientation and as indicated on the plans.

In-line fuseholder ends shall be insulated with electrical tape.

Pole conductors shall have sufficient length to permit removal of the fuse assembly through the handhole of the pole.

D Measurement

The department will measure the Decorative Arm Mounted Lighting Units as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.24	Decorative Arm Mounted Lighting Units 57W	EACH
SPV.0060.25	Decorative Arm Mounted Lighting Units 83W	EACH

Payment is full compensation for furnishing and delivering all materials, including poles, decorative bases, luminaries, mounting arms, pole wiring, appurtenances and all necessary hardware and fittings.

40. Decorative Post Top Lighting Units, Item SPV.0060.26; Decorative Post Top Lighting Units Without Appurtenances, Item SPV.0060.27.

A Description

This special provision describes furnishing and installing a decorative lighting unit complete with a LED luminaire, appurtenances, and an integral locking track style pole shaft. The lighting unit will be based upon the details in the Plan and as described herein.

Decorative Post Top Lighting Units Without Appurtenances shall not include receptacle, eyebolts and planter arms.

Concrete base shall be paid under a separate pay item.

B Materials

B.1 Poles

The pole shall conform to the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals for a basic wind speed as specified supporting luminaires and other accessories.

The extruded pole shaft shall be equipped with an integral four-sided dovetail locking track system. The exterior of the track profile shall accommodate modular accessory attachments which can be moved to different locations on the pole or changed after initial installation. The interior of the track lock profile shall allow for five independent and separate wiring raceways for initial assembly and post installation wiring flexibility.

The shaft shall be constructed of extruded tube of 6061-T6 aluminum according to requirements of ASTM B221-02. The pole shall be of sufficient nominal thickness to meet the design requirements without use of internal reinforcing sleeve. No longitudinal shaft welds shall be allowed. The pole shall be equipped with a 3-inch outside diameter by 5-inch tall pole-top tenon.

B.2 Structural Decorative Base

The base shall be a one-piece cast decorative structural base of aluminum alloy 356 per ASTM B26 or B108. The base shall be joined to the shaft by means of a complete circumferential weld. The base shall have a cast aluminum access door fastened to the base with tamper resistant screws. The base shall have provisions for grounding by the use of a lug (with drilled and tapped hole) cast to the inside of the structural base opposite to and accessible through the hand hole door.

Welding shall be done by inert gas shielded metal arc method with consumable electrode. Aluminum alloy 4103 electrode shall be used. Welding shall be according to the American Welding Society AWS specification AWS Specification D1.2, structural welding code- Aluminum.

All nuts, bolts, and washers used in the pole assembly shall be AISI type 300 series stainless steel per ASTM A193 class 1 grade B8 except for anchorage hardware.

Construct poles of materials having sufficient rigidity so that with all material installed and in place as the plans show, the centerline of the shaft appears vertical. If pole vibration is probable, it is the manufacturer's responsibility to include dampeners where necessary.

Provide a grounding lug complete with mounting hardware as required inside the pole. Provide access to the grounding lug from the hand hole. Mount the grounding lug by welding it directly opposite the hand hole on the inside wall of the pole.

B.3 Luminaires

Luminaire shall be the post top style as detailed in Plan. Nominal overall dimensions shall be 24" W x 43" H. Luminaire shall be provided in 55 watt LED configuration and operate at specified voltage.

The refractor shall be thermal resistant molded borosilicate prismatic glass cradled in a hinged cast aluminum door frame with single latch and shall have a maximum depth of 10".

The teardrop shaped refractor shall be combined with an internal COB LED's encased in a robust glass lens. The two lenses shall comprise the optical system which shall provide IES Type V symmetric distribution.

LED's are to be Chip-On-Board design, 4000K CCT. L70 lumen maintenance factor shall exceed 100,000hrs.

Nominal 55 watt unit shall utilize nominal 4,258 initial lumen LED output, 120-277V input voltage. BUG rating of B3-U3-G2.

Plastic or non-prismatic teardrop luminaires shall be deemed unacceptable. The complete assembly shall be rated IP65 and ULCSA Listed for Wet Locations at 40 degree C.

A unitized electrical module equipped with the LED drivers and surge protection shall be accessible via a separate chamber and be capable of being removed without entering or disturbing the optical chamber. Surge Protection shall meet ANSI 136.2 specified 10kV\5kA rating and be UL1449 listed.

An additional separate wiring chamber shall be provided complete with a three station terminal block and plug assembly connection to the removable electrical module.

All cast housings and doorframe components shall be copper free aluminum. All other hardware shall be stainless steel.

All electrical components shall have a nationally published 5-year manufacturer's warranty.

B.4 Appurtenances

The festoon receptacle shall consist of a duplex 20 amp, 125 volt commercial grade receptacle with a 2-3/8"D x 3-3/8"W x 5-3/4"H cast aluminum, lockable, UL listed cover that is suitable for wet locations while-in-use.

Banner arms and eyebolts shall be as detailed in plans and mount to pole via tracnuts. Banner arms shall be copper free aluminum. Eyebolts shall be stainless steel. Tracnuts shall be constructed of copper free cast aluminum and machined to a dove tail configuration to fit snugly in pole shaft channels. Provide in appropriate finish and threaded for appropriate size bolt.

B.5 Pole Wiring

Conductors from the underground cable network to the luminaire shall be #12 AWG Type USE/RHW (XLP) individual conductors. In each utilized phase conductor in the handhole, there shall be installed a 1-pole secondary inline 600 VAC fuse assembly with #12AWG copper crimp connections at each end, and a fast acting, current limiting type CC fuse.

B.6 General

Furnish shop drawings as specified in standard spec 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the dimensions of all equipment shown in the plans. The City of Lancaster shall have final approval of lighting unit shop drawings.

All threaded equipment mounting hardware shall be stainless steel.

Decorative base and pole shaft to have Class 1 anodized black finish as defined by the Aluminum Association and the American Architectural Manufacturers Association for corrosion protection. All lighting unit components (including decorative base and shaft) shall have a factory finish with a polyester powder coat, semi-gloss black. A minimum coating thickness of 1-1/2 mils shall be maintained. Application of powder must be electrostatically applied by a closed loop coating system featuring automatic spray guns with computer controls to assure mil thickness conformance. The manufacturer shall warrant its factory applied powder coatings against cracking, peeling, or excessive fading due to normal climatic exposure for a period of two years from the date of shipment.

All lighting components shall be fabricated and supplied by the same manufacturer.

C Construction

C.1 General

The lighting unit shall be assembled and installed per the manufacturer's instructions. The contractor shall install unit with proper luminaire orientation and as indicated on the plans.

In-line fuseholder ends shall be insulated with electrical tape.

Pole conductors shall have sufficient length to permit removal of the fuse assembly through the handhole of the pole.

D Measurement

The department will measure the Decorative Post Top Lighting Units 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.0060.26	Decorative Post Top Lighting Units	EACH
SPV.0060.27	Decorative Post Top Lighting Units Without Appurtenances	EACH

Payment is full compensation for furnishing and delivering all materials, including poles, decorative bases, luminaries, mounting arms, pole wiring, appurtenances and all necessary hardware and fittings.

41. Black Standard Lighting Units, Item SPV.0060.28.

A Description

This special provision describes furnishing and installing pole shafts, mast arms, LED luminaires, nut covers, transformer base, pole wiring/fusing and all miscellaneous hardware required to complete the installation of light poles, according to standard spec 655, 657 and 659, as shown on the plans, and as hereinafter provided.

B Materials

Furnish and deliver lighting units conforming to the details as shown on the plans.

B.1 Poles

Pole design shall conform to AASHTO design and fabrication standards for structural supports for highway signs, luminaires and traffic signals. Use a design life of 25 years. Design to withstand a 3 second gust wind speed of 90mph (145 km/h). The pole shall support twin 15-foot truss-type mast arms and luminaires with a weight of 50lbs and 1.5EPA as well as taking into account the effects of the festoon receptacle and banner according to the details as shown on the plans.

The pole shaft shall be aluminum, one-piece tapered construction.

Each pole shall have a factory installed internal dumb-bell type vibration damper.

The wall thickness of each shaft, alloy number, the shaft length, the manufacturer, and the date, shall all be indicated on a manufacturer's plate attached to each shaft near the base.

All shafts shall have a J-hook at the top of each pole to provide strain relief for the cable.

Any and all fasteners and other attachment hardware used on the pole shaft shall be stainless steel unless otherwise approved.

Nut covers shall be provided to conceal the anchor bolts at the base plate.

The pole shafts, handhole cover and nut covers shall have a Class 1 anodized black finish as defined by the Aluminum Association and the American Architectural Manufacturers Association.

B.2 Mast arm

The aluminum mast arm shall be a clamp on type according to standard spec 657. All fasteners shall be stainless steel.

The mast arm assembly shall have a Class 1 anodized black finish as defined by the Aluminum Association and the American Architectural Manufacturers Association.

B.3 LED luminaire

LED luminaires shall be of a slim, low profile design optimized for minimum wind loading, constructed from rugged extruded aluminum and cast aluminum components. LED drivers are mounted in the aluminum housing which is suitable for wet listed operation (per UL 1598 requirements). Integrated high performance aluminum heat-sink specifically designed for LED applications.

The complete assembly shall be UL Listed for Wet Locations. The luminaires shall be factory finished black (completely including housing and extrusion).

The LED drivers and surge protection shall be accessible via a separate chamber and be capable of being removed without entering or disturbing the optical chamber. Surge Protection shall meet ANSI/IEEE standards with a minimum of 10kV\5kA rating.

Luminaire shall be provided with a three station terminal block.

The LED luminaires shall consist of 4000K, 70CRI (min.), replaceable modular LED modules. L70 lumen maintenance factor shall exceed 100,000hrs.

Luminaires shall have type 3 distribution, between 8,475 and 8,893 initial lumen output, 80W max. energy consumption, dimming driver, 7-pin NEMA twist-lock receptacle with shorting cap and operate on 120-277V input voltage.

The luminaires shall be American Electric #ATB0-30BLEDE70-MVOLT-R3-BK-P7-SH, Philips #RFM-72W32LED4K-G2-R3M-UNIV-RCD7/PH9-BL or Eaton #ARCH-AF24-70-D-U-T3-10MSP-4N7-BK-OA/RA1013.

B.4 Transformer Base

The transformer base shall comply with standard spec 657.

The transformer base shall have a Class 1 anodized black finish as defined by the Aluminum Association and the American Architectural Manufacturers Association and shall have a factory finish with a polyester powder coat, semi-gloss black. A minimum coating thickness of 1-1/2 mils shall be maintained. Application of powder must be electrostatically applied by a closed loop coating system featuring automatic spray guns with computer controls to assure mil thickness conformance. The manufacturer shall warrant its factory applied powder coatings against cracking, peeling, or excessive fading due to normal climatic exposure for a period of two years from the date of shipment.

B.5 Pole Wiring/fusing

Conductors from the underground cable network to the luminaire shall be #12 AWG Type USE/RHW (XLP) individual conductors. In each utilized phase conductor in the handhole, there shall be installed a 1-pole or 2-pole secondary inline 600 VAC fuse assembly with #12AWG copper crimp connections at each end, and a fast acting, current limiting type CC fuse. Conductors shall have sufficient length to permit removal of the fuse assembly through the handhole. Conductors are paid for separately.

C Construction

Furnish and install all incidental items, such as grommets, splices, etc. necessary to make the lighting system complete.

D Measurement

The department will measure Black Standard Lighting Units as each individual unit, completed in place and accepted according to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.28	Black Standard Lighting Units	EACH

Payment is full compensation for furnishing and installing all materials, including pole shafts, nut covers, mast arms, luminaries, transformer base, pole wiring/fusing, all hardware, and fittings necessary to completely install the pole.

42. Decorative Arm Mounted Lighting Unit Concrete Bases, Item SPV.0060.29; Decorative Post Top Lighting Unit Concrete Bases, Item SPV.0060.30; Standard Lighting Unit Concrete Bases, Item SPV.0060.31.

A Description

This work shall consist of construction of lighting unit concrete foundations, including necessary hardware, as shown on the plans, according to the pertinent provisions of standard spec 654 and as hereinafter provided.

B Materials

Materials shall be according to standard spec 654 and as shown on the plans.

C Construction

Materials shall be according to standard spec 654 and as shown on the plans.

Anchor bolts shall be cast into the base as shown on the plans. Bolt circle diameters shall be verified before constructing the bases.

Manufactured elbows shall be furnished and installed in all bases by the contractor, except as noted on the details. Elbows shall be installed to permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted.

D Measurement

The department will measure Lighting Unit Concrete Bases, completed according to the contract, accepted as each individual unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.29	Decorative Arm Mounted Lighting Unit Concrete Bases	EACH
SPV.0060.30	Decorative Post Top Lighting Unit Concrete Bases	EACH
SPV.0060.31	Standard Lighting Unit Concrete Bases	EACH

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

43. Lighting Pull Boxes, Item SPV.0060.32.

A Description

This work shall consist of furnishing and installing electrical pull boxes according to standard spec 653, the plan details, and as herein provided.

B Materials

Lighting pull boxes shall be a stacked rectangular composite enclosure with nominal 17" wide x 30" long and 36" total depth as shown on the plans. The composite boxes shall be UL Listed, constructed of polymer concrete and reinforced by a heavy-weave fiberglass. The pull boxes shall be rated for 15,000 lbs. over a 10" x 10" area at a temperature of -50°F. The box shall be furnished with a cover having a "Lighting" logo, skid resistant surface with a minimum coefficient of friction of .5 and color to match pavers. The cover fasteners shall be stainless steel captive 3/8-inch hex head bolts with stainless steel inserts. The enclosure shall be colored to match the color of the brick pavers.

C Construction

The pull boxes shall be set flush with the grade or pavement and installed on aggregate as indicated on the plans.

D Measurement

The department will measure Lighting Pull Boxes, completed according to the contract accepted, as each individual unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.32	Lighting Pull boxes	EACH

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

44. Fire Hydrant, Item SPV.0060.41.

A Description

This special provision describes the furnishing and installing fire hydrants as shown on the drawings according to the Standard Specifications for Sewer and Water construction in Wisconsin and as hereinafter provided.

B Materials

Provide materials according to Fire Hydrant with Auxiliary Valve and Valve Box of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Construct fire hydrants according to Fire Hydrant with Auxiliary Valve and Valve Box of these special provisions.

Backfill and compact according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Fire Hydrant 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.0060.41	Fire Hydrant	EACH

Payment is full compensation for furnishing and installing fire hydrant and hydrant extensions; for providing certifications; for excavation, clear stone, filter fabric, granular backfill material and backfilling, compaction, disposal of excess material and adjusting to finished grade.

45. Fire Hydrant with Auxiliary Valve and Valve Box, Item SPV.0060.42.

A Description

This special provision describes furnishing and installing fire hydrants, auxiliary valve, and valve box as shown on the drawings according to the Standard Specifications for Sewer and Water construction in Wisconsin and as hereinafter provided.

B Materials

Fire hydrants shall conform to AWWA C502 for Dry-Barrel Fire Hydrants. Hydrants shall be Mueller Centurian Model A-423, Kennedy Guardian K-81D, or Waterous Pacer with 16-inch breakaway flange and 1 1/2-inch pentagon operating nut, or equal. Provide required bury length or barrel extensions to meet the elevations shown on the drawings. Color shall be red.

Hydrants shall have the following features:

Bury Length	Approximately 6 1/2 feet to traffic flange.
Nozzle Size	One 4 1/2-inch and two 2 1/2-inch-diameter openings.
Nozzle Threads	National standard fire hose coupling screw threads.
Drain Port:	Drain port at base of hydrant barrel. Plug drain port when hydrant installed in area where groundwater level may rise above drain port.
Size of Main Valve Opening	5 1/4-inch-diameter minimum. The hydrant lead connection shall be minimum 6-inch-diameter mechanical joint.
Torque Requirements	Hydrant shall comply with AWWA C502 even if greater than 5-foot bury.
Lubrication	Nontoxic and providing proper lubrication for a temperature range of -30° to +120° Fahrenheit.

Hydrants shall have permanent markings identifying the manufacturer by name, initials, insignia, or abbreviations in common usage, and designating the size of the main valve opening and the year of manufacture. Markings shall be so placed as to be readily discernible and legible after hydrants have been installed.

Furnish certification to engineer that the hydrant and all material used in its construction conform to the applicable requirements of AWWA C502 and the supplementary requirements thereto.

Valve and valve box for fire hydrant auxiliary valves shall be provided conforming to Water Main Valve and Valve Box of these special provisions. All auxiliary valves, unless otherwise shown or specified, shall be 6-Inch.

Provide bedding, cover materials, and granular backfill conforming to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Hydrants shall be installed to the bury line elevation shown on the drawings. Provided all fittings or extensions required to provide the hydrant at the bury line elevation.

All joints on fire hydrant leads shall be made using pipe restraint. Approximately 1/2 cubic yard of clear stone shall be placed from the bottom of the trench around the hydrant elbow and up the hydrant barrel as shown in the drawings. Clear stone shall be wrapped completely in filter fabric to prevent the migration of fine materials. Once clear stone is placed, use granular backfill as backfill material.

Furnish all necessary fittings in the fire hydrant lead to install the fire hydrant in a plumb condition at locations shown on the drawings and at the specified depth of bury, including any extensions. The pumped nozzle of all fire hydrants shall be installed with the nozzle pointing toward the street. Engineer reserves the right to alter the location of fire hydrants from that shown on the drawings.

Construction of valve and valve box shall conform to Water Main Valve and Valve Box, (Size) of these special provisions.

Backfill and compact conforming to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Fire Hydrant with Auxiliary Valve and Valve Box by each individual fire hydrant with auxiliary valve and valve box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.42	Fire Hydrant with Auxiliary Valve and Valve Box	EACH

Payment is full compensation for furnishing and installing fire hydrant, auxiliary valve, valve box, and hydrant extensions; for providing certifications; for excavation, clear stone and filter fabric, granular backfill material and backfilling, compaction, disposal of surplus material and adjusting to finished grade.

46. Remove and Replace Fire Hydrant with Auxiliary Valve and Valve Box, Item SPV.0060.43.

A Description

This special provision describes removing the existing fire hydrant, auxiliary valve, and valve box and replacing with a new fire hydrant, auxiliary valve and valve box as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide materials Fire Hydrant with Auxiliary Valve and Valve Box of these special provisions.

Provide water main pipe, fittings, restraint, and bedding and granular backfill material according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Construct fire hydrants according to Fire Hydrant with Auxiliary Valve and Valve Box of these special provisions.

Remove existing fire hydrant, auxiliary valve, valve box, and water main as necessary to replace with a new fire hydrant, new auxiliary valve, and new valve box to the location shown on the drawings. Make all connections and according to Connect to Existing Water Main of these special provisions.

Provide all connections to existing water main and compaction according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

All fire hydrants to be removed shall be salvaged and stockpiled at a convenient area on the project site for pickup by the City of Lancaster. Notify the city when ready for pickup.

D Measurement

The department will measure Remove and Replace Fire Hydrant with Auxiliary Valve and Valve Box as each individual remove and replace fire hydrant with auxiliary valve and valve box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.43	Remove and Replace Fire Hydrant with Auxiliary Valve and Valve Box	EACH

Payment is full compensation for furnishing materials; for providing certifications; for removal of existing fire hydrant, auxiliary valve, valve box, and pipe; for installing new fire hydrant, auxiliary valve, valve box, and pipe; for all connections to existing water main; for excavating, clear stone and filter fabric, granular backfill material and backfilling, and compaction; for salvaging and stockpiling existing fire hydrant, and for notifying the city when salvaged fire hydrants are ready for pickup.

47. Water Main Valve and Valve Box, 8-Inch, Item SPV.0060.44.

A Description

This special provision describes furnishing and installing water main gate valves and valve boxes as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

B.1 Valves

Water main valves shall be right-close resilient wedge gate valves, Mueller A-2370-20 R.S., Waterous Series 500 R.S., Kennedy Model 7571, or equal. Valve body nuts and bolts shall be stainless steel.

Provide resilient wedge gate valves manufactured according to AWWA C509. Valve stem seals shall be O-rings. The compound shall be of Buna-N or NBR rubber and have a durometer hardness of 70 degrees when tested according to ASTM D2240.

Markings shall be cast on the bonnet or body of each valve and shall show the manufacturer's name or mark, the year and location valve casting was made, the size of the valve, and the designation of working water pressure.

Valves shall be suitable for direct burial, be provided with nonrising stems, and be equipped with a standard 2-inch-square operating nut with cast-on directional arrow. Buried valves shall be fusion bonded epoxy coated.

B.2 Valve Box

A valve box shall be provided for fire hydrant auxiliary valves and for valves in the main.

Valve boxes shall be made of cast iron conforming to ASTM A48, Class 20. The castings shall be free from blowholes, porosity, hard spots, shrinkage defects or cracks, or other injurious defects and shall have a normal smooth casting finish. The castings shall be thoroughly coated with a 1 mil minimum thickness bituminous coating. Valve boxes shall be 5 1/4 inches in diameter. Valve boxes shall have a maximum length of 7 feet when extended without extension sections. Extensions shall be provided for deeper mains.

Valve boxes shall consist of a base section, tubular mid and top sections, both with cast threads by which one can be telescoped on the other, extension sections if required and a circular drop cover. Valve boxes shall include a non-tip cover marked "WATER." Metal adjusting or paving rings shall not be used.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

All gate valves and valve boxes shall be constructed at locations shown on the drawings. Connections to the main and other fittings shall be made as specified in Water Main, Ductile Iron (DI), (Size) of these special provisions.

Valve boxes shall be centered and plumb over the wrench nut of the valve with the box cover flush with the finished ground elevation. Solid 4-inch concrete blocks shall be placed under the base of valve boxes so that the bottom of the base is about 2 inches away from contact with the valve bonnet. A gate valve adaptor may be used in lieu of blocks. The valve box shall not transmit shock or stress to the valve.

Backfill and compact according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Water Main Valve and Valve Box, 8-Inch as each individual water main valve and valve box, 8-inch, 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.0060.44	Water Main Valve and Valve Box, 8-Inch	EACH

Payment is full compensation for furnishing all materials, including gate valve, valve box, valve support, water main connections, gate valve adaptor, fittings; for all excavation, granular backfill material and backfilling, compaction, disposal of surplus material, cleanup, and restoring site of work. 6-Inch auxiliary valves and valve boxes for fire hydrants will be paid for as specified in Fire Hydrant with Auxiliary Valve and Valve Box.

48. **Water Service Corporation, Curb Stop, and Box, 1-Inch, Item SPV.0060.47; Water Service Corporation, Curb Stop, and Box, 2-Inch, Item SPV.0060.48.**

A Description

This special provision describes furnishing and installing new water services corporations, curb stops and boxes as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

B.1 Corporation Stops, Curb Stops and Tapping Saddles

Corporation stops from 1/2 inch to 1 1/2 inches and curb stops from 1/2 inch to 2 inches shall be copper alloy and shall be manufactured according to AWWA C800-14 and ASTM B62. The maximum lead content shall be 0.25%. Manufacturer shall be Mueller-Model H-15008, AY McDonald-Model 74701BQ, or equal, minimum 150 psi working pressure.

With PVC main and for ductile iron main with 2-inch taps, tapping saddles shall be provided for all corporation stops. Tapping saddles shall be Mueller, Ford, or equal, brass or bronze, minimum 150 psi working pressure with stainless steel bands, nuts and bolts.

Curb stops shall be copper alloy and shall be manufactured according to AWWA C800-14 and ASTM B62. The maximum lead content shall be 0.25%. Manufacturer shall be Mueller H-15155, AY McDonald 76104Q, or equal, minimum 150 psi working pressure.

Provide bedding and granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

B.2 Curb Boxes

Curb boxes shall be of the Minneapolis Pattern, Mueller H-10300, AY McDonald 5614 or 5615, or equal made with cast iron conforming to ASTM A48, Class 20. The castings shall be free from blowholes, porosity, hard spots, shrinkage defects or cracks, or other injurious defects and shall have a normal smooth casting finish. The pentagon head bolt shall be brass.

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

A 2 1/2-inch-diameter box shall be provided for 3/4-inch and 1-inch service stops.

A 3-inch-diameter box shall be provided for 1 1/4-inch, 1 1/2-inch, and 2-inch service stops.

All curb boxes shall have a maximum length of 7 feet when extended without the use of extension section. Extensions shall be provided for deeper mains.

C Construction

Corporations, curb stops and boxes shall be constructed according to Water Service Copper, 1-Inch and 2-Inch of these special provisions. Curb stops and other water service fittings shall have a positive metal to metal connection.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Water Service Corporation, Curb Stop, and Box, (Size) as each individual water service corporation, curb stop, and box, (size) 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.0060.47	Water Service Corporation, Curb Stop, and Box, 1-Inch	EACH
SPV.0060.48	Water Service Corporation, Curb Stop, and Box, 2-Inch	EACH

Payment is full compensation for furnishing and installing all materials, excavation, granular backfill material and backfilling, compaction, and disposing of any excess materials.

49. Replace Water Service Curb Stop and Box, Item SPV.0060.49.

A Description

This special provision describes the removal and replacement of existing water service curb stops and curb boxes to the required elevation as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Curb boxes and materials shall be provided according to Water Service Corporation, Curb Stop, and Box, (Size) of these special provisions.

Curb boxes to be installed in the sidewalk south of Elm Street shall be set in a Bingham and Taylor Model 688 enclosure to be furnished by the City of Lancaster.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Excavate around the existing water service curb stop as necessary and replace the curb stop and box assembly to position at the required elevation. Furnish and install curb box extensions as necessary. Construct according to Water Service Corporation, Curb Stop, and Box, (Size) of these special provisions.

Where curb boxes located south of Elm Street are to be installed in the sidewalk, install the City furnished enclosure to protect the curb box.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Replace Water Service Curb Stop and Box as each individual replace water service curb stop and box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.49	Replace Water Service Curb Stop and Box	EACH

Payment is full compensation for removal of existing curb stop and box; furnishing and installing new curb stop, curb box sections and covers, and installation of curb box sidewalk casting (to be furnished by the City of Lancaster); for excavating, granular backfill material and backfilling, adjusting curb box to finished grade, compacting and restoring disturbed areas.

50. Replace Water Service Curb Box, Item SPV.0060.50.

A Description

This special provision describes replacing existing water service curb boxes to the required elevation as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and hereinafter provided.

B Materials

Curb boxes and materials shall be provided according to Water Service Corporation, Curb Stop, and Box, (Size) of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Curb boxes to be installed in the sidewalk south of Elm Street shall be set in a Bingham and Taylor Model 688 enclosure to be furnished by the City of Lancaster.

C Construction

Excavate around the existing water service curb box as necessary and replace the curb box assembly to position at the required elevation. Furnish and install curb box extensions as necessary. Construct according to Water Service Corporation, Curb Stop, and Box (Size) of these special provisions.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Where curb boxes located south of Elm Street are to be installed in the sidewalk, install the city furnished enclosure to protect the curb box.

D Measurement

The department will measure Replace Water Service Curb Box as each individual replace water service curb box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.50	Replace Water Service Curb Box	EACH

Payment is full compensation for providing and installing the replacement curb box sections and covers, installation of curb box sidewalk casting (to be furnished by the City of Lancaster); for excavating, granular backfill material and backfilling, adjusting curb box to finished grade, compacting and restoring disturbed areas.

51. Adjust Water Service Curb Box, Item SPV.0060.51.

A Description

This special provision describes adjusting existing water service curb boxes to the required elevation as shown on the drawings in according with the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide materials according to Water Service Corporation, Curb Stop, and Box, (Size) of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Excavate around the existing water service curb box as necessary and adjust curb box assembly to position top at the required elevation. Furnish and install curb box extensions as necessary.

Curb boxes shall be constructed according to Water Service Corporation, Curb Stop, and Box, (Size) of these special provisions.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Adjust Water Service Curb Box as each individual adjust water service curb box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.51	Adjust Water Service Curb Box	EACH

Payment is full compensation for excavating, adjusting curb box to finished grade, furnishing extensions as necessary, granular backfill material and backfilling, compacting, and restoring disturbed areas.

52. Replace Upper Section Valve Box, Item SPV.0060.52.

A Description

This special provision describes replacing the upper section and cap of water main valve boxes to the required elevation as shown on the drawings according to the Standard Specification for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Valve box upper section for replace existing upper section valve box shall be provided according to Water Main Valve and Valve Box of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Excavate around the existing water main valve box as necessary and replace the upper section of the valve box assembly to position top at the required elevation. Leave all valve boxes centered over the valve operating nut free of dirt and debris. Install according to Water Main Valve and Valve Box of these special provisions.

Valve box shall be centered and plumb over the wrench nut of the valve with the box cover flush with the finished ground elevation.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Replace Upper Section Valve Box as each replace upper section valve box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.52	Replace Upper Section Valve Box	EACH

Payment is full compensation for providing and installing the replacement valve box upper sections and covers; for excavating, granular backfill material and backfilling, adjusting valve box to 1/4 inch below finished grade, compacting and restoring disturbed areas.

53. Replace Full Valve Box, Item SPV.0060.53.

A Description

This special provision describes replacing the full valve box down to the valve and adjusting to the required elevation as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Valve box for replace full valve box shall be provided conforming to Water Main Valve and Valve Box of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Excavate around the existing water main and valve as necessary and replace the valve box assembly to position top at the required elevation. Furnish and install valve box extensions as necessary. Center all valve boxes over the valve operating nut free of dirt and debris.

Valve box shall be centered and plumb over the wrench nut of the valve with the box cover 1/4 inch below finished ground elevation. Solid 4-inch concrete blocks shall be placed under the base of valve boxes so that the bottom of the base is about 2 inches away from contact with the valve bonnet. A gate valve adaptor may be used in lieu of blocks. The valve box shall not transmit shock or stress to the valve.

Install according to Water Main valve and Valve Box, 8-Inch of these special provisions.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Replace Full Valve Box as each individual replace full valve box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.53	Replace Full Valve Box	EACH

Payment is full compensation for furnishing all materials, including valve box, valve support, gate valve adaptor, and concrete blocks; for all excavation, granular backfill material and backfilling, compaction, disposal of surplus material, cleanup, adjusting valve box to 1/4 inch below finished grade and restoring disturbed areas.

54. Connect to Existing Water Main, Item SPV.0060.54.

A Description

This special provision describes connecting new water main to existing water main as shown on drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all fittings, connections, and granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Connect the new water main to the existing water main. Depth and location of existing water main shown on the drawings are to be field verified at the connection location.

Compact, backfill and construct according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Written notification of connections to existing water mains shall be given to the department and the City of Lancaster a minimum of three days in advance of the work. Connection to existing utility facilities shall be completed between 8:00 AM and 3:00 PM Monday through Friday. Provide any dewatering necessary during construction.

C.1 Testing

Provide all required hydrostatic tests on all new water mains installed. Where connections to existing water mains occur this may necessitate, but is not limited to, the installation of temporary valves to isolate the new system from the existing system or temporary caps.

Hydrostatic testing of water utility facilities shall be completed between 8:00 AM and 3:00 PM, Monday through Friday unless approved by engineer.

D Measurement

The department will measure Connect to Existing Water Main as each individual connect to existing water main, 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.0060.54	Connect to Existing Water Main	EACH

Payment is full compensation for the water main and materials, excavation, fittings including temporary valves and caps, dewatering, disposal of any excess materials, granular backfill material and backfilling, and compaction; for all written notifications of connections; for all testing; and for all necessary field verifications.

55. Connect to Existing Water Service, Item SPV.0060.55.

A Description

This special provision describes connecting new water services to existing water services as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all materials as specified in Water Service Copper, 1-Inch and 2-Inch of these special provisions. All fittings and couplers used in connections shall be certified lead free.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Connect the new water service to the existing water service as close to the right-of-way line as possible, without encroaching on private property. Fittings and couplers utilized to make the connection shall be minimized as much as feasible.

Compact, backfill and construct according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C.1 Existing Lead Service

If an existing water service is found to be lead, notify the department, City of Lancaster and the city's resident engineer immediately. Lead services shall be cut and disturbed as little as possible. Replacement of existing lead services to the right-of-way line shall be completed the same day the work begins and shall not be reconnected to the water main or temporarily connected to the new water service at a location other than the final connection location.

Dispose of lead water services according to all applicable federal, state and local code requirements.

D Measurement

The department will measure Connect to Existing Water Service as each individual connect to existing water service, acceptably completed. An individual unit shall be considered a new water service connected to an existing water service regardless of whether one or two ends of new pipe are connected to an existing pipe.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.55	Connect to Existing Water Service	EACH

Payment is full compensation for providing all materials, including all fittings and connections; for all notifications; for removing and disposing of lead services; for coordination with contractors of private property owners; for granular backfill material and backfilling, compaction, and removing any excess materials.

56. Sanitary Sewer Manhole, 4-Foot Diameter, Item SPV.0060.56.

A Description

This special provision describes furnishing precast reinforced concrete sanitary sewer manholes, metal frames, and covers as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and hereinafter provided.

B Materials

Manhole sections including risers, flat slab tops, conical tops, base sections, and adjusting rings shall be precast reinforced concrete. Reinforced concrete manhole sections shall conform to ASTM C478.

Heights of manhole rise (barrel) shall be furnished in such combinations as to conveniently achieve the depth of the manhole. A maximum of two handling holes per riser will be permitted.

Sanitary sewer manholes shall be constructed with eccentric cone top section for 48-Inch diameter barrel sections. Concrete adjusting rings shall be furnished to set the manhole casting to established grade.

Drop entrances to sanitary sewer manholes shall be installed where indicated on the drawings. Drop entrances shall be of the same diameter as the sewer main from sizes 8 inches through 18 inches. For larger diameters, the drop shall be 18 inches unless otherwise shown on the drawings.

The interior bottom of sanitary sewer manholes shall be constructed of concrete benches which shall be precast or poured-in-place. Benches shall extend to the top of each pipe to a maximum height of 42 inches. Flow lines shall be made smooth with uniform curves to promote flow through the manhole.

All joints between manhole pipe sections and top shall be tongue-and-groove conforming to ASTM C443. Manhole joints shall be sealed with circular O-ring or preformed flexible joint sealant. Exterior joints shall be sealed with MacWrap, Cretex, or equal.

Manhole connections for sanitary sewer mains shall be made using flexible, watertight connections, PSX Press Seal, Kor-N-Seal, or equal, for sewers through 18-inch diameter. All other sanitary sewer manhole connections shall be made with A-Lok, PSX Press Seal, Kor-N-Seal, or concrete grout.

Manhole bottoms for sanitary sewer shall be monolithically precast with the bottom section.

Steps shall be installed in all sewer manholes by the manufacturer as shown on the drawings and shall be cast iron conforming to ASTM A48, Class 30B or steel reinforced plastic conforming to ASTM A615, Grade 60 and ASTM D4101, Type II, Grade 49108 as shown on the drawings. Manhole steps shall be spaced 16 inches on center with an allowable tolerance of ± 1 inch. Steps shall be embedded into the riser or conical top section wall a minimum of 3 inches.

Precast reinforced concrete manhole risers and tops shall be tested according to ASTM C497. Precast reinforced concrete manhole risers and tops meeting the strength requirements will be considered acceptable and shall be stamped with an appropriate monogram. When requested, copies of test reports shall be submitted to engineer before the manhole sections are installed in the Project. Final acceptance will be made after field inspection upon delivery to the project.

Precast reinforced concrete manhole sections shall be subject to rejection for failure to conform to any of the Specification requirements. In addition, individual sections of manhole risers and tops may be rejected because of any of the following reasons:

- a. Fracture or cracks passing through the wall, except for a single end crack that does not exceed the depth of the joint.
- b. Defects that indicate imperfect proportioning, mixing, and molding.
- c. Surface defects indicating honey-combed or open texture.
- d. Damaged ends, where such damage would prevent making a satisfactory joint.
- e. Manhole steps out of line, or not properly spaced.
- f. Noticeable infiltration into manhole.
- g. Variation in diameter of the manhole section of more than 1% from the nominal diameter.
- h. Any continuous crack having a surface width of .01 inch or more and extending for a length of 12 inches or more regardless of position in the section wall.

Each precast reinforced concrete manhole riser and top section shall be clearly marked with the name or trademark of the manufacturer and the date of manufacture. This marking shall be indented into the manhole section or shall be painted thereon with waterproof paint.

HDPE adjusting rings for standard manholes shall have an inside diameter of 26 inches, be not less than 2 inches nor more than 6 inches high, and shall have a wall thickness of 6 inches unless otherwise specified. The joints between rings and between rings and castings shall be sealed with a compressed butyl rubber sealant.

Manhole Casting:

All manhole castings shall be gray iron and meet the requirements of ASTM A48. Standard manhole castings shall be Neenah R-1550-A with machined frame, Type B self-sealing, non-rocking lid, and concealed pick holes, or 100% compatible East Jordan casting. The frame for all manhole castings shall have the non-rocking feature built in.

External Chimney Seal:

Provide external manhole frame chimney seal. The seal shall be made of a rubber type product, with a minimum thickness of 3/16 inches, a minimum unstretched width of 8 inches and be extruded or molded from a high-grade rubber compound conforming to the applicable requirements of ASTM C923. The bands used for compressing the sleeve against the manhole shall be fabricated from stainless bolts, or nuts used on these bands shall be stainless steel conforming to ASTM F5593 and F594, Type 304. Manufacturer shall be Cretex or equal.

Manhole frame-chimney seals shall be designed to prevent the leakage of water into the manhole at the area of the joint between the manhole frame and chimney continuously throughout a 20-year design life. The seal shall remain flexible, allowing repeated vertical movements of the frame because of frost lift, ground movement or other causes of up to 2 inches and/or repeated horizontal movements of the frame because of thermal movement of the pavement or other causes of up to 1/2 inch, both rates of movement occurring at rates not less than 0.10 inch per minute.

Provide seals made of only materials that have been used in sanitary sewer construction for at least 10 years and have proven to be resistant to sanitary sewage; corrosion or rotting under wet or dry conditions; the gaseous environment in sanitary sewers and at road surfaces including common levels of ozone, carbon monoxide and other trace gases at the sites of installations; the biological environment in soils and sanitary sewers; chemical attacks by road salts, road oil and common street spillages or solvents used in street construction or maintenance; the temperature ranges, variations and gradients in and between manhole frames and chimneys in the climate of the location of construction; variations in moisture conditions and humidity; fatigue failure caused by a minimum of 30 freeze-thaw cycles per year; vibrations because of traffic loadings; fatigue failure because of repeated variations of tensile, compressive and shear stresses and repeated elongation and compression; and any combination of the foregoing. The materials used are to be compatible with each other and the manhole materials.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Manholes shall be installed according to the drawings. Manholes shall be plumb with any steps aligned and openings located over steps. For sanitary sewers, openings shall be located over the bench and not the sewer flow line itself.

All manholes shall be made watertight and shall show no visible signs of leakage at the time of final review. Any leakage shall be sealed from the exterior of the manhole.

In drop manholes, the upper pipe of the drop shall be stubbed into the manhole 8 inches horizontally. The end of the upper pipe shall be cut off at an approximately 30 degree angle so the resulting opening is facing up towards the manhole casting.

All manhole adjusting rings shall be sealed with precompressed butyl rubber material in 3 1/2-inch width. Final rim elevation and manhole adjustment shall be determined in the field. Metal adjusting rings and metal paving rings on the castings shall not be used.

Casting adjustments to finished grade on new manholes is to be included in installation.

D Measurement

The department will measure Sanitary Sewer Manhole, 4-Foot Diameter as each individual sanitary sewer manhole, 4-foot diameter, 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	Sanitary Sewer Manhole, 4-Foot Diameter	EACH

Payment is full compensation for providing all material, excavation, granular backfill material and backfilling necessary for construction of manholes; furnishing and installing casting to finished grade, chimney seals, steps, and adjusting rings.

Drop entrances to manholes shall be furnished and installed as shown on the drawings. No additional payment will be made for drop entrances to manholes. Drop entrances will vary in depth from a minimum of 2 feet to a maximum as indicated on the drawings.

57. Connect to Existing Sanitary Sewer Main or Manhole, Item SPV.0060.57.

A Description

This special provision describes connecting new sanitary sewer main to the existing sanitary sewer main or existing sanitary sewer manholes as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all sanitary sewer materials and connections according to Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35, (Size) of these special provisions.

Where new sanitary sewer is coupled with existing sanitary sewer Strongback RC 1100 Series Fernco couplings, Mission Band-Seal couplings, or equal shall be used.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Connect the new sanitary sewer or laterals to existing sanitary sewers or manholes. Depth and location of the existing sanitary sewer or manhole connection shall be field verified by contractor. Field verification shall take place prior to commencing work towards the connection location and with sufficient time to notify the engineer of and address any discrepancies from connection locations or elevations shown on the drawings.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Connect to Existing Sanitary Sewer Main or Manhole by each connect to existing sanitary sewer main or manhole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.57	Connect to Existing Sanitary Sewer Main or Manhole	EACH

Payment is full compensation for providing all materials; for excavation, granular backfill material and backfilling, compaction, disposing of excess material, and for field verifications.

58. Connect to Existing Sanitary Sewer Lateral, Item SPV.0060.58.

A Description

This special provision describes connecting new sanitary laterals to existing sanitary laterals as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all materials as specified in Sanitary Sewer Lateral (Size) of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of the special provisions.

Where new sanitary sewer is coupled with existing sanitary sewer Strongback RC 1100 Series Fernco couplings, Mission Band-Seal coupling, or equal shall be used.

C Construction

Connect the new sanitary lateral to the existing sanitary lateral as close to the right-of-way line as possible without encroaching on private property. Fittings and couplers utilized to make the connection shall be minimized as much as feasible. All connections shall be made according to the sanitary sewer lateral details in the drawings.

D Measurement

The department will measure Connect to Existing Sanitary Sewer Lateral as each individual connect to existing sanitary sewer lateral, acceptably completed. An individual unit shall be considered a new sanitary lateral connected to an existing sanitary lateral regardless of whether one or two ends are connected to an existing pipe.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.58	Connect to Existing Sanitary Sewer Lateral	EACH

Payment is full compensation for providing all materials, for all excavation, granular backfill material and backfilling, compaction, disposal of excess materials; and for making all necessary connections.

59. Remove Existing Sanitary Sewer Manhole, Item SPV.0060.59.

A Description

This special provision describes removing the existing sanitary sewer manhole, casting, and appurtenances as shown on the drawings according to the Standard Specifications for Sewer and Water in Wisconsin and as hereinafter provided.

B Materials

All caps, fittings, and other materials required to remove existing sanitary sewer manhole shall be provided according to the specifications for Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35, (Size) of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Manhole barrels and other such structures shall be removed where shown on the drawings to a point 3 feet below existing or final ground surface, whichever is lower, and shall then be filled with backfill material as described in these special provisions. An approximate 9-inch-diameter opening shall be made in the bottom of the any structures to be abandoned to allow for groundwater movement. Remove manhole and appurtenances completely where installation of new sanitary sewer structures are shown on the drawings.

Discontinue existing sanitary sewer main according to Discontinue Existing Sanitary Sewer and Laterals of these specifications.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Remove Existing Sanitary Sewer Manhole as each individual remove existing sanitary sewer manhole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.59	Remove Existing Sanitary Sewer Manhole	EACH

Payment is full compensation for removing existing sanitary sewer manhole; for excavation, for providing all materials, granular backfill material and backfilling, and compaction; for disposal of surplus materials and for restoring the site.

60. Remove and Replace Manhole Casting and Adjusting Rings, Item SPV.0060.60.

A Description

This special provision describes removing existing sanitary manhole castings and adjusting rings, and furnishing and installing new manhole castings, new adjusting rings, and new external chimney seals as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all sanitary sewer materials according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions.

C Construction

Where shown on drawings existing manhole castings and adjustment rings are to be removed and replaced with new manhole casting, new HDPE adjusting rings and new external chimney seals. Manhole casting, adjusting rings, and external chimney seals shall be constructed according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions.

Prior to milling, or while removing pavement, existing castings shall be removed and the opening temporarily covered with a steel plate of sufficient thickness to accommodate traffic and construction equipment. New manhole castings and adjustment rings shall be adjusted to final grade prior to final paving. Install external chimney seals prior to paving.

After the castings have been removed and replaced, there should be a minimum of 2 inches of adjustment and a maximum of 12 inches of adjustment.

All existing manhole casting and covers shall be salvaged and stockpiled at a convenient area on the project site for pickup by the City of Lancaster. Notify they city when ready for pickup.

D Measurement

The department will measure Remove and Replace Manhole Casting and Adjusting Rings as each individual remove and replace manhole casting and adjusting rings, 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.0060.60	Remove and Replace Manhole Casting and Adjusting Rings	EACH

Payment is full compensation for furnishing and all materials; for removing and disposing of existing adjusting rings; for providing steel plates, for salvaging and stockpiling existing casting and covers; for adjusting the new casting to finish grade; for installing the new casting and chimney seal, and for notifying the city when salvaged castings and covers are ready for pickup.

61. Reconstruct Existing Sanitary Sewer Manhole, Item SPV.0060.61.

A Description

This special provision describes the removal and/or replacement of the existing sanitary sewer manhole barrel sections to achieve the desired finished grade as indicated in the drawings according to the Standard Specifications for Sewer and Water construction in Wisconsin and as hereinafter provided.

B Materials

Provide all sanitary sewer materials according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Remove existing casting, adjustment rings, and concrete barrel section(s) as necessary to install new casting, new HPDE adjusting rings, new external chimney seal, and/or barrel sections needed to reach the final proposed grade as shown on the drawings. Barrel section(s), manhole casting, adjusting rings, and external chimney seal shall be included in this item and constructed according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions.

There should be a minimum of 2 inches of adjustment and a maximum of 12 inches of adjustment. If unable to meet these adjustment requirements through adjusting rings, add or remove barrel sections as needed.

Adjustment ring heights exceeding 12 inches will not be allowed.

D Measurement

The department will measure Reconstruct Existing Sanitary Sewer Manhole as each individual reconstruct existing sanitary sewer manhole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.61	Reconstruct Existing Sanitary Sewer Manhole	EACH

Payment is full compensation for removing and adding barrel sections to existing sanitary sewer manhole; for furnishing all new castings, adjusting rings, external chimney seals; for excavation, granular backfill material and backfilling, compaction; for disposal of surplus excavated material, and cleanup.

62. Adjust Existing Manhole Casting, Item SPV.0060.62.

A Description

This special provision describes adjusting existing manhole casting with new HDPE adjustment rings and new external chimney seals as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide all sanitary sewer materials according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions.

C Construction

Sanitary manhole HDPE adjustment rings, castings, and external chimney seals shall be installed according to Sanitary Sewer Manhole, 4-Foot Diameter of these special provisions. Reuse existing manhole casting and cover.

While removing pavement, existing castings shall be removed, salvaged, and the manhole opening temporarily covered with a steel plate of sufficient thickness to accommodate traffic and construction equipment. Salvaged manhole casting and new adjustment rings shall be adjusted to final grade prior to final paving. Install external chimney seals prior to paving.

After the castings have been adjusted, there should be a minimum of 2 inches of adjustment and a maximum of 12 inches of adjustment.

D Measurement

The department will measure Adjust Existing Manhole Casting as each individual adjust existing manhole casting, 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.0060.62	Adjust Existing Manhole Casting	EACH

Payment is full compensation for removing and reusing existing castings, for removing existing adjustment rings and for providing new HDPE adjustment rings, for providing new external chimney seals, for providing steel plates, and for adjusting castings to finished grade.

63. Sidewalk Trench Drain, Item SPV.0090.01.

A Description

This special provision describes providing and installing trench drains and grates in concrete sidewalk as shown in the plan details.

B Materials

Trench drains shall be Neenah Cast Iron R4999 Series, with Type D solid bolted cover, or equal. Trench width shall be as shown in the plans.

If cast in place, furnish concrete according to standard spec 611.

C Construction

Construct sidewalk trench drain according to standard spec. 611, the plan details and the manufacturer's recommended installation procedure.

D Measurement

The department will measure Sidewalk Trench Drain assembly, including the drain frame and solid grate, by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Sidewalk Trench Drain	LF

Payment is full compensation according to standard spec 611.5.

64. HDPE Duct 2-Inch Schedule 40 In Trench, Item SPV.0090.21; HDPE Duct 2-Inch Schedule 40 Directional Bored, Item SPV.0090.22.

A Description

All work under this item shall be completed according to standard spec 655 except as hereinafter amended.

B Materials

The duct shall be high density polyethylene, Schedule 40, UL Listed, black color.

C Construction

The duct shall be installed according to standard spec 655.

Duct shall be installed by trenching or directional boring. The routing of duct shall be adjusted based on existing conditions and as indicated on the plans.

Electrical Wire shall not be allowed to be pre-installed (prior to duct placement) in duct.

D Measurement

The department will measure HDPE Duct 2-Inch Schedule 40 by the linear foot of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.21	HDPE Duct 2-Inch Schedule 40 In Trench	LF
SPV.0090.22	HDPE Duct 2-Inch Schedule 40 Directional Bored	LF

Payment is full compensation for furnishing and installing all materials, including duct, for excavating trenches, for placing duct; for backfilling; directional boring; for rough grading disturbed or damaged areas for hard surface areas, seeding and sodding of grass areas not already included under other portions of the project; for making connections and testing installed cable system; for disposing of surplus material.

65. Water Main, Ductile Iron (DI), 6-Inch, Item SPV.0090.41; Water Main, Ductile Iron (DI), 8-Inch, Item SPV.0090.42.

A Description

This special provision describes furnishing and installing water main as shown on the drawings and according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Iron pipe shall be ductile iron conforming to AWWA C151. Fittings shall be ductile or cast iron conforming to the standards herein. Iron pipe and fittings shall be American-made: American, Clow, Griffin, Tyler, U.S. Pipe or equal.

Ductile iron pipe shall consist of pipe centrifugally cast in metal or sand-lined molds. Pipe wall shall be homogeneous from inside to outside and shall be completely free of laminations, blisters, or other imperfections. Defects may be removed at the factory only.

Each pipe and fitting shall have the weight, class or nominal thickness, country where cast, casting period, manufacturers mark, the year in which the pipe was produced, and the letters DI or DUCTILE cast or stamped thereon. Improper or incomplete marking will be cause for rejection of the pipe or fitting.

Furnish certification data representing each class of pipe or fitting furnished. The certification report shall clearly state that all pipe and fittings furnished meet the appropriate AWWA specification.

Ductile iron pipe shall be provided with mechanical joints or push-on joints. Provide flanged joints inside manholes, wet wells or other such structures, and elsewhere exterior as shown on the drawings or as specified.

Pipe shall be minimum Pressure Class 350 with a water hammer allowance of 100 psi. Additional pipe wall thickness shall be furnished as required by AWWA C150 for the depth of cover as shown on the drawings when using Laying Condition 4 of AWWA C600 or the Class C Bedding.

Furnish pipe wall thickness as required by AWWA C115 for flanged piping, and AWWA C150 for buried piping with the depth of cover as shown on the drawings for Class C bedding.

Pipe and pipe in manholes, wet wells, and other structures shall be cement-mortar lined and asphaltic coated inside and asphaltic coated outside. Inside lining and coating shall comply with AWWA C104. Outside coating shall comply with AWWA C151. Lining and coatings shall be suitable for use with potable water systems. The asphaltic coating shall be applied over the cement lining on the inside of the pipe and directly on the outside of the pipe. The coatings shall be smooth and impervious to water without any tendency to scale off.

In cases where corporation stops are to be tapped into mains, furnish pipe wall thickness as specified in AWWA C151 to provide four threads; furnish pipe saddles as approved by manufacturer.

Cable bond conductor or electrobond conductivity straps shall be installed on all ductile iron piping to maintain electrical continuity across joints. Continuity across valves and fittings shall be made with multiple conductivity straps connected in series. Lead-tipped gaskets or bronze wedges will not be allowed.

Cutting-in and repair tees and sleeves and tapping tees shall be of ductile or cast iron with the same rated working pressure of the pipe in which they are installed but no less than 150 psi.

Joints, fittings, and gaskets shall have the same rated working pressure of the pipe in which they are installed but no less than a minimum rated working pressure of 150 psi. Fittings shall be cement-mortar lined and asphaltic coated inside and shall be shop primed or asphaltic coated outside as specified above for the piping in which they are being installed.

Joints, fittings and gaskets for buried piping shall be mechanical joint or push-on joint conforming to AWWA C110 and AWWA C111, as well as AWWA C153 (compact), with vulcanized styrene butadiene rubber gaskets conforming to AWWA C111.

Bolts on mechanical joints shall be high-strength low-alloy Corten steel conforming to AWWA C111; a certificate to that effect shall be provided.

Flange joints, fittings and gaskets to be used elsewhere or as specified shall conform to AWWA C110, AWWA C111, and to ANSI B16.1. Gaskets for flanged piping shall be full face, minimum 1/8-inch-thick synthetic rubber gaskets with factory-made holes for flange bolts. Thicker gaskets shall be provided as needed to accommodate allowed tolerances in flange manufacturing.

Gaskets shall be furnished in sufficient number for all joints. Sufficient joint lubricant shall be furnished by the manufacturer with the gaskets.

Pipe restraint fittings shall be provided as follows:

- a) For ductile iron pipe with ductile iron mechanical joints MEGALUG Series 1100 or 1100SD by EBAA Iron Sales, Inc.; Series D-SLDE or SSLD by Sigma; Series 3000 or 3000S by Star Pipe Products; or equal.
- b) For ductile iron pipe with ductile iron push-on joints MEGALUG Series 1100HD or 1700 by EBAA Iron Sales, Inc.; Sales SLDEH or SSLDH by Sigma; Series 3100 P or 3100S by Star Pipe Products; Flex-Ring or Lok-Ring by American Cast Iron Pipe Company; TR Flex by U.S. Pipe Company; or equal.

Gland body, wedges, and wedge actuating components shall be ductile iron conforming to ASTM A536 Grade 65-45-12. Bolts and tie rods shall be high-strength low-alloy steel conforming to AWWA C111.

Gaskets that include metal locking segments vulcanized into the gasket to grip the pipe to provide joint restraint are not acceptable.

Use pipe restraint fittings to restrain joints in addition to reaction backing on all plugs, caps, hydrant leads, bends, and other mechanical joints.

Polyethylene encasement shall conform to AWWA C105. Film shall be Class C-Carbon Black, with a minimum thickness of 0.008 inches (8 mils). Tape for securing the film shall be a thermoplastic material with a pressure sensitive adhesive face capable of bonding to metal, asphaltic coating, and polyethylene. Tape shall have a minimum thickness of 8 mils and a minimum width of 1 inch.

Bedding material shall be hard and durable and shall be crushed sound limestone or dolomite ledge rock, or crushed gravel aggregate. Bedding material shall conform to the requirements of ASTM 33. Ductile iron pipe shall be bedded according to the Class B bedding detail in the drawings or Type 3 laying condition of AWWA C600. Bedding material shall conform to Size No. 8 or Size No. 9 below.

BEDDING MATERIAL GRADATION

Size	1 1/2 IN	1 IN	3/4 IN	1/2 IN	3/8 IN	No. 4	No. 8	No. 16	No. 30	No. 100
57	100	95-100		25-60		0-10	0-5			
8			100	85-100	10-30	0-10	0-5			
9				100	75-100	0-25	0-5			
10					100	85-100				10-30

Provide engineer with a sieve analysis of the bedding material for review a minimum of 10 calendar days prior to starting construction. No native material to the trench shall be used for bedding material.

Material which is to be placed from the bedding material to 1 foot above the top of the pipe shall be termed cover material. All trenches shall be backfilled by hand to 1 foot above the top of the pipe with cover material. Cover material shall be deposited in the trench for its full width on each side of the pipe, fittings and appurtenances simultaneously in 6-inch layers and shall be compacted using hand tamping bars and/or mechanical tampers. Use special care in placing cover material to avoid injury to or movement of the pipe. Cover material shall consist of durable granular particles ranging in size from fine to a maximum size of 3/4 inches. Cover material shall conform to the following gradation specifications:

COVER MATERIAL GRADATION

Sieve Size	Percentage by Weight Passing
1 inch	100
3/4 inches	85 to 100
3/8 inches	50 to 80
No. 4	35 to 65
No. 30	--
No. 40	15 to 30
No. 200	5 to 15

All bedding materials may be substituted for cover material when requested except where polyethylene encasement is used. In such case, only those bedding materials specifically noted for polyethylene encasement may be used.

All backfill material shall be granular backfill, exceed 35 degrees Fahrenheit and be free from frost, cinders, ashes, refuse, organic matter, boulders, rocks, or stone, frozen lumps, or other material which in the opinion of the engineer is unsuitable. From 1 foot above the top of the pipe to the trench subgrade, granular backfill shall be used. Care should be taken in backfilling so as not to damage the installed pipe.

Granular backfill material shall consist of durable particles ranging in size from fine to coarse in a substantially uniform combination. Sufficient fine material shall be present to fill all the voids in the coarse material. No stones over 3 inches or clay lumps shall be present. Unless otherwise allowed by engineer, granular backfill shall generally conform to the following gradation specification:

GRANULAR BACKFILL

Sieve Size	Percentage by Weight Passing
3 inches	100
2 inches	95 to 100
No. 4	35 to 60
No. 200	5 to 10

Limestone screenings shall not be accepted as granular backfill.

C Construction

C.1 General

Notify engineer a minimum of 10 calendar days prior of the intended date for starting work. Engineer will stake water main and all associated appurtenances. Give engineer three days' notice prior to when staking is needed. Engineer may request, at contractor's expense, the removal and relaying of any pipe which was installed prior to notification of the engineer.

Proper implements, tools, and facilities shall be provided and used for the safe and convenient prosecution of the work. All pipe, fittings, and appurtenances shall be carefully lowered into the trench in such manner as to prevent damage to materials. Under no circumstance shall pipe be dropped or rolled into the trench.

Inspect the pipe, fittings, and appurtenance for defects when delivered to the jobsite and prior to lowering into the trench. Defective material shall be removed from the jobsite. All material shall be cleaned and free of deleterious substances prior to use in the work.

Where significant obstructions not shown on the drawings are encountered during the progress of the work, notify the city and engineer and protect the facilities. Existing items unnecessarily damaged during the performance of the work shall be repaired and replaced and the expense of the contractor.

Proceed with caution in the excavation and preparation of the trench so that the exact location of existing underground structures may be determined. Contractor shall be held responsible for the repairs of such structures when damaged because of its operations.

The trench shall be dug so that the utilities can be laid to the alignment and depth shown on the drawings. Unless otherwise allowed by the engineer, trenches shall not be excavated more than 100 feet in advance of pipe laying.

C.2 Excavation to Grade

The trench shall be finished to the depth necessary to provide a uniform and continuous bearing and support for the pipe on the bedding material provided at every point between bell holes. Any part of the bottom of trench excavated below the specified grade shall be corrected with bedding material, thoroughly compacted in place. The bedding shall be shaped and finished with hand tools to fit the bottom quadrant to the pipe.

All excavated material shall be piled in a manner that will not endanger the work. Stockpiles not for immediate backfilling shall have erosion control measures placed around their perimeter. The work shall be conducted in such a manner that pedestrian and motor traffic is not unnecessarily disrupted. Existing fire hydrants, valve boxes and manholes shall be left unobstructed. Gutters shall be kept clear or other satisfactory provisions made for street drainage and natural water courses.

Remove excavated material immediately as excavation progresses. All material must be disposed of according to standard spec 205.3.11.

Excavation below subgrade to the bottom trench depth required for water main work will be considered incidental to the water main.

C.3 Dewatering

Keep the excavation clear of water while structures and appurtenances are being built, utilities are being installed, and fill and backfill is being compacted. At all times have on hand sufficient pumping equipment and machinery in good working condition and have available at all times competent workers for the operation of the pumping equipment. The dewatering systems shall not be shut down between shifts, on holidays or weekends, or during work stoppages.

All dewatering shall be done according to applicable federal, state, and local code requirements.

Under no conditions shall the work be laid in or under water. No water shall flow over the work until the joints are complete. Wherever necessary, excavate in advance of the completed work, lead the water into sumps or pump wells, and provide erosion control measures to prevent water or sediment damage.

The expense for making all extra excavations necessary to prevent water from interfering with the proper construction of the work and for forming of all dams, digging sumps or pump wells, bailing and pumping, and erosion control shall be borne by contractor. Any permits necessary for the dewatering operations shall be obtained and paid for by contractor. No extra payment will be made for dewatering of the trench whether accomplished by the use of sumps and pumps, well point systems, or deep wells.

The dewatering system shall perform so that soils within the trench will not be destabilized by hydrostatic uplift pressures from adjacent groundwater. If conditions warrant, furnish and install well point systems or deep wells. Spacing and depth of well points or wells shall be adequate to lower the piezometric level to at least 2 feet below the bottom of the excavation. Additional lowering shall be provided as necessary to create a stable subgrade. The control of groundwater shall be such that softening or heaving of the bottom of excavations or formation of quick conditions or boils shall be prevented. Dewatering systems shall be designed and operated to prevent the migration or removal of soils. In areas where rock is encountered, the water level shall be kept at or below top of rock.

Take all necessary precautions during the dewatering operation to protect adjacent structures against subsidence, flooding, or other damage. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Any such facilities and structures damaged shall be repaired or replaced to the satisfaction of their owner.

Prior to dewatering, take into account the effect of the proposed dewatering operation on existing private water supply systems and make arrangements with property owners for protecting their supplies or providing alternative supply. If the dewatering operation adversely affects private water supply systems, Provide property owners with alternative potable and nonpotable supplies until dewatering operations are ceased and groundwater levels return to normal. If the water in private water supply wells is contaminated through no fault of contractor after restoration of original groundwater levels, City of Lancaster will provide measures to restore water potability. Contractor is responsible for restoration of the water supply, not its potability after restoration.

In areas where continuous operation of dewatering pumps is necessary, avoid noise disturbance to nearby residences and businesses to the greatest extent possible by using electric driven pumps, intake and exhaust silencers, or housing to minimize noise.

The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted fill or backfill, and prevent floatation or movement of all structures and pipelines.

C.4 Width of Trench

Determine and provide the minimum width necessary to provide for a safe trench according to current OSHA standards and all other applicable standards. The top width of trench excavation shall be kept as narrow as is reasonably possible and acceptable to minimize pavement damage.

The width of trench below the outside top of the pipe shall be as shown in the following table for the sizes listed. A minimum clearance of 8 inches between the outside of the pipe barrel and the trench wall at the pipe spring line shall be maintained to allow for bedding and haunching. If shoring is used and is going to remain in place, the trench width shall be measured as the clear distance between inside faces of the shoring. Otherwise, the trench width shall be based on the width between stable trench walls after shoring is removed.

MAXIMUM WIDTH OF TRENCH BELOW TOP OF PIPE

Nominal Pipe Diameter (Inches)	Trench Width (Inches)
4	30
6	30
8	36
10	36
12	36
15	36

Where the width of trench below the outside top of the pipe barrel cannot be otherwise maintained within the limits shown above, contractor, at its own expense, shall furnish an adequate pipe installation for the actual trench width which will meet design conditions. This may be accomplished by furnishing higher class bedding, a stronger pipe, concrete cradle, cap or envelope or by driving shoring prior to excavation to subgrade. Removal of shoring below the top of the pipe, if allowed by engineer, shall be gradual during backfilling.

Perform construction in conformance with AWWA C600 for cast iron or ductile iron water main. All plugs, caps, tees, hydrants, bends and other fittings for water mains and force mains shall be provided with restrained joints.

C.5 Pipe Laying

All pipe shall be laid accurately to the line and grade as shown on the drawings. Prior to making pipe joints, all surfaces of the portions of the pipe to be joined or of the factory-made jointing material shall be clean and dry. Lubricants, primers, adhesives, and other joint material shall be used and installed as recommended by the pipe or joint manufacturer's specifications. The jointing materials or factory-fabricated joints shall then be placed, fitted, joined, and adjusted in such a workmanlike manner as to obtain the degree of watertightness specified. Specifications from the joint and pipe manufacturer which outline procedures to be followed in making the joint shall be furnished to engineer.

Water main shall maintain a minimum of 6 1/2 feet of cover but shall be deep enough to provide service to buildings.

Immediately prior to placing the pipe, the trench bottom shall be shaped by hand to fit the entire bottom quadrant of the pipe. For bell and spigot pipe, bell holes shall be provided to prevent the bell from supporting the backfill load. Bell holes shall be large enough to permit proper making of the joint, but not larger than necessary to make the joint. All adjustments to line and grade must be done by scraping away or filling in bedding material under the body of the pipe. Any bedding fill used must be bedding material. If necessary to obtain uniform contact of the pipe with the subgrade, a template shall be used to shape the bedding material. All pipe shall be bedded in bedding material at least 4 inches thick. Contractor shall perform all necessary excavation and shall furnish all necessary material to provide this bedding.

All plugs, caps, tees, hydrants, and bends for water mains shall be provided with positive reaction backing. Reaction backing shall be poured-in-place concrete or precast concrete blocks. Backing shall be placed between solid ground and the fitting to be anchored; the area of bearing on the pipe and on the ground in each instance shall be sized so the soil-bearing pressure does not exceed 1,200 psi, using a working pressure in the main of 150 psi plus 100 psi water hammer allowance. The backing shall be placed that the pipe and fitting joints will be accessible for repair.

In joining two dissimilar types of pipe, manufactured adapters and fittings shall be used. Adapters and fittings shall be configured to maintain invert elevations at the same level.

Joint deflections shall not exceed the limits established by the pipe manufacturer for the pipe and joint being used.

Joints that are damaged because of carelessness, improper handling, or failure to prevent imperfections in manufacture shall be subject to replacement and gaskets shall be subject to replacement whenever they show surface cracking, tears, or splice separation.

At times when pipe laying is not in progress, the open ends of the pipe shall be closed with plugs to prevent the entry of foreign materials. All foreign material shall be removed from the pipe prior to acceptance.

After placing a length of pipe in the trench, the spigot end shall be centered in the bell and the pipe forced home and brought to correct line and grade. The pipe shall be secured in place with specified backfill material tamped around it except at the bells. Trenches shall be kept water-free during bedding, laying and jointing, and for as long a period as necessary to permit proper execution of the Work.

Pipe shall be brought home by using a cross member and levers or jacks. It will not be permissible to push pipe home with motor-powered excavation equipment.

Water main shall be installed according to AWWA C600 for iron pipe. All plugs, caps, tees, hydrants, bends, and other fittings for water mains shall be provided with restraint joints.

The minimum length of pipe to be restrained shall be shown in the following table:

REQUIRED LENGTH OF RESTRAINED PIPE BEYOND FITTING IN FEET

Fitting	Minimum Length -Ft
90 Degree Bend (≤ 6 inches)	36
90 Degree Bend (8 inches to 10 inches)	54
90 Degree Bend (12 inches to 14 inches)	72
90 Degree Bend (16 inches)	84
45 Degree Bend (≤ 8 inches)	18
45 Degree Bend (10 inches to 16 inches)	36
22 1/2 Degree Bend ≤ 16 inches	18
11 1/4 Degree Bend ≤ 16 inches	9
Fire Hydrant Leads	All Joints
End of Line Tees (≤ 4 inches)	18 (Along Branch)
End of Line Tees (6 inches to 8 inches)*	36 (Along Branch)
End of Line Tees (10 inches to 12 inches)*	54 (Along Branch)
End of Line Tees (14 inches to 16 inches)*	72 (Along Branch)

*Restrained run length on tees assumed 18 feet on each side of fitting

This table assumes horizontal orientation of fittings, 150 psi test pressure plus a 100 psi water hammer allowance, ductile iron pipe, and a 3-foot bury. Lengths shall be adjusted for other conditions and fittings.

C.6 Backfilling

All trenches shall be backfilled so that excessive lengths of trench are not left open. In general, the backfilling operation shall proceed so that no more than 100 feet of trench is open behind the pipe laying operation.

Backfill shall be left below the original surface to allow for placement of restoration materials including pavement, base course, concrete, topsoil, sod, plus any pavement replacement specified according to the Asphaltic Paving section herein. When settlement occurs, contractor shall restore the surface improvements at its expense to maintain the finished surface.

All trenches shall be consolidated as specified in this section for the entire depth and width of the trench.

Consolidation shall be achieved by use of smooth surface vibratory compactors or backhoe operated hydraulic compactors for granular materials and rotating sheepfoot type mechanisms for loam/clay soils. The lift height shall not exceed 8 inches. Lift heights may be less than 8 inches as necessary to achieve the degree of compaction specified.

Backfill material beneath paved areas or future paved areas and within 5 feet of paved areas or future paved areas shall be consolidated to achieve a minimum of 95% of maximum dry density, as determined by the standard Proctor Test (ASTM D-698).

Backfill material not meeting the compaction specification shall be re-compacted by contractor at no cost to the department. Cost for additional testing on re-compacted material shall be at contractor's expense.

The City of Lancaster will provide a geotechnical consultant to perform compaction testing of trench backfill. A compaction test shall be performed approximately every 50 linear feet of utility trench and one test per water service or sanitary lateral trench. Additional tests may be requested by the engineer, department, or City of Lancaster as deemed necessary.

Maintain all backfilling, resurfacing, repaving, and other surface improvements constructed under this Contract. Upon proper notice from the department, make all repairs in surfaces of trenches and excavations. All expenses incurred in making repairs and in maintaining trench and excavation surfaces shall be at the expense of contractor regardless of the material used in backfilling trench excavations.

Contractor shall be responsible for controlling dust dispersion during water main construction. Remedial actions required as a result of inadequate dust control shall be contractor's responsibility. To control dust, contractor shall apply calcium chloride or ammonium lignin sulfonate in 12 to 14% solution or other dust control palliative acceptable to City of Lancaster. Prior to application of dust palliative, the street shall be graded smooth.

C.7 Water Main Testing

Furnish all water and other materials, equipment and labor necessary to disinfect all new water mains and all existing water mains disturbed by construction. Testing shall conform to AWWA C651. Notify the Health Department to observe sterilization test and coordinate and bear cost for necessary laboratory testing and provide safe bacteriological sample results to the department and the City of Lancaster prior to placing the water main in service. Sampling and testing shall be scheduled to complete the work within the contract times. Items of material for testing shall be furnished in the size and quantity necessary to properly complete the test. Interruption or delay of contractor's work progress caused by testing and sampling shall not be cause for extra payment under the contract nor shall they be cause for extension of contract time.

Conduct hydrostatic pressure tests and leakage tests of all joints according to the requirements of AWWA C600 for iron pipe. During performance of the hydrostatic pressure test, water main shall be subjected to a minimum pressure of at least 50% above normal working pressure with a minimum pressure 125 psi. All air shall be removed from the main during testing. This shall be done by flushing, by installing corporations at high points, or by releasing air at valves at high points. Test pumping equipment used shall be centrifugal pumps or other pumping equipment that will not place shock pressures on the main. Power plunger pumps will not be permitted for use on closed pipe systems. Pumps shall be disconnected during test periods.

Prior to conducting the pressure and leakage test, backfill the trench for its full depth. All bends and special connections to the main shall be adequately blocked and tied prior to the test. Any damage caused to the main or its appurtenances during performance of these tests shall be corrected by contractor at its expense.

Keep a record of all tests performed. These records shall show the individual lengths of main tested and test results. Submit a copy of the records to the engineer and the city within two days of the testing.

Where connections are made to existing mains, provide the necessary hydrostatic tests on all new mains installed. This may necessitate, but is not limited to, the installation of temporary valves to isolate the new system from the existing system. All materials, work, and equipment necessary for this work shall be furnished by contractor at its expense.

All testing of pipelines shall proceed concurrently with installation. Contractor is advised that it may be advantageous to conduct daily preliminary testing of its work.

Water from disinfection testing shall not be discharged to a stream, creek, river, storm sewer tributary thereto, or to a navigable water without first neutralizing the chlorine residual in the water and complying with local, state, and federal laws thereto.

Provide continuity testing of all ductile iron water mains installed. Tests shall be performed using an ohmmeter to assure that electrical continuity exists across all joints. Make all necessary repairs to establish continuity across joints.

All testing of utility facilities shall be completed between 8:00 AM and 3:00 PM, Monday through Friday.

D Measurement

The department will measure Water Main, Ductile Iron (DI), (Size) in length by the linear foot, acceptably completed. Quantity to be paid for includes construction through valves and other fittings. Tees, reducers, sleeves, and bends will be measured and paid as water main.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.41	Water Main, Ductile Iron (DI), 6-Inch	LF
SPV.0090.42	Water Main, Ductile Iron (DI), 8-Inch	LF

Payment is full compensation for all pipe, all fittings, excavation, dewatering, bedding, cover material, laying, jointing, granular backfill material and backfilling, compaction, maintenance of surface, dust control, water main testing and recording, shoring, and erosion control measures.

66. **Water Service, Copper, 1-Inch, Item SPV.0090.43; Water Service, Copper, 2-Inch, Item SPV.0090.44.**

A Description

This special provision describes furnishing and installing new water services as shown on the drawings according to the requirements of the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Copper Water Tubing:

Copper tubing installed within trenches shall be Type K soft annealed copper tubing and shall conform to the specifications of ASTM B88. All other copper shall be Type K hard copper conforming to ASTM B88. The name or trademark of the manufacturer and a mark indicating the type shall be permanently and plainly marked on tubing.

Fittings for copper tubing are to be copper alloy meeting the requirements of AWWA C800-14. The maximum lead content shall be 0.25%. They shall have uniformity in wall thickness and strength and shall be free from any defect that may affect their serviceability.

Fittings are to be of compression type. Unions are to be extra heavy three-part unions only.

Each fitting shall be permanently and plainly marked with the name or trademark of the manufacturer.

Provide bedding and granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Water services requiring reconstruction and new services shall be installed according to AWWA C600. Perform all excavation, backfill and other work necessary for complete installation. Install water services with minimum amount of service interruption. The service tubing shall be continuous and shall be placed at a minimum depth of 6.5 feet. Each service shall include a corporation stop at the main, copper service tubing, curb stop, curb box, couplings, and all other appurtenances necessary for a complete installation as noted elsewhere in these special provisions. Where existing services in the street are being reconstructed, the new service shall be connected to the existing service at the property line unless otherwise shown or specified. Taps in the main shall be at an angle of 45 degrees above the horizontal.

Existing and new service line locations shown on the drawings are approximate. Provide field verification to determine actual service line locations as required for complete installation of the service. Field verify the size, location, and depth of the existing service prior to connection.

Refer to Water Main, Ductile Iron (DI), (Size) of these special provisions for additional construction requirements for backfill, compaction, and other items.

Bedding and cover material for copper water services shall conform to size No. 9 or No. 10, provided in the Water Main, Ductile Iron (DI), (Size) of these special provisions.

Water Service Interruption and Notification:

Provide a minimum of 48 hours' notice to City of Lancaster and engineer, and all affected utility customers/residents prior to all water service interruptions. The notice is to consist of at least the following:

1. Verbal communication of interruption including estimated times and duration of interruption shall be given to the utility customer/resident.
2. Written communication of interruption including estimated times and duration of interruption shall be left in a conspicuous location at the utility customer/resident's home.
3. Verbal communication immediately prior to the service interruption including estimated duration of interruption shall be given to the utility customer/resident.

The estimated time stated on the notification is to consist of the range of hours during a single day that the service may be interrupted. If the service is not interrupted during the day stated on the notification, additional notifications shall be given to the City of Lancaster, engineer, and all affected utility customers/residents for each successive day that the utility service may be interrupted. A minimum of 24 hours' notice shall be given for each successive day of potential service interruption.

If the utility customer/resident cannot be reached for face-to-face verbal communication of the service interruption, call the utility customer/resident if their number is publicly available. If the utility customer/resident's phone number is not available, or the utility customer/resident does not answer the phone, written notification shall be left in a conspicuous location at the utility customer/resident's home. Attempt to verbally contact the utility customer/resident immediately prior to the service interruption.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Water Service, Copper, (Size) in length by linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.43	Water Service, Copper, 1-Inch	LF
SPV.0090.44	Water Service, Copper, 2-Inch	LF

Payment is full compensation for providing all materials; for excavating, for granular backfill material and backfilling, compaction, for providing taps in the main, removing excess material; for providing bedding material; and for all notifications.

67. Water Main Insulation, Item SPV.0090.45.

A Description

This special provision describes furnishing and installing polystyrene insulation to insulate water mains and/or copper water services according to the requirements of the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Water Main Insulation will be one 2-inch thick by 8-foot by 4-foot sheet of extruded polystyrene board.

C Construction

Insulation is required for all Water Main and Laterals at locations where there is less than 6.5 feet of cover to finished grade and where water main crosses vertically within 3 feet of a proposed storm sewer or culvert pipe. Install insulation according to the drawings or as request by the engineer.

D Measurement

The department will measure Water Main Insulation in length by the linear foot, acceptably completed. Measurement is along the centerline of the installed water main or copper water service and includes the length through bends and tees.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.45	Water Main Insulation	LF

Payment is full compensation for providing and installing of a 2-inch thick by 8-foot by 4-foot sheet of polystyrene at the locations shown on the plans and as directed by the engineer or the City of Lancaster.

68. Rock Excavation Water Main, Item SPV.0090.46.

A Description

This special provision describes providing rock excavation according to standard specification 205 and as detailed herein.

B (Vacant)

C Construction

Classify rock excavation (type) according to standard spec 205.2.3, except include rock boulders with a volume of a 1/2 cubic yard or more.

If rock, hardpan, or fragmented material exists, excavate the trench to a depth of at least 6 inches below the bottom of the pipe, including 6 inches below any bells or joints, and 3 feet greater than the outside diameter of the pipe, 1 1/2 feet on either side.

Place bedding and granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Keep the rock excavation dewatered until the pipe joints are secured and the pipes are backfilled.

Dispose of any surplus excavation.

D Measurement

The department will measure Rock Excavation Water Main in length by the linear foot, acceptably completed. This shall be measured along the centerline of the utility trench where rock excavation is required, regardless of the vertical depth from the top of rock to the bottom of the excavated rock.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.46	Rock Excavation Water Main	LF

Payment is full compensation for all rock excavation, dewatering, providing granular backfill material and backfilling, and disposal of surplus material.

69. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 8-Inch, Item SPV.0090.47.

A Description

This special provision describes excavating required trenches or tunnels, placing bedding and cover materials, laying therein the sanitary sewer pipe of the size and type specified, tees, wyes, risers and all required fittings; all sheeting and shorings, backfilling and compacting the trenches, testing, and restoring the work site as shown on the drawings according to the requirements of the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Provide polyvinyl chloride (PVC) sewer pipe meeting the requirements of Standard Specifications for Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings of the American Society for Testing Materials, Serial Designation D3034 for pipe sizes 4-inch through 15-inch.

All PVC sewer pipe shall have maximum standard dimension ratio (SDR) of 35.

Provide the wall thickness conforming to requirements for a T-1 wall. Provide PVC material with a cell classification 12454-B or 12454-C as defined in ASTM D1784 with minimum modulus of elasticity of 400,000 psi in tension. Provide a minimum pipe stiffness of 46 psi when tested according to ASTM D2412.

Provide pipe and fittings that are the product of one manufacturer with experience records substantiating acceptable performance of the pipe to be furnished.

Provide injection molded fittings.

Acceptance of piping will be subject to tests conducted by an approved testing agency according to ASTM D3034 and/or ASTM F679.

Provide fittings such as saddles, elbows, tees, wyes and others of material and construction corresponding to and having a joint design compatible with the adjacent pipe. Provide approved adapters for transitions to other types of pipe.

Provide elastomeric type joints for pipes 4 inch or larger and elastomeric or solvent cement for pipes less than 4 inch.

Provide elastomeric joints with a bell and spigot joint conforming to ASTM D3212 sealed by a rubber gasket conforming to ASTM F477 so that the assembly will remain watertight under all conditions of service, including the movements resulting from the expansion, contraction, settlement and deformation of the pipe. Form bells integrally with the pipe so they contain a factory installed positively restrained gasket.

Assemble solvent cement joints using solvent cement obtained from the pipe manufacturer, which conforms to the requirements of ASTM D2564.

The assembled joint shall pass the performance tests as required in ASTM D3212.

Provide bedding and cover material according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Provide granular backfill material according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

C.1 Alignment and Grade – General

Engineer will stake sanitary sewer and all appurtenances. Provide engineer three days' notice prior to when staking is needed. Lay and install utility lines to the lines and grades specified with valves, fittings, manholes, and other appurtenances at the specified locations; spigots centered in bells; and all manholes and riser pipes plumb. Unless otherwise noted, service lines shown on the drawings are approximate.

C.2 Deviations Occasioned by Existing Improvements

Wherever significant obstructions not shown on the drawings are encountered during the progress of the work and interfere to such an extent that an alteration in the plan may be necessary, the engineer will have the authority to change and request a deviation from the line and grade or arrange with the owners of the structure for the removal, relocation or reconstruction of the obstructions. Existing items unnecessarily damaged during the performance of this contract shall be repaired and replaced at the expense of the contractor.

C.3 Caution in Excavation

Proceed with caution in the excavation and preparation of the trench so that the exact location of existing underground structures may be determined. The contractor shall be held responsible for the repair of such structures when damaged because its operations.

C.4 Excavation and Preparation of Trench – General

Dig the trench so that the pipe can be laid to the alignment and depth specified. Unless otherwise allowed by the engineer, trenches shall not be excavated more than 100 feet in advance of pipe laying.

C.5 Excavation to Grade

The trench shall be finished to the depth necessary to provide a uniform and continuous bearing and support for the pipe on the bedding material provided at every point between bell holes. Any part of the bottom of trench excavated below the specified grade shall be corrected with bedding material, thoroughly compacted in place. The bedding shall be shaped and finished with hand tools to fit the bottom quadrant to the pipe.

All excavated material shall be piled in a manner that will not endanger the work. Stockpiles not for immediate backfilling shall have erosion control measures placed around their perimeter. The work shall be conducted in such a manner that pedestrian and motor traffic is not unnecessarily disrupted. Existing fire hydrants, valve boxes and manholes shall be left unobstructed. Gutters shall be kept clear or other satisfactory provisions made for street drainage and natural water courses.

Remove excavated material immediately as excavation progresses. All undesirable and surplus material must be disposed of according to standard spec 205.3.11.

Excavation below subgrade to the bottom trench depth required for sanitary sewer work will be considered incidental to the sanitary sewer.

C.6 Dewatering

Keep the excavation clear of water while structures and appurtenances are being built, utilities are being installed, and fill and backfill is being compacted. At all times have on hand sufficient pumping equipment and machinery in good working condition and have available at all times competent workers for the operation of the pumping equipment. The dewatering systems shall not be shut down between shifts, on holidays or weekends, or during work stoppages.

All dewatering shall be done according to applicable federal, state, and local code requirements.

Under no conditions shall the work be laid in or under water. No water shall flow over the work until the joints are complete or the concrete has set. Wherever necessary, excavate in advance of the completed work, lead the water into sumps or pump wells, and provide erosion control measures to prevent water or sediment damage.

The expense for making all extra excavations necessary to prevent water from interfering with the proper construction of the work and for forming of all dams, digging sumps or pump wells, bailing and pumping, and erosion control shall be borne by contractor. Any permits necessary for the dewatering operations shall be obtained and paid for by contractor. No extra payment will be made for dewatering of the trench whether accomplished by the use of sumps and pumps, well point systems, or deep wells.

The dewatering system shall perform so that soils within the trench will not be destabilized by hydrostatic uplift pressures from adjacent groundwater. If conditions warrant, furnish and install well point systems or deep wells. Spacing and depth of well points or wells shall be adequate to lower the piezometric level to at least 2 feet below the bottom of the excavation. Additional lowering shall be provided as necessary to create a stable subgrade. The control of groundwater shall be such that softening or heaving of the bottom of excavations or formation of quick conditions or boils shall be prevented. Dewatering systems shall be designed and operated to prevent the migration or removal of soils. In areas where rock is encountered, the water level shall be kept at or below top of rock.

Take all necessary precautions during the dewatering operation to protect adjacent structures against subsidence, flooding, or other damage. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Any such facilities and structures damaged shall be repaired or replaced to the satisfaction of their owner.

Prior to dewatering, take into account the effect of the proposed dewatering operation on existing private water supply systems and make arrangements with property owners for protecting their supplies or providing alternative supply. If the dewatering operation adversely affects private water supply systems, Provide property owners with alternative potable and nonpotable supplies until dewatering operations are ceased and groundwater levels return to normal. If the water in private water supply wells is contaminated through no fault of contractor after restoration of original groundwater levels, City of Lancaster will provide measures to restore water potability. Contractor is responsible for restoration of the water supply, not its potability after restoration.

In areas where continuous operation of dewatering pumps is necessary, avoid noise disturbance to nearby residences and businesses to the greatest extent possible by using electric driven pumps, intake and exhaust silencers, or housing to minimize noise.

The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted fill or backfill, and prevent floatation or movement of all structures and pipelines.

C.7 Width of Trench

Determine and provide the minimum width necessary to provide for a safe trench in according to current OSHA standards and all other applicable standards. The top width of trench excavation shall be kept as narrow as is reasonably possible and acceptable to minimize pavement damage.

The width of trench below the outside top of the pipe shall be as shown in the following table for the sizes listed. A minimum clearance of 8 inches between the outside of the pipe barrel and the trench wall at the pipe spring line shall be maintained to allow for bedding and haunching. If shoring is used and is going to remain in place, the trench width shall be measured as the clear distance between inside faces of the shoring. Otherwise, the trench width shall be based on the width between stable trench walls after shoring is removed.

MAXIMUM WIDTH OF TRENCH BELOW TOP OF PIPE

Nominal Pipe Diameter (Inches)	Trench Width (Inches)
4	30
6	30
8	36
10	36
12	36
15	36
18 and larger	SEE SPECIAL PROVISIONS

Where the width of trench below the outside top of the pipe barrel cannot be otherwise maintained within the limits shown above, contractor, at its own expense, shall furnish an adequate pipe installation for the actual trench width which will meet design conditions. This may be accomplished by furnishing higher class bedding, a stronger pipe, concrete cradle, cap or envelope or by driving shoring prior to excavation to subgrade. Removal of shoring below the top of the pipe, if allowed by engineer, shall be gradual during backfilling.

C.8 Braced and Shored Trenches

Shore and brace open-cut trenches as required by any governing state laws and municipal ordinances and as may be necessary to protect life, property, improvements or the work. Protect underground or aboveground improvements to be left in place and, if damaged, repair or replace at the expense of the contractor.

Shoring and bracing which is to be left in place must be removed for a distance of 4 feet below the established street grade or existing surface of the street, whichever is lower, or as required to complete the work. Trench bracing, except that which is left in place, may be removed after backfilling has been completed or has been brought up to such an elevation as to permit its safe removal. Biodegradable trench bracing material shall not be left in place.

C.9 Pipe Installation – General

Prior to commencing pipe laying, notify the engineer a minimum of 10 calendar days prior to the intended date for starting work. The engineer may request the removal and relaying of pipe installed prior to notification of the engineer at the contractor's expense.

Provide and use proper implements, tools, and facilities for the safe and convenient prosecution of the work. Carefully lower all pipe, fittings, and appurtenances into the trench, in such manner as to prevent damage to materials. Under no circumstance shall pipe be dropped or rolled into the trench.

Provide materials as shown on the drawings or as specified herein.

C.10 Material Inspection

Inspect the pipe, fittings, and appurtenances for defects when delivered to the job site and prior to lowering into the trench. Remove defective material from the job site. Provide material that is clean and free of deleterious substances prior to use in the work.

C.11 Bedding and Cover

Immediately prior to placing the pipe, shape the trench bottom by hand to fit the entire bottom quadrant of the pipe. If pipe is of the bell and spigot type, provide bell holes to prevent the bell from supporting the backfill load. Bell holes shall be large enough to permit proper making of the joint but not larger than necessary to make the joint. All adjustments to line and grade must be done by scraping away or filling in bedding material under the body of the pipe. Any fill used must be bedding material. If necessary to obtain uniform contact of the pipe with the subgrade, a template shall be used to shape the bedding material. All pipe shall be bedded in bedding material at least 4 inches thick. Perform all necessary excavation and furnish all necessary material to provide this bedding.

Sanitary sewer pipe shall be bedded and covered according to the Class B bedding detail as shown on the drawings.

C.12 Pipe Laying

Lay all pipe accurately to the line and grade as designated. Preparatory to making pipe joints, all surfaces of the portions of the pipe to be joined or of the factory made jointing material shall be clean and dry. Use lubricants, primers, adhesives, and other joint material and install as recommended by the pipe or joint manufacturer's specifications. The jointing materials or factory fabricated joints shall then be placed, fitted, joined, and adjusted in such a workmanlike manner as to obtain the degree of watertightness specified. Furnish specifications from the joint and pipe manufacturer that outline procedures to be followed in making the joint to the engineer.

At times when pipe laying is not in progress, close the open ends of pipe with plugs to prevent the entry of foreign material. Remove all foreign material from the pipe prior to acceptance.

After placing a length of pipe in the trench, center the spigot end in the bell and force the pipe home and bring to correct line and grade. Secure the pipe in place with specified backfill material tamped around it except at the bells. Keep trenches water-free during bedding, laying, and jointing and for as long a period as necessary to permit proper execution of the work.

Pipe shall be brought home by using a cross member and levers or jacks. It will not be permissible to push pipe home with motor-powered excavation equipment.

Install sanitary sewer to an elevation tolerance of plus or minus 0.03 feet of the plan elevation or elevation provided on the grade sheet at any point along the main.

Install wyes, tees, and special fittings as called for on the drawings or as requested by the engineer. In general, joint wyes, tees, and specials with the same type of joint as used in the main.

In joining two dissimilar types of pipe, use manufactured adaptors and fittings.

Do not exceed joint deflection limits established by the pipe manufacturer for the pipe and joint being used.

C.13 Portable Trench Box

Whenever a portable trench box or shield is used, take special precautions so as not to pull already jointed pipe apart or leave voids around the pipe wall. Whenever possible keep the bottom edge of the box at a level approximately even with the top of pipe. Place cover material to at least the top of pipe before moving the box ahead.

C.14 Backfilling

Backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C.15 Sanitary Sewer Testing

Televisely completed sections of the sanitary sewer main. Provide a report and color video tape taken by a 360-degree radial-view camera for closeup view showing all completed work according to NASCO PACP Standards.

Conduct testing on all new pipe lines as specified below.

Utility installations that fail to meet the test limits shall be repaired in a manner acceptable to engineer. In general, defective pipe installations should be uncovered and relaid, with new pipe if necessary, to repair the defect. Under no circumstances shall defects be sealed from the interior of the pipe, and only where specifically allowed by engineer, shall defects be sealed from the exterior of the pipe.

All sanitary sewer gravity mains shall be tested for leakage after installation of laterals and placement of backfill. Leakage testing of thermoplastic sanitary sewer gravity mains shall be conducted according to ASTM F1417. Testing of rigid sanitary sewer mains shall be according to ASTM C828 for clay pipe and ASTM C1214 for concrete pipe. Keep a record of all tests performed. These records shall show the individual lengths of main tested and test results.

Sewers 18 inches and larger may be tested for leakage by infiltration or exfiltration in lieu of vacuum testing. Concrete pipe shall be tested per ASTM C969 except as modified herein. If groundwater is 2 feet or more above the sewer, measurements will be taken to determine the rate of infiltration into the sewer. If groundwater is below 2 feet above the sewer, the stretch of sewer shall be plugged at its downstream end and water shall be placed inside the sewer to provide a minimum of 4 feet of head above the upstream end.

Measurements will then be taken to determine the rate of leakage out of the sewer. Furnish all labor and materials necessary for making the tests. The allowable leakage shall be as indicated below for final acceptance.

At the conclusion of construction and before final acceptance of the Work, the downstream end of all sanitary sewer will be measured for infiltration. Allowable infiltration shall not exceed 100 gallons/inch of pipe diameter/mile/day for that portion of the Work under groundwater. If infiltration is exceeded, the leak or leaks shall be located and repaired.

Prepare all pipeline for testing and furnish all equipment, materials, tools, and labor necessary for performance of the tests. Equipment for the low pressure air test of gravity mains shall be equal in all operational aspects to that as furnished by Cherne Industrial, Inc., or United Survey, Inc.

All PVC pipe used for sanitary sewer shall be tested for vertical deflection. Maximum deflection after completion of backfilling shall be 5% of the inside pipe diameter. Testing shall not be started until trench backfill has been in place for 30 days. Keep a record of all tests performed. These records shall show the individual lengths of main tested and test results. Deflection shall be measured by pulling a mandrel with a vertical diameter equal to 95% of the pipe inside diameter through the line, after thoroughly flushing the lines to be tested. The testing device shall be controlled using cables at both the upstream and downstream manholes. The testing device must pass freely through the sewer without the use of unreasonable force on the control cables. Any line that will not pass the test cylinder will not be accepted until the faulty sections have been removed and replaced and the line retested.

Testing of utility facilities shall be completed between 8:00 AM and 3:00 PM, Monday through Friday.

C.16 Temporary Wastewater Control.

Temporary wastewater control, if needed, shall include all equipment, labor, materials, coordination, and incidentals required to control or divert, sanitary sewer flows during reconstruction of the sanitary sewer. This shall include pumps with adequate capacity of 100 g.PM and all associated equipment required to maintain a functioning sanitary sewer system during construction. At no time shall the normal flow of wastewater in sanitary sewer service laterals be disrupted without prior knowledge of the engineer. This condition shall also hold at the time of connection of an existing lateral to the new sewer main. Hoses crossing streets, driveways, parking areas, etc., are to be ramped over to prevent damage to hoses. Spillage of wastewater is to be contained within the trenches and disposed of downstream to previously installed sewer piping. No spillage of wastewater to adjacent streets, lawns, etc. shall be tolerated. If any such spillage should occur, all construction operations shall cease and the engineer and city shall be notified. Cleanup shall commence immediately and be completed prior to the resumption of any construction operations.

D Measurement

The department will measure Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 8-Inch in length by the linear foot, acceptably completed.

Where utility pipes are connected by structures, the length of the pipe considered for payment will be measured from the inside wall to inside wall of connecting structures.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.47	Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 8-Inch	LF

Payment is full compensation for pipe, wyes, tee branches; for excavation including braced and sheeted trenches, dewatering, bedding and cover material, laying, jointing, granular backfill material and backfilling, compaction, for dust control, sanitary sewer testing, and temporary wastewater control.

70. Sanitary Sewer Lateral, 6-Inch, Item SPV.0090.48.

A Description

This special provision describes the furnishing and installing new sanitary sewer laterals as shown on the drawings and according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

Sanitary Sewer laterals shall be PVC pipe as specified in Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35 of these special provisions.

Branches (tees and wyes) shall be of the same material as the main. Fittings for laterals shall be of the same material as the lateral pipe unless special fittings are needed for transition between material types or sizes or standard fittings are not manufactured. Where the wye or tee branches and laterals are of dissimilar materials, provide a transition coupling for the connection.

Tracer wire for sanitary laterals shall be solid copper wire (10 gauge) with plastic coating to all non-metallic sewer laterals. Access box shall be manufactured by Valvco, Copper Head Industries, or equal.

Provide bedding and granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Furnish and install sanitary sewer laterals as shown on the drawings or requested by engineer. Under normal circumstances, service laterals will be installed within the right-of-way or easement to serve all existing building and all platted lots. In certain cases, only wye or tee branches will be installed to vacant lots. Service laterals shall consist of a branch fitting at the main and extension of the specified lateral pipe to the end of lateral as called for on the drawings and requested. All necessary fittings shall be furnished and installed to complete the installation as shown on the drawings.

Refer to Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35 of these special provisions for additional construction requirements.

Compact and backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

Wherever shown on the drawings or requested by engineer, wye to tee branches shall be provided for use in making sanitary sewer service connections. All wye or tee branches for sanitary sewer service lateral connections to single-family residences or other structures shall be 6-inch diameter, unless directed otherwise by engineer.

Sanitary sewer service branches shall be turned so that the branch is at an angle of 30 degrees or 45 degrees with the horizontal.

Under normal conditions unless otherwise shown on the drawings, or requested by engineer, all service laterals shall be standard laterals, Type 1, as shown on the drawings. Service laterals of Types 2 through 6 may be requested by engineer to meet field conditions.

It is the general intent to install Modified Laterals, Type 2, 4, or 5 for service to homes that presently have shallow or no basements or where the depth to groundwater at the end of the lateral is shallow. Types 3 and 6 riser are only to be provided if requested by engineer.

Except for those branches that are to be used for extending sanitary sewer service laterals, wye and tee branches shall be closed with airtight stoppers blocked to withstand air test pressures.

Each service lateral shall have a tracer wire installed from the main to the property line or the location of the connection to the existing service, whichever is greater or applicable. The trace wire shall be 10 gauge solid copper with no splices. The wire shall be secured to the pipe with duct tape at a minimum of 5-foot intervals. The ends of the tracer wire shall be brought to the ground surface and stored in a tracer wire access box at a location selected by the engineer. Eighteen inches of additional wire shall be coiled at the location of the terminal box. Confirm the method of installation is compatible with the city's means of detecting the location of the service lateral. Each tracer wire shall be tested by the contractor to confirm it accurately provides the location and depth of the sewer lateral. Construct tracer wire and access box as shown on the details on the drawings.

A complete and accurate tabulation of length, depth, and location of all branches, risers, and laterals shall be kept by the contractor on cards available from engineer. Measurements shall be made from the nearest downstream manhole. Lateral installation shall meet these specifications and field conditions. Problems occurring because of failure to provide proper installation or proper records shall be corrected by contractor at its expense.

No installed lateral shall be backfilled until engineer has been notified that the lateral is complete and reasonable time is allowed for observation of the work.

D Measurement

The department will measure Sanitary Sewer Lateral, 6-Inch 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:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.48	Sanitary Sewer Lateral, 6-Inch	LF

Payment is full compensation for all bends, couplings, tracer wire installations, tracer wire access boxes; for all wye's and tee's, for all service laterals; and for preparing and providing all records; for providing bedding, granular backfill material and backfilling, compaction, disposal of excess material, cleanup, and restoring site of work.

71. Remove, Store and Reinstall Step Railing, Sta. 21+50 "J" LT Item SPV.0105.01; Remove, Store and Reinstall Step Railing, Sta. 21+30 "J" LT Item SPV.0105.02.

A Description

This special provision describes providing the removal of business step railings and the reinstallation of the same railings.

B Materials

Furnish bolts and concrete anchors necessary to reinstall the railings. The anchoring system shall be subject to the approval of the engineer.

C Construction

Prior to the removal of the concrete or wood steps, remove and store the railings without damaging the railings. After the new concrete steps have been constructed, install the previously removed railing(s) in the same location.

D Measurement

The department will measure Remove and Reinstall Step Railing 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.0105.01	Remove, Store and Reinstall Step Railing, Left and Right of Entry, Sta. 21+50 "J" LT	LS
SPV.0105.02	Remove, Store and Reinstall Step Railing, Left Of Entry, Sta. 21+30 "J" LT	LS

Payment is full compensation removing the railing(s), storing, and reinstallation of the railings, including all necessary concrete anchor and bolts required to reinstall the railing(s).

72. Rectangular Rapid Flashing Beacon, Item SPV.0105.03.

A Description

Furnish and install a solar powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies as described herein and as shown in the plans. Each assembly will be solar powered and pedestrian activated.

The assemblies shall be wirelessly controlled and multiple units shall be synchronized.

B Materials

Furnish a complete RRFB system with multiple assemblies. Each assembly may consist of, but is not limited to, light indications, wireless communication equipment, solar power equipment, and electrical components (wiring, solid-state circuit boards, etc). An assembly may include the following items:

Light Indications:

Each indication shall be a minimum size of approximately 5" wide x 2" high. Two indications shall be installed on an assembly facing each direction of approaching vehicular traffic. The two indications shall be aligned horizontally, with the longer dimension of the indication horizontal, and a minimum space between the two indications of approximately 7" measured from inside edge of one indication to inside edge of second indication.

A single indication shall be installed on an assembly facing in the direction of approaching pedestrian traffic to serve as a confirmation for the pedestrian that the system has been activated.

The outside edges of the two indications, including any housing, shall not protrude beyond the outside edges of the integral signage of the assembly.

The light intensity of the indications shall meet the minimum specifications of the Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005. Contractor shall furnish a Certificate of Compliance for this standard. Specifically, the certificate should state that the indications: "Meet photometry of jurisdictional compliance standard(s) identical to: 2 J595 Class 2 Nov08 Yellow Peak Cd and 2 J595 Class 3 Nov08 Yellow Cds/Min.

Each indication shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque. All exposed hardware shall be anti-vandal.

Signs:

- Signage is paid separately. See Permanent Sign plan details..

The assemblies must be constructed to allow the appropriate space for the installation of the signs in the field.

Control Circuit:

The control circuit shall have the capability of independently flashing up to two independent outputs. The LED light outputs and flash pattern shall be completely programmable.

The flashing output shall have 70 to 80 periods of flashing per minute with a 100 - millisecond duration on time. The output shall reach the output current as programmed for the duration of the pulse.

When two indications are mounted side-by-side, they shall have alternating but approximately equal periods of rapid pulsing light emissions and dark operation. Also, during each of the 70 to 80 flashing periods per minute, one of the indications shall emit two rapid pulses of light and the other indication shall emit three rapid pulses of light.

Flash rates with the frequencies of 5 to 30 flashes/second shall not be used to avoid inducing seizures.

When activated, the RRFB shall operate for a predetermined interval based on MUTCD procedures for timing of pedestrian clearance times for pedestrian signals. Coordinate with the department for this interval.

To prevent continuous activation of the RRFB and to allow vehicular queue clearance, the RRFB shall be programmed to prevent activation within 30 seconds of the termination of a previous activation.

The control circuit shall be installed in an IP67 NEMA rated enclosure. All circuit connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 3 feet deep for 30 minutes. Connectors shall be Deutsch DTM series.

Battery:

Battery unit shall be a 4.8 volt 14000mAH Nickel Metal Hydride (NiMH). All batteries shall be sealed in a plastic film to provide moisture and corrosion resistance.

All batteries shall operate between the temperatures of -20°C and +60°C. All battery connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 3 feet deep for 30 minutes. Connectors shall be Deutsch DTM series.

Wireless Radio:

Radio control shall operate on 900mhz frequency hopping spread spectrum network.

Radio shall integrate with communication of RRFB system control circuit to activate light indications from pushbutton input.

The Radio shall synchronize all of the remote light indications so they will turn on within 120msec of each other and remain synchronized through-out the duration of the flashing cycle.

Radio systems shall operate from 3.6 vdc to 15vdc.

Solar Panel:

The solar panel shall be up to 13.5"x15" in size and provide up to 13.5 watts peak total output. The panel shall be sized according to the weather and field conditions to maximize performance.

The solar panel shall be mounted to an aluminum plate and bracket at an angle of 45° - 60° to provide maximum output.

All fasteners used shall be anti-vandal.

All solar panel connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series.

Pushbutton:

Furnish freeze-proof ADA compliant pedestrian push buttons and push button poles made by an approved manufacturer to meet requirements of standard spec 658.

Aluminum Pole Standard and Pedestal Base:

The supporting structure (pole, breakaway transformer base, sign supports), shall be constructed of anodized aluminum and meet requirements of standard spec 657.

Concrete Base:

The concrete base and anchor bolts shall be supplied and installed to meet requirements of a Concrete Base Type 1 of standard spec 654.

Hardware:

Furnish all hardware, connections, etc to make the RRFB system fully operational.

C Construction

The RRFB system shall consist of multiple assemblies to be constructed by the contractor as shown on the plans. Make the RRFB system fully operational. Construct and assemble the system per manufacturer's instructions.

D Measurement

The department will measure Rectangular Rapid Flashing Beacon system at the USH 61/Elm Street intersection as a single lump sum unit of work for each location, acceptably completed.

E Payment

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

Item Number	Description	Unit
SPV.0105.03	Rectangular Rapid Flashing Beacon	LS

Payment is full compensation for providing and installing a fully operational RRFB system, including two RRFB flashing units in the northwest and southeast intersection quadrants, and four pedestrian push buttons, one for each quadrant of the intersection, poles, pedestal bases, concrete bases, and all mounting hardware and appurtenances.

73. Lighting Control Cabinet L1, Item SPV.0105.21; Lighting Control Cabinet L2, Item SPV.0105.22.

A Description

This special provision describes furnishing and installing lighting control cabinet and concrete base as shown on the plans and hereinafter provided.

Meter pedestal is paid under a separate bid item.

B Materials

B.1 Contactors

The contactors shall be electrically held Square D LG series in a NEMA 1 enclosure with and cover mounted Hand-Off-Auto Switch with legend plate or equal by Cutler-Hammer or GE. Provide white engraved plaque on contactor cover with "LIGHTING" or "RECEPTACLES" in ½" black text as appropriate.

B.2 Photocell

Provide a button type photocell that is rated for 1500W with 30-60 second delay between "on-off" operations.

B.3 Panelboard

The load center shall be in a NEMA 1 enclosure as manufactured by Square D, Eaton or GE. Provide copper ground and split neutral bus bars in addition to copper bus bars. Provide bolt-on, thermal-magnetic circuit breakers that clearly indicate ON, OFF or TRIPPED position in the panel.

B.4 Enclosure

The cabinet and door shall be constructed from 5052-H32 sheet aluminum alloy which has a thickness of .125 inch. External welds shall be made by using the Heliarc welding method; whereas, internal welds will be made by the wire welding method. All welds shall be neatly formed and free of cracks, blow holes and other irregularities. All inside and outside edges of the cabinet shall be free of burrs. The cabinet shall be designed with a sloped top to prevent the accumulation of water on its top surface. The door opening shall be double flanged on all four sides which increases strength around openings and keeps dirt and liquids from entering the enclosure when door is opened. A door restraint shall be provided to prevent door movement in windy conditions. The enclosure interior back shall be provided with a rigid 5052-H32 aluminum equipment mounting panel having a thickness of .125 inch.

The cabinet door will be a minimum of 80% of the front surface area and shall be hinged on the right side when facing the cabinet. The door shall be furnished with a gasket that satisfies the physical properties as found in UL508 table 21.1 and shall form a weathertight seal between the cabinet and door. The hinges shall be continuous and bolted to the cabinet and door utilizing 1/4-20 stainless steel carriage bolts and nylock nuts. The hinge shall be made of .075 inch thick stainless steel and shall have .250 inch diameter stainless steel hinge pin. The hinge pin shall be capped top and bottom by weld to render it tamperproof. Hinge leaves shall not be exposed externally when the door is closed, but hinge knuckles may protrude. All bolt holes shall be gasketed. The latching mechanism shall be a 3-point draw roller type. Pushrods shall be turned edgewise at the outwards supports and shall be .250 inch by .750 inch aluminum, minimum. Rollers shall have a minimum diameter of .875 inch and will be made of nylon. The center catch shall be fabricated from .187 inch aluminum, minimum. An operating handle shall be furnished. The handle shall be stainless steel with a 3/4 inch diameter shank. The latching handle shall have a provision for padlocking in the closed position. The lock shall be keyed dead bolt Corbin Lock or equivalent. Five keys shall be furnished with each lock. No louvers in cabinet.

The enclosure shall have a factory applied black powder coat finish. The cabinet doors and any other parts to be painted shall be treated with an iron phosphate conversion technique. After phosphatizing, the parts shall be baked to eliminate any moisture in seams. The finish coat of a Polyester Powder shall be baked 10 minutes at 400- 450 degrees F. The finish shall be commercially smooth, substantially free of flow lines, paint washout, streaks, blisters and other defects that would impair serviceability or detract from general appearance. NO manufacturer identification plaques/tags shall be visible on the exterior of the cabinet. Cabinet not to exceed size shown on the plans.

B.5 Field Wiring Termination Blocks

All connections from the field wiring to equipment in the lighting control cabinet shall be made through termination blocks. Provide quantity of channel mount NEMA rated, box lug, single terminal blocks as indicated on plans that are capable of holding #12 to #1/0 wire for power, neutral and grounding connections. The terminal blocks shall be mounted on a mounting channel (cut to appropriate length) with end anchors and an end barrier. Each terminal block shall have a typed label indicating the appropriate circuit number, neutral ('N') or ground ('G') wire connected to block; handwritten numbers and letters are not acceptable means of identification.

B.6 Surge Arrester

A surge suppressor shall protect the panel. The TVSS shall provide all modes of surge protection, meet UL1449 Latest Edition with 26KA per mode and 78KA per phase surge current, contain LED line indicators, 5-year manufacturer's warranty, and dimensions of 7.5"H x 4.25"W x 4.0"D. Connect the surge suppressor to the branch circuit breaker as indicated on the plans.

B.7 Time Clock

The time clock shall be astronomical with 4-day capacitor clock backup, -40°F to 158°F operating range, 40 year program schedule retention, LCD display, daylight saving time and leap year correction. Program to allow receptacles to turn on 1 hour prior to sunset (actual on time is through the photocontrol) and turnoff at midnight or as required by the Village. Provide a Tork DWZ100B or equal by Intermatic or Eltec.

B.8 Cabinet Light, Receptacle and Switch

The light shall be surface mount with guard, 14W, 931 lumens, 4000K LED Econolite #E-VT1L141NG or equal by Acuity or Cooper.

The receptacle shall be specification grade, GFCI, 20A, 125V, P&S 2095 Series or equal by Hubbell or Leviton.

The light switch shall be specification grade, 20A, 125V, P&S CS20AC1 Series or equal by Hubbell or Leviton.

B.9 Concrete Base

Conform to standard spec 654.2 and the plans.

C Construction

Use a UL 508 Listed Panel Builder to assemble the lighting control cabinet. Assemble the lighting control cabinet with all of its electrical components, wiring and parts in a neat and orderly fashion and as shown on the plans. Pretest the cabinet prior to shipment to the site. Panel Builder shall apply UL label inside cabinet.

Mount all equipment to panel in enclosure. Train the cables in straight horizontal and vertical directions and be parallel next to and adjacent to other cables whenever possible. Install wiring in slotted wireway between terminal strip, contactor and panelboard. Secure all remaining wiring using screw attachment type straps; adhesive type will not be allowed.

Surge arresters shall be installed to allow LED indicator(s) to be readily visible when viewing inside of cabinet. Connect the surge arrester to the branch circuit breaker as indicated on the plans.

Install photocell in the overhang of the control cabinet facing down and apply silicon caulk to maintain integrity of the enclosure.

Make all connections from the field wiring to equipment in the lighting control cabinet through termination blocks.

Construct concrete base in conformance with standard spec 654.3 and as shown on the plans.

D Measurement

The department will measure the Lighting Control Cabinet 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 items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.21	Lighting Control Cabinet L1	LS
SPV.0105.22	Lighting Control Cabinet L2	LS

Payment is full compensation for photocontrol, contactors, panel, termination blocks, surge arrester, enclosure, meter breaker pedestal, grounding, concrete base and all necessary electrical components.

74. Discontinue Existing Water Main and Services, Item SPV.0105.41.

A Description

This special provision describes the discontinuing in place the existing water main and services, and removing existing fire hydrants, valves, valve boxes, and water main appurtenances as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

All caps, fittings, and other materials required to abandon the existing water main shall be provided according to the specifications for Water Main, Ductile Iron (DI), (Size) of these specifications.

C Construction

Water main shall be discontinued in place unless otherwise noted on the drawings. Open ends of pipe not required to be capped shall be plugged with a minimum of 2 feet of concrete. Fire hydrants, valves, valve boxes, and other such structures that will not be removed completely due to construction of new facilities

shall be removed to a point 3 feet below existing or final ground surface, whichever is lower, and filled with granular backfill material compacted according to Water Main, Ductile Iron (DI), (Size) of these specifications.

All fire hydrants to be removed shall be salvaged and stockpiled at a convenient area on the project site for pickup by the City of Lancaster. Notify the city when ready for pickup.

D Measurement

The department will measure Discontinue Existing Water Main and Services 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.0105.41	Discontinue Existing Water Main and Services	LF

Payment is full compensation for providing all materials, excavation, removal of existing facilities, granular backfill material and backfilling, compaction, and disposal of excess materials; for salvaging and stockpiling existing fire hydrant, and for notifying the city when salvaged fire hydrants are ready for pickup.

75. Discontinue Existing Sanitary Sewer and Laterals, Item SPV.0105.42.

A Description

This special provision describes the discontinuation of the existing sanitary sewer in place as shown on the drawings according to the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials

All caps, fittings, plugs, and other materials required to discontinue the existing sanitary sewer shall be provided according to the specifications for Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35 of these special provisions.

Provide granular backfill according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

C Construction

Sanitary sewer and laterals shall be discontinued in place. Open ends of pipe not required to be capped shall be plugged with a minimum of 2 feet of concrete. Where existing sanitary sewer is to be discontinued at an existing sanitary sewer manhole, fasten a PVC plug at the invert to be discontinued and fill the flowline and opening with concrete.

Backfill and compact according to Water Main, Ductile Iron (DI), (Size) of these special provisions.

D Measurement

The department will measure Discontinue Existing Sanitary Sewer and Laterals 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.0105.42	Discontinue Existing Sanitary Sewer and Laterals	LF

Payment is full compensation for excavating, for providing all materials, for granular backfill material and backfilling, compaction, dewatering, and disposal of excess material.

76. Wall Modular Block Gravity Landscape (Sta. 38+57 LT), Item SPV.0165.01; Wall Modular Block Gravity Landscape (Sta. 44+40 LT) Item SPV.0165.02.

A Description

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

B Materials

B.1 Proprietary Wall Systems

The supplied wall system must be from the department's approved list of Modular Block Gravity Landscape Wall systems. Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures. The department maintains a list of pre-approved proprietary wall systems. The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The location of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid closing date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared according to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section at the following email address: DOTDLStructuresFabrication@dot.wi.gov

B.2 Design Requirements

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design is in compliance with the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit electronically to the engineer and Bureau of Structures for review and acceptance. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

The plans and shop drawings shall be prepared on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the WisDOT project identification number and structure number. Design calculations and notes shall be on 8 ½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All plans, shop drawings, and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.

The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current Standard Specifications for Highway and Structure Construction (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 in AASHTO LRFD.

Design and construct the walls according to the lines, grades, heights and dimensions shown on the plans, as herein specified, and as directed by the engineer.

Walls shall be designed for a minimum live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as shown on the plans.

A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees.

An external stability check at critical wall stations showing Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing checks is provided by the department and are provided on the wall plans.

The design of the wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. Internal stability shall also be considered at each block level. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. The width of the modular block from front face to back face of the wall shall be included in the design computations and shown on the wall shop drawings. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software program used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Wall facing units shall be designed according to AASHTO LRFD 11.10.2.3.

The minimum embedment of the wall shall be 1 foot 6 inches below finished grade, or as given on the plans. All walls shall be provided with a concrete or base aggregate leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

Wall facing units shall be installed on a concrete leveling pad or base aggregate leveling pad. The bottom row of blocks shall be horizontal and 100% of the block surface shall bear on the leveling pad.

Concrete leveling pads shall be as wide as the proposed blocks plus 6 inches, with 6 inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6-inches.

Base aggregate leveling pads shall be as wide as the blocks plus 12 inches, and the modular blocks shall be centered on the leveling pad. The minimum thickness of the leveling pad shall be 12-inches after compaction. The leveling pad shall be made from base aggregate dense 1 1/4-inch in conformance with standard spec 305.

B.3 Wall System Components

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All documentation related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

B.3.1 Wall Facing

Wall facing units shall consist of precast modular concrete blocks. Furnish concrete produced by a dry-cast or wet-cast process. Concrete for all blocks shall not contain less than 565 pounds of cementitious materials per cubic yard. The contractor may use cement conforming to standard spec 501.2.1 or may substitute for portland cement at the time of batching conforming to standard spec 501.2.6 for fly, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30% of the total cementitious content by weight.

Dry-cast concrete blocks shall be manufactured according to ASTM C1372 and this specification.

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02" and longer than 25% of the nominal height of the unit, chips larger than 1", have excessive efflorescence, or are otherwise deemed unacceptable by the engineer, shall not be used within the wall. A single block type and style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course of facing units shall be as noted on the plans, either;

- Solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material.
- A formed cast-in-place concrete cap. A cap of this type shall have texture, color, and appearance, as noted on the plans. The vertical dimension of the cap shall not be less than 3 1/2 inches. Expansion joints shall be placed in the cap at a maximum spacing of 20 feet unless noted otherwise on the plan. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Block dimensions may vary no more than $\pm 1/8$ inch from the standard values published by the manufacturer. Blocks must have a minimum depth (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. The minimum allowed thickness of any other portions of the block is 1 3/4 inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

If pins are used to align modular block facing units, they shall consist of a non-degrading polymer, or hot dipping galvanized steel and be made for the express use with the modular block units supplied, to develop mechanical interlock between facing unit block layers. Connecting pins shall be capable of holding the wall in the proper position during backfilling. Furnish documentation that establishes and substantiates the design life of such devices.

For concrete leveling pad, use Grade A, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete.

For base aggregate leveling pad conform to item 305.0120 Base Aggregate Dense 1 1/4-Inch.

B.3.2 Material Testing

Provide independent quality verification testing of project materials according to the following requirements:

Test	Method	Requirement	
		Dry-cast	Wet-cast
Compressive Strength (psi)	ASTM C140	5000 min.	4000 min.
Air Content (%)	AASHTO T152	N/A	6.0 +/-1.5
Water Absorption (%)	ASTM C140	6 max. ^[3]	N/A
Freeze-Thaw Loss (%) 40 cycles, 5 of 5 samples 50 cycles, 4 of 5 samples	ASTM C1262 ^[1]	1.0 max. ^{[2][3]} 1.5 max. ^{[2][3]}	N/A

[1] Test shall be run using a 3% saline solution and blocks greater than 45 days old.

[2] Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable.

[3] The independent testing laboratory shall control and conduct all sampling and testing. Prior to sampling, the manufacturer's representative shall identify materials by lot. Five blocks per lot shall be randomly selected for testing. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory. All pallets of blocks within a lot shall be strapped or wrapped to secure the contents and tagged or marked for identification. The engineer will reject any pallet of blocks delivered to the project without intact security measures. At no expense to the department, the contractor shall remove all rejected blocks from the project. If a random sample of five blocks of any lot tested by the department fails to meet any of the above testing requirements, the entire lot will be considered non-conforming.

The contractor and fabricator shall coordinate with the independent testing agency to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot.

The certified test report shall include the following:

- Project ID
- Production process used (dry-cast or wet-cast)
- Name and location of testing facility
- Name of sampling technician
- Lot number and lot size

Testing of project materials shall be completed not more than 18 months prior to delivery. Independent testing frequency shall not exceed 5000 blocks for dry-cast blocks and the lesser of 150 CY or one day's production for wet-cast blocks. The certified test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting certified test reports will be rejected and shall be removed from the project at no expense to the department.

Nonconforming materials will be subject to evaluation according to standard spec 106.5.

B.3.3 Backfill

Furnish and place backfill for the wall as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate Size No. 1 as given in standard spec 501.2.5.4. All backfill placed within a zone from the top of the leveling pad to the top of the

final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

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

Backfill placed between retained soil and Type A backfill shall comply with the requirements for Granular Backfill Grade 1 as contained in standard spec 209.2.2. The contractor may substitute Type A Backfill for Granular Backfill Grade 1.

C Construction

C.1 Excavation and Backfill

Excavation and preparation of the foundation for the wall and the leveling pad shall be according to standard spec 206. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the back of the wall.

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

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units or other wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the contractor and the engineer.

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

C.2 Compaction

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

Ensure adequate moisture is present in the backfill during placement and compaction to prevent segregation and to help achieve compaction.

Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks.

C.3 Wall Components

Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers according to the manufacturer's directions.

C.4 Geotechnical Information

Geotechnical data to be used in the design of the wall is given on the wall plan.

D Measurement

The department will measure Wall Modular Block Gravity Landscape by the square foot, acceptably completed, measured at the front face of wall as defined by the pay limits the contract plans show. Unless the engineer directs in writing, a change to the limits indicated on the contract plan, wall area constructed above or below these limits will not be measured for payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Wall Modular Block Gravity Landscape (Sta. 38+57 LT)	SF
SPV.0165.02.	Wall Modular Block Gravity Landscape (Sta. 44+40 LT)	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional wall system including cap, copings and leveling pad; constructing the retaining system including drainage system; providing backfill, backfilling, compacting, and performing compaction testing.

Payment limit for all walls is the line of minimum embedment per section B.2. No payment will be made for additional embedment detailed for construction purposes.

Parapets, railings, and other items above the wall cap or coping will be paid for separately. Vehicle barrier and its support will be paid separately.

Any required topsoil, fertilizer, seeding or sodding and mulch will be paid for at the contract unit price for those items.

77. **Excavation, Hauling, and Disposal of Contaminated Soil (Direct Landfill), Item SPV.0195.01; Excavation, Hauling, and Disposal of Contaminated Soil (Bioremediation), Item SPV.0195.02.**

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of contaminated soil. Contaminated soil shall be disposed of at a WDNR-approved facility. The closest WDNR-approved facilities are:

Waste Management Madison Prairie Landfill
6002 Nelson Road
Sun Prairie, WI 53590

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

A.2 Notice to the Contractor – Contaminated Soil Locations

The department completed testing for soil contamination within this project where excavation is required. Previous investigations indicate that contamination is present at the following locations:

- **Site 8 (Bailey Oil Inc., BRRTS #03-22-202848, 205 Cherry St.)** – USH 61/S Jefferson St., Station 20+15'J' to 20+50'J', from reference line to limits on LT and Cherry St. construction limits to Station 6+85'C', from reference line to limits on LT.
- **Site 12 (Kwik Trip #645, BRRTS #03-22-000764, 141 N Madison St.)** – USH 61, Station 26+50 to 27+00, from reference line to limits on RT.
- **Site 30 (Foremost Farms USA, BRRTS #02-22-001596, 932 N Madison St.)** USH 61, Station 54+50 to 57+00, from reference line to limits on LT.

Contaminated soil and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soil and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Contaminated soil at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Steve Vetsch
Wisconsin DOT, Southwest Region
Address: 2101 Wright St.
Madison, WI 53704-2559
Phone: (608) 785-9049
E-mail: Stephan.Vetsch@dot.wi.gov

Name: Dan Haak
TRC Environmental Corporation
Address: 708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: (608) 826-3628
E-mail: DHaak@trcsolutions.com

or

Name: Ted O'Connell
TRC Environmental Corporation
Address: 708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: (608) 826-3648
E-mail: TOConnell@trcsolutions.com

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation
Address: 708 Heartland Trail, Suite 3000, Madison, WI 53717
Fax: (608) 826-3941

Contact: Dan Haak
Phone: (608) 826-3628 office, (608) 886-7423 mobile
E-mail: DHaak@trcsolutions.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the disposal facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contamination management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the disposal facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also, notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Identify the WDNR-approved bioremediation and disposal facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation and disposal facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not pump or haul contaminated groundwater offsite without specific approval from the environmental consultant. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Protection of Groundwater Monitoring Wells

Groundwater monitoring wells may be present within the construction limits. Protect all groundwater monitoring wells to maintain their integrity. Adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant for the abandonment or adjustment of the wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

A.5 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Steve Vetsch with the department, at (608) 785-9049.

A.6 Health and Safety Requirements for Workers Remediating Contamination

Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products; polycyclic aromatic hydrocarbons; and metals. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

Disposal of contaminated soil at the bioremediation and disposal facility is subject to the facility's safety policies.

B (Vacant)

C Construction

Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite disposal. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material (PID readings less than 10 ppm and no observation of staining or petroleum odor, or based on existing analytical data) for reuse as fill within the construction limits as allowed, or

- Petroleum contaminated soil (significant petroleum odor, staining, and/or PID readings greater than 10 ppm) for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Contaminated soil (based on the presence of industrial fill or existing analytical data) for off-site disposal at the WDNR-licensed disposal facility, or
- Potentially contaminated for temporary stockpiling and additional characterization prior to disposal.

Directly load and haul soil designated by the environmental consultant for offsite disposal to the WDNR-approved facility. Verify that vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils so as not to contain free liquids.

When material is encountered outside the above-identified limits of known contamination that appears to have been impacted with petroleum or chemical products, or when other obvious potentially contaminated materials are encountered or material exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or when underground storage tanks are encountered, suspend excavation in that area and notify the engineer.

Groundwater is unlikely to be present within the construction limits. Employ construction methods and techniques in a manner that will minimize the need for dewatering, and if dewatering is required, minimize the volume of water generated. Take measures to limit groundwater, surface water, and precipitation from entering and exiting excavations in the areas of contamination. Such measures, which may include berming, ditching, or other means, shall be maintained until construction of utilities in the areas of contamination are complete.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Contaminated Soil in tons of contaminated soil accepted by the disposal facility as documented by weight tickets generated by the facility. Load tickets must be delivered to the engineer within 10 business days of the date on which the soil was accepted by the facility.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Excavation, Hauling, and Disposal of Contaminated Soil (Direct Landfill)	TON
SPV.0195.02	Excavation, Hauling, and Disposal of Contaminated Soil (Bioremediation)	TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation and/or disposal of contaminated soil; tipping fees; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and for dewatering of soils prior to transport, if necessary.

**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 4 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

I. RATIONALE AND SPECIAL NOTE

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

NOTE: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

II. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE [DBE] PROGRAM IMPLEMENTATION

1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
 - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
 - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance.
<https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>
 - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
 - i. Produce accurate and complete quotes.
 - ii. Understand highway plans applicable to their work.
 - iii. Understand specifications and contract requirements applicable to their work.
 - iv. Understand contracting reporting requirements.
 - (2) Wisconsin DOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
 - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:
<https://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

2. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- e. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- f. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

a. Department's DBE Evaluation Process

WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.

b. Documentation Submittal

The contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at DBE_Alert@dot.wi.gov (DBE_Alert@dot.wi.gov) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

(1) **Bidder Meets DBE Goal**

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

(2) **Bidder Does Not Meet DBE Goal**

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

c. **Bidder Fails to Submit Documentation**

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

5. Department's Criteria for Good Faith Effort

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

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

- a. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

b. Prime Contractors should:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT- approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
- (2) Prime contractors may request assistance with DBE outreach and follow-up by contacting the department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Requesting assistance with outreach is not a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: DOTDBESupportServices@dot.wi.gov.
- (3) Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
 - i. Solicit quotes from certified DBE firms who match 'possible items to subcontract' using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which you are seeking quotes to DOTDBESupportServices@dot.wi.gov.
 - ii. SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
 - (a) Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
 - (b) Solicit quotes at least 10 calendar days prior to the letting date, at least two Fridays before the letting, to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
 - (c) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up solicitation.
 - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
 - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit or insurance if requested.
 - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - (a) Email to all prospective DBE firms in relevant work areas.
 - (b) Phone call log to DBE firms who express interest via written response or call.
 - (c) Fax/letter confirmation
 - (d) Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

c. Evaluate DBE quotes Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.

- (1) Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
- (2) In striving to meet an assigned DBE contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

- (3) **Special Circumstance** - Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
 - i. Compare bid items common to both quotes, noting the reasonableness in the price comparison.
 - ii. Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- d. Immediately after notification of contract award, the prime submits all **'Commitment to Subcontract'** forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
 - (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
 - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
 - (3) Photocopies or electronic copies of all written solicitations to DBE's. A printed copy of SBN solicitation is acceptable.
 - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
 - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

6. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE, a prime contractor and the regular dealer of materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE in cases where the prime has submitted the DBE and material for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
 - (1) Request should be made when the DBE Commitment form or Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
 - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
 - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
 - (4) The joint check for supplies must be strictly for the cost of supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following.
 - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
 - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor,
 - (1) The prime agrees to furnish the check used for the payment of materials/supplies under the contract.
 - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractors negotiated unit price.

7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 5 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

8. Department's Criteria for DBE Participation

Directory of DBE firms

- a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:
<https://wisconsin.gov/Documents/doing-business/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

9. Counting DBE Participation

Assessing DBE Work

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE certified firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he is committing/contracting the DBE to do. Note that the department encourages the prime contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE is performing a commercially useful function if the following conditions are met:
 - (1) For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
 - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

11. Credit Evaluation for Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at <https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

12. Credit Evaluation for Manufacturers, Suppliers, Brokers

The department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The department will count the material and supplies that a DBE provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, count **100%** percent of the cost of the materials or supplies toward DBE goals.

b. Regular Dealers of Material and/or Supplies

- (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
 - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

c. Brokers, Transaction Expeditors, Packagers, Manufacturers Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit; however, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives or other persons who arrange or expedite transactions.
- (2) Brokerage fees have historically been calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site.
- (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.

When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and documentation of the calculations used as the basis for the purchase agreement, subcontract or invoice.

WisDOT recognizes that the amount on the Attachment 'A' form may be more or less than the amount on the invoice. Please respond to the following questions and submit with your DBE Commitment Form.

1. What is the product or material?
2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
3. Which contract line items were referenced to develop this quote?
4. What is the amount of material or product used on the project?

13. Credit Evaluation for DBE Primes

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

14. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces for DBE credit.

15. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be evaluated and confirmed by the DBE Office for any contracts on which the mentor protégé team identifies itself to the DBE Office as a current participant of the Mentor Protégé Program.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

16. DBE Replacement or Termination

Contractual Requirement

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

Contractor Considerations

- a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason or is terminated from a contract, the prime contractor is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
 - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
 - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
 - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent* to request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
 - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
 - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days to respond, in writing. **EXCEPTION:** The prime contractor must provide a verifiable reason for a response period shorter than five days. For example a WisDOT project manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
 - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

The Request to Replace or Terminate a DBE

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

1. Contract ID number.
2. Wisconsin DOT Contract Project Manager name and contact information.
3. DBE name and work type and/or NAICS code.
4. Contract's progress schedule.
5. Reason(s) for requesting that the DBE be replaced or terminated.
6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

Examples of Good Causes to Replace a DBE according to the federal DBE program guidelines {49 CFR part 26.53}

- The listed DBE subcontractor fails or refuses to execute a written contract.
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor.
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Evaluation and Response to the Request

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at DBE_Alert@dot.wi.gov or by calling 608-267-3849.

17. DBE Utilization beyond the approved DBE Commitment Form DT1506

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- a. Send an email to the DBE Engineer at DBE_Alert@dot.wi.gov describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally.

If the scope change added work for a participating DBE; list the date and reason for the scope change.

- b. Forward a complete, signed Attachment 'A' form to the DBE Office at DBE_Alert@dot.wi.gov. A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.

The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

18. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

19. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A

Sample Contractor Solicitation Letter Page 1

This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS
FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR
SUBJECT: REQUEST FOR DBE QUOTES
LET DATE & TIME
DATE: MONTH DAY YEAR
CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. **Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.** We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

All questions should be directed to:

Project Manager, John Doe,

Phone: (000) 123-4567

Email: Joe@joetheplumber.com

Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- .. Yes, we will be quoting on the projects and items listed below
- .. No, we are not interested in quoting on the letting or its items referenced below
- .. Please take our name off your monthly DBE contact list
- .. We have questions about quoting this letting. Please have someone contact me at this number

Prime Contractor 's Contact Person

DBE Contractor Contact Person

Phone: _____

Fax: _____

Email: _____

Phone _____

Fax _____

Email _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B

BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Ø Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Ø Participate in speed networking and mosaic exercises as arranged by DBE office.
- Ø Host information sessions not directly associated with a bid letting.
- Ø Participate in a formal mentor protégé or joint venture with a DBE firm.
- Ø Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Ø Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods.
- Ø Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Ø Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Ø Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Ø Participate in DBE office assessment programs.
- Ø Participate on advisory and mega-project committees.
- Ø Sign up to receive the DBE Contracting Update.
- Ø Consider membership in relevant industry or contractor organizations.
- Ø Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C

Types of Efforts considered in determining GFE

This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities.
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively.
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal.
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract.
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D

Good Faith Effort Evaluation Guidance

Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
 - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - D.
 - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a

contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
 - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
 - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E

Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription.

Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request.
 - d. Add attachments to sub-quotes.
3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
 - c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
 - c. Add attachments to a sub-quote.
 - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime.
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to www.bidx.com and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588.

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

107.17.1 General

Replace paragraph seven with the following effective with the December 2018 letting:

- (7) Have a professional engineer registered in the state of Wisconsin sign and seal the shop drawings. At least 30 calendar days before starting falsework, form, or shoring construction; submit a PDF file of shop drawings to the railroad's chief engineering officer and to the engineer. The engineer and the railroad may review the shop drawings. If the engineer or the railroad finds the shop drawings unsatisfactory, the contractor shall make the required changes. A satisfactory shop drawing review does not relieve the contractor of responsibility and liability for the structural integrity and proper functioning of the falsework, forms, or shoring.
-

305.2.1 General

Replace paragraph two with the following effective with the December 2018 letting:

- (2) Where the contract specifies or allows 1 1/4-inch base, do not place reclaimed asphalt, reprocessed material, or blended materials below virgin aggregate materials unless the contract specifies or the engineer allows in writing. The department will allow virgin aggregate above reclaimed asphalt, reprocessed material, or blended materials in shoulder areas adjacent to concrete pavement.
-

420.3.2.1 General

Replace paragraph one with the following effective with the December 2018 letting:

- (1) Use self-propelled grinding machines with depth, grade, and slope controls designed for grinding and texturing concrete. Equip grinding machines with diamond blades and a vacuuming system capable of removing liquid and solid residue from the ground surface. Shroud the machine to prevent discharging loosened material into adjacent work areas or live traffic lanes. Provide the specified effective wheelbase, defined as the center of the front to center of the rear main support wheels.
-

420.3.2.2 Continuous Grinding

Replace paragraph one with the following effective with the December 2018 letting:

- (1) Under the Continuous Diamond Grinding Concrete Pavement bid item, ensure that the grinding machine, including the grinding head, weighs 35,000 pounds or more, will grind a strip at least 4 feet wide, and has an effective wheel base of 25 feet or more. For pavements with a design speed less than 40 miles per hour and areas difficult to access, the contractor may use equipment with an effective wheel base of 12 feet or more.
-

450.3.2.8 Jointing

Replace paragraphs three through five with the following effective with the December 2018 letting:

- (3) Construct notched wedge longitudinal joints for mainline paving if the pavement thickness conforms to the minimums specified in 460.3.2, unless the engineer directs or allows an alternate joint. Construct the wedge using a slope no steeper than 3:1. Extend the wedge 12 inches beyond the normal lane width, or as the engineer directs. Ensure that the wedge for all layers directly overlaps and slopes in the same direction.
- (4) Locate the joint at the pavement centerline for 2-lane roadways, or at lane lines if the roadway has more than 2 lanes. Construct a vertical notch 1/2-inch to 3/4-inch high on the centerline or lane line at the top of each wedge. Place a 1/2-inch to 3/4-inch notch at the outside bottom edge of the wedge after compacting each layer. Align the finished longitudinal joint line of the upper layer with the centerline or lane line.
- (5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted

steel side roller wheel the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.

455.2.4.3 Emulsified Asphalts

Replace paragraph two with the following effective with the December 2018 letting:

- (2) The bill of lading for emulsified asphalts shall indicate the asphalt content of the original emulsion and dilution rate of the additional water added to the original emulsion. If undiluted samples are not available, test the diluted material and modify AASHTO M140, M208, or M316 to reflect properties resulting from dilution of the asphalt.
-

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the December 2018 letting:

- (3) The department will perform testing conforming to the following standards:
 - Bulk specific gravity (G_{mb}) of the compacted mixture according to AASHTO T166.
 - Maximum specific gravity (G_{mm}) according to AASHTO T209.
 - Air voids (V_a) by calculation according to AASHTO T269.
 - VMA by calculation according to AASHTO R35.
 - Asphalt content by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164, or Asphalt Analyzer™ according to manufacturer recommendations.
-

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2018 letting:

- (1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:
 - V_a is within a range of 2.0 to 4.3 percent. For SMA, V_a is within a range of 2.7 to 5.3 percent.
 - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.
 - Asphalt content is within minus 0.3 percent of the JMF.
-

460.2.8.3.1.7 Dispute Resolution

Replace paragraph one with the following effective with the December 2018 letting:

- (1) When QV test results do not meet the specified limits for 100 percent pay, the bureau's AASHTO accredited laboratory and certified personnel will referee test the retained portion of the QV sample and the retained portion of the required forward and backward QC retained samples according to CMM 8-36.
-

460.5.2.1 General

Replace paragraphs five and six with the following effective with the December 2018 letting:

- (5) The department will reduce pay for nonconforming QMP HMA mixtures as specified in 460.2.8.2.1.7, starting from the stop point to the point when the running average of 4 is back inside the warning limits. The engineer will determine the quantity of material subject to pay reduction based on the testing data and an inspection of the completed pavement. The department will reduce pay as follows:

PAYMENT FOR MIXTURE^{[1] [2] [3]}

ITEM	PRODUCED WITHIN WARNING BANDS	PRODUCED OUTSIDE JMF LIMITS
Gradation	90%	75%
Asphalt Content ^[4]	—	—
Air Voids	70%	50%
VMA	90%	75%

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

^[2] Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. If the quantity of material subject to pay adjustment based on the running average of 4 is also subject to pay adjustment resulting from dispute resolution in accordance with 460.2.8.3.1.7, the department will apply the single pay adjustment resulting in the lowest percent pay.

^[3] In addition to any pay adjustment listed in the table above, the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.

^[4] The department will not adjust pay based on a running average of 4 asphalt content tests; however, corrective action will be applied to nonconforming material according to 460.2.8.2.1.7.

- (6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:
- Va greater than 5.0 or less than 1.5.
 - VMA more than 1.0 below the minimum allowed in table 460-1.
 - AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

506.3.2 Shop Drawings

Replace paragraph four with the following effective with the December 2018 letting:

- (4) Ensure that the fabricator submits a PDF file of shop drawings for railroad structures to the railroad company's chief engineering officer upon contract completion.

650.3.1 General

Replace the entire text with the following effective with the December 2018 letting:

- (1) Department and contractor responsibilities for construction staking are specified in 105.6. Conform to 105.6 and the additional requirements specified here in 650.3 for the individual contractor-staking bid items the contract includes.
- (2) Protect and preserve known property and survey marks and land monuments as specified in 107.11.3. The contract may require related work under the 621 bid items.
- (3) Obtain or calculate benchmark data, grades, and alignment from plan information. The engineer will furnish data for the horizontal and vertical control points, control point ties, horizontal alignments, profiles, and elevations. Reestablish, set additional, and maintain the horizontal and vertical control points and control point ties, as needed for bid items.
- (4) Check horizontal and vertical information including but not limited to alignments, locations, elevations, and dimensions, that either the plans show or the engineer provides, for compatibility with existing field conditions. Conduct similar compatibility checks and accuracy checks of horizontal and vertical positions either the department or the contractor establishes in the field.
- (5) Perform survey work using conventional methods, or AMG methods capable of achieving the lines and grades the plans show for the work in question. Establish additional benchmarks and control points as necessary to support the method of operation.

650.3.1.1 Staking

- (1) Furnish, set, reference, and maintain stakes and markings necessary to establish the alignment, location, benchmarks, elevations, and continuous profile-grades for road and structure work as needed for bid items. Supervise and coordinate construction staking.
- (2) Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. Make the survey notes and computations available to the engineer within 24 hours, upon request, as the work progresses.
- (3) Furnish surveying equipment, stakes, flags, pins, lath, whiskers, and other materials necessary to perform this work, subject to the engineer's approval.

650.3.1.2 Automated Machine Guidance**650.3.1.2.1 General**

- (1) The contractor may substitute AMG for conventional staking on all or part of the work under the individual staking bid items. Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Revert to conventional staking methods for all or part of the work at any point during construction if AMG is producing unacceptable results.

650.3.1.2.2 AMG Work Plan

- (1) Submit a comprehensive written AMG work plan for department review at least 5 business days before the preconstruction conference. In that plan discuss how AMG technology will be integrated into other technologies employed on the project. List the staking bid items that will have work performed using AMG and, for each bid item listed, include the following:
 1. Designate which portions of the contract will be done using AMG and which portions will be done using conventional staking.
 2. Designate a single staff person as the primary contact for AMG technology issues.
 3. List and map the primary and secondary control points required under 105.6.2 enveloping the site.
 4. Describe the contractor's quality control procedures. Include the frequency and type of checks performed to ensure that the work conforms to the contract plans.
- (2) The engineer will review the plan to determine if it conforms to the contract. Do not perform AMG work until the engineer approves the governing portion of the AMG workplan. Perform the work as the contractor's AMG work plan provides. Update the plan as necessary.

650.3.1.2.3 Geometric and Surface Information**650.3.1.2.3.1 Department Responsibilities**

- (1) At any time after the contract is awarded the contractor may request the contractor data packet. The department will provide the packet within 5 business days of receiving the contractor's request.

650.3.1.2.3.2 Contractor Responsibilities

- (1) Develop and maintain a contractor construction model for areas of the project employing AMG. Confirm that the resulting model agrees with the contract plans.
- (2) If the engineer requests, provide the construction model to the department in LandXML or other engineer-approved format.

650.3.1.2.4 Managing and Updating Information

- (1) Notify the department of any errors or discrepancies in department-provided information. The department will determine what revisions may be required. The department will revise the contract plans, if necessary, to address errors or discrepancies that the contractor identifies. The department will provide the best available information related to those contract plan revisions.
- (2) Revise the construction model as required to support construction operations and to reflect any contract plan revisions the department makes. Perform checks to confirm that the revised construction model agrees with the contract plan revisions. If the engineer requests, provide construction model updates to the engineer. The department will pay for costs incurred to incorporate contract plan revisions as extra work.

650.3.1.2.5 Construction Checks

- (1) Check the work against the plan elevation at randomly selected points on cross-sections located at stations evenly divisible by 100 at the frequency the engineer approved as a part of the AMG work plan. Submit the results of these random checks to the engineer daily. Notify the engineer immediately if a check exceeds the tolerances specified in 650.3.1.2.6 below.
- (2) Check the work at additional points as the engineer directs. The department may conduct periodic independent checks.

650.3.1.2.6 Construction Tolerances

- (1) Ensure that the finished work vertically matches existing or other completed features. Ensure that the work conforms to revised plan elevations as follows:
 - Subgrade : +/- 0.10 feet.
 - Base : within the tolerance specified in 301.3.4.1(2).

650.3.3 Subgrade

Retitle and replace the entire text with the following effective with the December 2018 letting:

650.3.3 Subgrade Staking

- (1) Set construction stakes or marks at intervals of 100 feet, or more frequently, for rural sections and at intervals of 50 feet, or more frequently, for urban sections. Include additional stakes at each cross-section as necessary to match the plan cross-section, achieve the required accuracy, and to support construction operations. Also set and maintain stakes as necessary to establish the horizontal and vertical positions of intersecting road radii, auxiliary lanes, horizontal and vertical curves, and curve transitions. Locate stakes to within 0.25 feet horizontally and establish the grade elevation to within 0.03 feet vertically.

Errata

520.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

- (5) Provide joint ties on the upstream and downstream ends of circular and horizontal elliptical concrete culvert and concrete cattle pass installations. Tie the next 3 pipe joints or, if using apron endwalls, the endwall joint and the last 2 pipe joints. Ties are not required on culverts with masonry endwalls unless the plans show otherwise.

608.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

- (5) Provide joint ties on concrete storm sewer system infall and outfall pipes. Tie the last 3 pipe joints or, if using apron endwalls, the endwall joint and the next 2 pipe joints. Ties are not required on installations with masonry endwalls unless the plans show otherwise.

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1st Tier and DBE Payments During Construction
1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
 2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
 3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
 4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
 5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
 6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, including all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

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

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

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

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

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

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

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

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<https://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses*. “Use of United States-flag vessels:”

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”

(b) *Contractor and Subcontractor Clauses*. “Use of United States-flag vessels: The contractor agrees—”

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS
FOR PROJECTS WITH FEDERAL AID**

I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH_Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

- a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

General Decision Number: WI180010 10/12/2018 WI10

Superseded General Decision Number: WI20170010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	05/18/2018
2	05/25/2018
3	06/15/2018
4	06/22/2018
5	07/20/2018
6	08/03/2018
7	08/31/2018
8	09/28/2018
9	10/12/2018

BRWI0001-002 06/01/2017

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.03	22.40

BRWI0002-002 06/01/2017		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.07	20.67

BRWI0002-005 06/01/2017		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 34.87	21.46

BRWI0003-002 06/01/2017		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.41	22.02

BRWI0004-002 06/01/2017		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 36.79	22.99

BRWI0006-002 06/01/2017		

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.25	21.18

BRWI0007-002 06/01/2017		

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.77	22.37

BRWI0008-002 06/01/2017		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 37.25	22.10

BRWI0011-002 06/01/2016		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.22	20.57

BRWI0019-002 06/01/2017		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 32.17	22.26

BRWI0034-002 06/01/2017		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.74	22.40

CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39

CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except

area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00

 CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

 CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

 CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

 CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

 ELEC0014-002 06/04/2018

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPLEALEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.21	20.46

 ELEC0014-007 06/05/2018

REMAINING COUNTIES

Rates	Fringes
-------	---------

Teledata System Installer
Installer/Technician.....\$ 26.25 13.92

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2017

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 38.50	30%+10.57

ELEC0158-002 06/04/2018

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausaukee and area South thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.50	19.68

ELEC0159-003 06/01/2018

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
Electricians:.....	\$ 39.04	21.56

ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under \$180,000.....	\$ 30.18	18.42

ELEC0242-005 05/16/2018

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17

* ELEC0388-002 06/03/2018

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
--	-------	---------

Electricians:.....	\$ 32.55	19.02

* ELEC0430-002 06/01/2018		
RACINE COUNTY (Except Burlington Township)		
	Rates	Fringes
Electricians:.....	\$ 38.78	21.49

ELEC0494-005 06/01/2018		
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 39.31	24.69

ELEC0494-006 06/01/2018		
CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 33.40	22.08

ELEC0494-013 06/01/2018		
DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES		
	Rates	Fringes
Sound & Communications		
Installer.....	\$ 19.56	17.74
Technician.....	\$ 28.99	19.15
<p>Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products</p>		

ELEC0577-003 06/01/2018		
CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES		
	Rates	Fringes
Electricians:.....	\$ 32.18	18.59

ELEC0890-003 06/01/2018		
DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES		

	Rates	Fringes
Electricians:.....	\$ 34.15	19.63

ELEC0953-001 07/01/2015

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 42.14	32% + 5.00
(2) Heavy Equipment Operator.....	\$ 40.03	32% + 5.00
(3) Equipment Operator.....	\$ 33.71	32% + 5.00
(4) Heavy Groundman Driver..	\$ 26.78	14.11
(5) Light Groundman Driver..	\$ 24.86	13.45
(6) Groundsman.....	\$ 23.18	32% + 5.00

ENGI0139-005 06/04/2018

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 40.72	22.10
Group 2.....	\$ 40.22	22.10
Group 3.....	\$ 39.72	22.10
Group 4.....	\$ 39.46	22.10
Group 5.....	\$ 39.17	22.10
Group 6.....	\$ 33.27	22.10

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" protection - \$3.00 per hour
EPA Level "B" protection - \$2.00 per hour
EPA Level "C" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and
extractor; heavy equipment, leadman; tank car heaters;
stump chipper; curb machine operator; Concrete
proportioning plants; generators; mudjack operator; rock
breaker; crusher or screening plant; screed (milling
machine); automatic belt conveyor and surge bin; pug mill
operator; Oiler, pump (over 3 inches); Drilling Machine
Tender.

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2017

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,
MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO
COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 31.24	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor
Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2017

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3),
WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor
Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2017

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST,
GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA,
JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON,
MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern
area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA,
WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 34.50	23.82

IRON0498-005 06/01/2016

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and
WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 36.29	30.77

IRON0512-008 05/01/2017

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,
PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU
COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 36.50	26.45

IRON0512-021 05/01/2017

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.04	26.45

LABO0113-002 06/04/2018

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.88	21.76
Group 2.....	\$ 28.03	21.76
Group 3.....	\$ 28.23	21.76
Group 4.....	\$ 28.38	21.76
Group 5.....	\$ 28.53	21.76
Group 6.....	\$ 24.37	21.76

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LABO0113-003 06/04/2018

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 27.13	21.76
Group 2.....	\$ 27.23	21.76
Group 3.....	\$ 27.28	21.76
Group 4.....	\$ 27.48	21.76
Group 5.....	\$ 27.33	21.76
Group 6.....	\$ 24.22	21.76

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LABO0113-011 06/04/2018

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 26.94	21.76
Group 2.....	\$ 27.09	21.76
Group 3.....	\$ 27.29	21.76
Group 4.....	\$ 27.26	21.76
Group 5.....	\$ 27.59	21.76
Group 6.....	\$ 24.08	21.76

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LABO0140-002 06/04/2018

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 31.80	17.20
Group 2.....	\$ 31.90	17.20
Group 3.....	\$ 31.95	17.20
Group 4.....	\$ 32.15	17.20
Group 5.....	\$ 32.00	17.20
Group 6.....	\$ 28.43	17.20

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter

(Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LABO0464-003 06/04/2018

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.08	17..20
Group 2.....	\$ 32.18	17..20
Group 3.....	\$ 32.23	17..20
Group 4.....	\$ 32.43	17..20
Group 5.....	\$ 32.28	17..20
Group 6.....	\$ 28.43	17..20

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;
Demolition and Wrecking Laborer; Guard Rail, Fence, and
Bridge Builder; Landscaper; Multiplate Culvert Assembler;
Stone Handler; Bituminous Worker (Shoveler, Loader, and
Utility Man); Batch Truck Dumper or Cement Handler;
Bituminous Worker (Dumper, Ironer, Smoother, and Tamper);
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler
(Pavement); Vibrator or Tamper Operator (Mechanical Hand
Operated); Chain Saw Operator; Demolition Burning Torch
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

PAIN0108-002 06/01/2017

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 33.74	18.95
Spray & Sandblast.....	\$ 34.74	18.95

PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,
SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

PAIN0781-002 06/01/2017

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 30.60	22.80
Brush.....	\$ 30.25	22.80
Spray & Sandblast.....	\$ 31.00	22.80

PAIN0802-002 06/01/2017

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 28.25	17.72

PREMIUM PAY:
Structural Steel, Spray, Bridges = \$1.00 additional per
hour.

PAIN0802-003 06/01/2017

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN
LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,
MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,
OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,
WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.89	12.05

PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

PAIN1011-002 06/01/2017

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 24.86	12.23

PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2018

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 28.12	21.20
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 28.27	21.20

WELL DRILLER.....	\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

August 2018

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.



Proposal Schedule of Items

Page 1 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0120 Clearing	312.000 ID	_____.	_____.
0004	201.0220 Grubbing	348.000 ID	_____.	_____.
0006	203.0100 Removing Small Pipe Culverts **P**	2.000 EACH	_____.	_____.
0008	204.0100 Removing Pavement	27,527.000 SY	_____.	_____.
0010	204.0110 Removing Asphaltic Surface	1,415.000 SY	_____.	_____.
0012	204.0150 Removing Curb & Gutter **P**	3,086.000 LF	_____.	_____.
0014	204.0155 Removing Concrete Sidewalk **P**	6,419.000 SY	_____.	_____.
0016	204.0185 Removing Masonry	2.000 CY	_____.	_____.
0018	204.0195 Removing Concrete Bases **P**	56.000 EACH	_____.	_____.
0020	204.0210 Removing Manholes **P**	10.000 EACH	_____.	_____.
0022	204.0220 Removing Inlets **P**	38.000 EACH	_____.	_____.
0024	204.0245 Removing Storm Sewer (size) 01. 12-Inch	864.000 LF	_____.	_____.
0026	204.0245 Removing Storm Sewer (size) 02. 15-Inch	113.000 LF	_____.	_____.
0028	204.0245 Removing Storm Sewer (size) 03. 18-Inch	807.000 LF	_____.	_____.
0030	204.0245 Removing Storm Sewer (size) 04. 21-Inch	75.000 LF	_____.	_____.



Proposal Schedule of Items

Page 2 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0245 Removing Storm Sewer (size) 05. 24-Inch	541.000 LF	_____.	_____.
0034	204.0245 Removing Storm Sewer (size) 06. 30-Inch	210.000 LF	_____.	_____.
0036	204.0245 Removing Storm Sewer (size) 07. 36-Inch	69.000 LF	_____.	_____.
0038	204.9165.S Removing (item description) 01. Removing Concrete Steps	115.000 SF	_____.	_____.
0040	204.9165.S Removing (item description) 02. Removing Wood Steps	22.000 SF	_____.	_____.
0042	205.0100 Excavation Common	30,557.000 CY	_____.	_____.
0044	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 1650-07-71	LS	LUMP SUM	_____.
0046	213.0100 Finishing Roadway (project) 01. 1650-07-71	1.000 EACH	_____.	_____.
0048	305.0110 Base Aggregate Dense 3/4-Inch	1,768.000 TON	_____.	_____.
0050	305.0120 Base Aggregate Dense 1 1/4-Inch	14,316.000 TON	_____.	_____.
0052	312.0110 Select Crushed Material	25,113.000 TON	_____.	_____.
0054	405.0100 Coloring Concrete WisDOT Red	179.000 CY	_____.	_____.
0056	405.1000 Stamping Colored Concrete	90.000 CY	_____.	_____.
0058	415.0085 Concrete Pavement 8 1/2-Inch **P**	24,652.000 SY	_____.	_____.
0060	415.0210 Concrete Pavement Gaps	4.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 3 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	415.4100 Concrete Pavement Joint Filling	24,652.000 SY	_____.	_____.
0064	415.5110.S Concrete Pavement Joint Layout	1.000 LS	_____.	_____.
0066	415.6000.S Rout and Seal	182.000 LF	_____.	_____.
0068	416.0160 Concrete Driveway 6-Inch	1,495.000 SY	_____.	_____.
0070	416.0180 Concrete Driveway 8-Inch	71.000 SY	_____.	_____.
0072	416.0620 Drilled Dowel Bars	62.000 EACH	_____.	_____.
0074	450.4000 HMA Cold Weather Paving	83.000 TON	_____.	_____.
0076	455.0605 Tack Coat	299.000 GAL	_____.	_____.
0078	460.2000 Incentive Density HMA Pavement	340.000 DOL	1.00000	340.00
0080	460.6224 HMA Pavement 4 MT 58-28 S	525.000 TON	_____.	_____.
0082	465.0105 Asphaltic Surface	405.000 TON	_____.	_____.
0084	465.0120 Asphaltic Surface Driveways and Field Entrances	288.000 TON	_____.	_____.
0086	520.8000 Concrete Collars for Pipe	2.000 EACH	_____.	_____.
0088	522.0415 Culvert Pipe Reinforced Concrete Class IV 15-Inch	50.000 LF	_____.	_____.
0090	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	1.000 EACH	_____.	_____.
0092	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 4 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	522.2419 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	57.000 LF	_____.	_____.
0096	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	2.000 EACH	_____.	_____.
0098	601.0409 Concrete Curb & Gutter 30-Inch Type A **P**	7,596.000 LF	_____.	_____.
0100	601.0411 Concrete Curb & Gutter 30-Inch Type D **P**	1,554.000 LF	_____.	_____.
0102	601.0452 Concrete Curb & Gutter Integral 30-Inch Type D **P**	2,599.000 LF	_____.	_____.
0104	601.0600 Concrete Curb Pedestrian	233.000 LF	_____.	_____.
0106	602.0410 Concrete Sidewalk 5-Inch **P**	63,764.000 SF	_____.	_____.
0108	602.0515 Curb Ramp Detectable Warning Field Natural Patina	500.000 SF	_____.	_____.
0110	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	81.000 SF	_____.	_____.
0112	602.1500 Concrete Steps	135.000 SF	_____.	_____.
0114	606.0200 Riprap Medium	11.000 CY	_____.	_____.
0116	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	1,364.000 LF	_____.	_____.
0118	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	90.000 LF	_____.	_____.



Proposal Schedule of Items

Page 5 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0120	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	1,053.000 LF	_____.	_____.
0122	608.0421 Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	77.000 LF	_____.	_____.
0124	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	1,560.000 LF	_____.	_____.
0126	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	212.000 LF	_____.	_____.
0128	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	43.000 LF	_____.	_____.
0130	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	74.000 LF	_____.	_____.
0132	608.2424 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	184.000 LF	_____.	_____.
0134	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	238.000 LF	_____.	_____.
0136	611.0530 Manhole Covers Type J	20.000 EACH	_____.	_____.
0138	611.0545 Manhole Covers Type L	16.000 EACH	_____.	_____.
0140	611.0624 Inlet Covers Type H	59.000 EACH	_____.	_____.
0142	611.2004 Manholes 4-FT Diameter	6.000 EACH	_____.	_____.
0144	611.2005 Manholes 5-FT Diameter	12.000 EACH	_____.	_____.
0146	611.2006 Manholes 6-FT Diameter	3.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 6 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0148	611.2007 Manholes 7-FT Diameter	2.000 EACH	_____.	_____.
0150	611.2008 Manholes 8-FT Diameter	2.000 EACH	_____.	_____.
0152	611.3004 Inlets 4-FT Diameter	7.000 EACH	_____.	_____.
0154	611.3230 Inlets 2x3-FT	42.000 EACH	_____.	_____.
0156	611.8110 Adjusting Manhole Covers	1.000 EACH	_____.	_____.
0158	612.0106 Pipe Underdrain 6-Inch	2,390.000 LF	_____.	_____.
0160	612.0206 Pipe Underdrain Unperforated 6-Inch	28.000 LF	_____.	_____.
0162	616.0700.S Fence Safety	30.000 LF	_____.	_____.
0164	618.0100 Maintenance And Repair of Haul Roads (project) 01. 1650-07-71	1.000 EACH	_____.	_____.
0166	619.1000 Mobilization	1.000 EACH	_____.	_____.
0168	623.0200 Dust Control Surface Treatment	36,814.000 SY	_____.	_____.
0170	624.0100 Water	259.000 MGAL	_____.	_____.
0172	625.0500 Salvaged Topsoil	4,910.000 SY	_____.	_____.
0174	627.0200 Mulching	1,250.000 SY	_____.	_____.
0176	628.1504 Silt Fence	1,470.000 LF	_____.	_____.
0178	628.1520 Silt Fence Maintenance	1,470.000 LF	_____.	_____.



Proposal Schedule of Items

Page 7 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0180	628.1905 Mobilizations Erosion Control	10.000 EACH	_____.	_____.
0182	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH	_____.	_____.
0184	628.2004 Erosion Mat Class I Type B	950.000 SY	_____.	_____.
0186	628.2006 Erosion Mat Urban Class I Type A	3,670.000 SY	_____.	_____.
0188	628.6510 Soil Stabilizer Type B	0.600 ACRE	_____.	_____.
0190	628.7005 Inlet Protection Type A	30.000 EACH	_____.	_____.
0192	628.7015 Inlet Protection Type C	81.000 EACH	_____.	_____.
0194	628.7504 Temporary Ditch Checks	20.000 LF	_____.	_____.
0196	628.7555 Culvert Pipe Checks	10.000 EACH	_____.	_____.
0198	628.7560 Tracking Pads	6.000 EACH	_____.	_____.
0200	628.7570 Rock Bags	20.000 EACH	_____.	_____.
0202	629.0210 Fertilizer Type B	5.000 CWT	_____.	_____.
0204	630.0140 Seeding Mixture No. 40	100.000 LB	_____.	_____.
0206	630.0200 Seeding Temporary	30.000 LB	_____.	_____.
0208	631.0300 Sod Water	60.000 MGAL	_____.	_____.
0210	631.1000 Sod Lawn	2,615.000 SY	_____.	_____.
0212	633.5200 Markers Culvert End	5.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 8 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	634.0614 Posts Wood 4x6-Inch X 14-FT	27.000 EACH	_____.	_____.
0216	634.0616 Posts Wood 4x6-Inch X 16-FT	31.000 EACH	_____.	_____.
0218	634.0618 Posts Wood 4x6-Inch X 18-FT	13.000 EACH	_____.	_____.
0220	634.0620 Posts Wood 4x6-Inch X 20-FT	4.000 EACH	_____.	_____.
0222	637.2210 Signs Type II Reflective H	972.440 SF	_____.	_____.
0224	637.2230 Signs Type II Reflective F	171.250 SF	_____.	_____.
0226	638.2102 Moving Signs Type II	4.000 EACH	_____.	_____.
0228	638.2602 Removing Signs Type II	111.000 EACH	_____.	_____.
0230	638.3000 Removing Small Sign Supports	44.000 EACH	_____.	_____.
0232	638.4000 Moving Small Sign Supports	3.000 EACH	_____.	_____.
0234	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0236	643.0300 Traffic Control Drums	3,600.000 DAY	_____.	_____.
0238	643.0410 Traffic Control Barricades Type II	4,705.000 DAY	_____.	_____.
0240	643.0420 Traffic Control Barricades Type III	5,594.000 DAY	_____.	_____.
0242	643.0705 Traffic Control Warning Lights Type A	15,893.000 DAY	_____.	_____.
0244	643.0715 Traffic Control Warning Lights Type C	300.000 DAY	_____.	_____.
0246	643.0900 Traffic Control Signs	68,528.000 DAY	_____.	_____.



Proposal Schedule of Items

Page 9 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0248	643.0920 Traffic Control Covering Signs Type II	3.000 EACH	_____.	_____.
0250	643.1000 Traffic Control Signs Fixed Message	13.500 SF	_____.	_____.
0252	643.1050 Traffic Control Signs PCMS	21.000 DAY	_____.	_____.
0254	643.1070 Traffic Control Cones 42-Inch	946.000 DAY	_____.	_____.
0256	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0258	644.1420.S Temporary Pedestrian Surface Plywood	4,750.000 SF	_____.	_____.
0260	644.1601.S Temporary Curb Ramp	105.000 EACH	_____.	_____.
0262	644.1616.S Temporary Pedestrian Safety Fence	8,776.000 LF	_____.	_____.
0264	645.0130 Geotextile Type R	20.000 SY	_____.	_____.
0266	645.0220 Geogrid Type SR	31,311.000 SY	_____.	_____.
0268	646.1020 Marking Line Epoxy 4-Inch	17,117.000 LF	_____.	_____.
0270	646.3020 Marking Line Epoxy 8-Inch	565.000 LF	_____.	_____.
0272	646.5020 Marking Arrow Epoxy	16.000 EACH	_____.	_____.
0274	646.6120 Marking Stop Line Epoxy 18-Inch	352.000 LF	_____.	_____.
0276	646.6464 Cold Weather Marking Epoxy 4-Inch	13,503.000 LF	_____.	_____.
0278	646.6468 Cold Weather Marking Epoxy 8-Inch	85.000 LF	_____.	_____.



Proposal Schedule of Items

Page 10 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0280	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	3,233.000 LF	_____.	_____.
0282	646.8120 Marking Curb Epoxy	1,003.000 LF	_____.	_____.
0284	649.0150 Temporary Marking Line Removable Tape 4-Inch	1,057.000 LF	_____.	_____.
0286	650.4000 Construction Staking Storm Sewer	96.000 EACH	_____.	_____.
0288	650.4500 Construction Staking Subgrade	5,709.000 LF	_____.	_____.
0290	650.5000 Construction Staking Base	1,375.000 LF	_____.	_____.
0292	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,076.000 LF	_____.	_____.
0294	650.6000 Construction Staking Pipe Culverts	2.000 EACH	_____.	_____.
0296	650.6500 Construction Staking Structure Layout (structure) 01. Wall Modular Block Gravity Landscape (Sta 38+57 LT)	LS	LUMP SUM	_____.
0298	650.6500 Construction Staking Structure Layout (structure) 02. Wall Modular Block Gravity Landscape (Sta 44+40 LT)	LS	LUMP SUM	_____.
0300	650.7000 Construction Staking Concrete Pavement	5,709.000 LF	_____.	_____.
0302	650.8500 Construction Staking Electrical Installations (project) 01. 1650-07-71	LS	LUMP SUM	_____.
0304	650.9000 Construction Staking Curb Ramps	55.000 EACH	_____.	_____.
0306	650.9910 Construction Staking Supplemental Control (project) 01. 1650-07-71	LS	LUMP SUM	_____.



Proposal Schedule of Items

Page 11 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	650.9920 Construction Staking Slope Stakes	7,084.000 LF	_____.	_____.
0310	653.0905 Removing Pull Boxes **P**	13.000 EACH	_____.	_____.
0312	655.0630 Electrical Wire Lighting 4 AWG **P**	48,174.000 LF	_____.	_____.
0314	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. Cabinet L1	LS	LUMP SUM	_____.
0316	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. Cabinet L2	LS	LUMP SUM	_____.
0318	690.0150 Sawing Asphalt	1,969.000 LF	_____.	_____.
0320	690.0250 Sawing Concrete	1,129.000 LF	_____.	_____.
0322	715.0415 Incentive Strength Concrete Pavement	1,560.000 DOL	1.00000	1,560.00
0324	715.0710 Optimized Aggregate Gradation Incentive	18,857.000 DOL	1.00000	18,857.00
0326	740.0440 Incentive IRI Ride	3,200.000 DOL	1.00000	3,200.00
0328	999.1500.S Crack and Damage Survey	LS	LUMP SUM	_____.
0330	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	1,250.000 HRS	5.00000	6,250.00
0332	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	500.000 HRS	5.00000	2,500.00
0334	SPV.0060 Special 01. Research and Locate Existing Land Parcel Monuments	39.000 EACH	_____.	_____.
0336	SPV.0060 Special 02. Verify and Replace Existing Land Parcel Monuments	69.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 12 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0338	SPV.0060 Special 03. Removing Electrified Sign Fireball Lanes	1.000 EACH	_____.	_____.
0340	SPV.0060 Special 04. Decorative Oxford Style Sign Post with Breakaway Mount	13.000 EACH	_____.	_____.
0342	SPV.0060 Special 05. Round Black Sign Post with Breakaway Mount	51.000 EACH	_____.	_____.
0344	SPV.0060 Special 14. Manhole Special 4-FT Diameter	6.000 EACH	_____.	_____.
0346	SPV.0060 Special 15. Manhole Special 5-FT Diameter	10.000 EACH	_____.	_____.
0348	SPV.0060 Special 16. Manhole Special 6-FT Diameter	3.000 EACH	_____.	_____.
0350	SPV.0060 Special 17. Manhole Special 7-FT Diameter	2.000 EACH	_____.	_____.
0352	SPV.0060 Special 21. Removing Lighting Units	56.000 EACH	_____.	_____.
0354	SPV.0060 Special 22. Removing Existing Lighting Service	9.000 EACH	_____.	_____.
0356	SPV.0060 Special 23. Removing Existing Lighting Control Cabinets	1.000 EACH	_____.	_____.
0358	SPV.0060 Special 24. Decorative Arm Mounted Lighting Units 57W	23.000 EACH	_____.	_____.
0360	SPV.0060 Special 25. Decorative Arm Mounted Lighting Units 83W	15.000 EACH	_____.	_____.
0362	SPV.0060 Special 26. Decorative Post Top Lighting Units	20.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 13 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0364	SPV.0060 Special 27. Decorative Post Top Lighting Units without Appurtenances	4.000 EACH	_____.	_____.
0366	SPV.0060 Special 28. Black Standard Lighting Units	22.000 EACH	_____.	_____.
0368	SPV.0060 Special 29. Decorative Arm Mounted Lighting Unit Concrete Bases	38.000 EACH	_____.	_____.
0370	SPV.0060 Special 30. Decorative Post Top Lighting Unit Concrete Bases	24.000 EACH	_____.	_____.
0372	SPV.0060 Special 31. Standard Lighting Unit Concrete Bases	22.000 EACH	_____.	_____.
0374	SPV.0060 Special 32. Lighting Pull Boxes	21.000 EACH	_____.	_____.
0376	SPV.0060 Special 41. Fire Hydrant	1.000 EACH	_____.	_____.
0378	SPV.0060 Special 42. Fire Hydrant with Auxiliary Valve and Valve Box	7.000 EACH	_____.	_____.
0380	SPV.0060 Special 43. Remove and Replace Fire Hydrant with Auxiliary Valve and Valve Box	3.000 EACH	_____.	_____.
0382	SPV.0060 Special 44. Water Main Valve and Valve Box, 8-Inch	7.000 EACH	_____.	_____.
0384	SPV.0060 Special 47. Water Service Corporation, Curb Stop and Curb Box, 1-Inch	41.000 EACH	_____.	_____.
0386	SPV.0060 Special 48. Water Service Corporation, Curb Stop and Curb Box, 2-Inch	4.000 EACH	_____.	_____.
0388	SPV.0060 Special 49. Replace Water Service Curb Stop and Box	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 14 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0390	SPV.0060 Special 50. Replace Water Service Curb Box	24.000 EACH	_____.	_____.
0392	SPV.0060 Special 51. Adjust Water Service Curb Box	10.000 EACH	_____.	_____.
0394	SPV.0060 Special 52. Replace Upper Section Valve Box	32.000 EACH	_____.	_____.
0396	SPV.0060 Special 53. Replace Full Valve Box	10.000 EACH	_____.	_____.
0398	SPV.0060 Special 54. Connect to Existing Water Main	9.000 EACH	_____.	_____.
0400	SPV.0060 Special 55. Connect to Existing Water Service	43.000 EACH	_____.	_____.
0402	SPV.0060 Special 56. Sanitary Sewer Manhole, 4-Foot Diameter	1.000 EACH	_____.	_____.
0404	SPV.0060 Special 57. Connect to Existing Sanitary Sewer Main or Manhole	5.000 EACH	_____.	_____.
0406	SPV.0060 Special 58. Connect to Existing Sanitary Sewer Lateral	3.000 EACH	_____.	_____.
0408	SPV.0060 Special 59. Remove Existing Sanitary Sewer Manhole	6.000 EACH	_____.	_____.
0410	SPV.0060 Special 60. Remove and Replace Manhole Casting and Adjusting Rings	16.000 EACH	_____.	_____.
0412	SPV.0060 Special 61. Reconstruct Existing Sanitary Sewer Manhole	1.000 EACH	_____.	_____.
0414	SPV.0060 Special 62. Adjust Existing Manhole Casting	1.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 15 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0416	SPV.0090 Special 01. Sidewalk Trench Drain	62.000 LF	_____.	_____.
0418	SPV.0090 Special 21. HDPE Duct 2-Inch Schedule 40 In Trench	5,951.000 LF	_____.	_____.
0420	SPV.0090 Special 22. HDPE Duct 2-Inch Schedule 40 Directional Bore	4,136.000 LF	_____.	_____.
0422	SPV.0090 Special 41. Water Main, Ductile Iron (DI), 6-Inch	108.000 LF	_____.	_____.
0424	SPV.0090 Special 42. Water Main, Ductile Iron (DI), 8-Inch	2,500.000 LF	_____.	_____.
0426	SPV.0090 Special 43. Water Service, Copper, 1-Inch	1,304.000 LF	_____.	_____.
0428	SPV.0090 Special 44. Water Service, Copper, 2-Inch	126.000 LF	_____.	_____.
0430	SPV.0090 Special 45. Water Main Insulation	100.000 LF	_____.	_____.
0432	SPV.0090 Special 46. Rock Excavation for Water Main	500.000 LF	_____.	_____.
0434	SPV.0090 Special 47. Sanitary Sewer, Polyvinyl Chloride (PVC) SDR 35, 8-Inch	110.000 LF	_____.	_____.
0436	SPV.0090 Special 48. Sanitary Sewer Lateral, 6-Inch	65.000 LF	_____.	_____.
0438	SPV.0105 Special 01. Remove, Store, and Reinstall Step Railings, Sta. 21+50"J" LT	LS	LUMP SUM	_____.
0440	SPV.0105 Special 02. Remove, Store, and Reinstall Step Railing, Sta.21+30"J" LT	LS	LUMP SUM	_____.



Proposal Schedule of Items

Page 16 of 16

Proposal ID: 20181211002 Project(s): 1650-07-71, 1650-07-81

Federal ID(s): WISC 2019003, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0442	SPV.0105 Special 03. Rectangular Rapid Flashing Beacon	LS	LUMP SUM	_____.
0444	SPV.0105 Special 21. Lighting Control Cabinet L1	LS	LUMP SUM	_____.
0446	SPV.0105 Special 22. Lighting Control Cabinet L2	LS	LUMP SUM	_____.
0448	SPV.0105 Special 41. Discontinue Existing Water Main and Services	LS	LUMP SUM	_____.
0450	SPV.0105 Special 42. Discontinue Existing Sanitary Sewer and Laterals	LS	LUMP SUM	_____.
0452	SPV.0165 Special 01. Wall Modular Block Gravity Landscape (STA 38+57 LT)	855.000 SF	_____.	_____.
0454	SPV.0165 Special 02. Wall Modular Block Gravity Landscape (STA 44+40 LT)	205.000 SF	_____.	_____.
0456	SPV.0195 Special 01. Excavation, Hauling, and Disposal of Contaminated Soil (Direct Landfill)	1,020.000 TON	_____.	_____.
0458	SPV.0195 Special 02. Excavation, Hauling and Disposal of Contaminated Soil, Bioremediation	300.000 TON	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH SCHEDULE OF ITEMS HERE