## ADDENDUM REQUIRED <br> ATTACHED AT BACK

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: $\$ 310,000.00$ |
| :--- |
| Payable to: Wisconsin Department of Transportation |
| Bid Submittal |
| Date: February 13, 2024 |
| Time (Local Time): 11:00 am |
| Contract Completion Time |
| May 31, 2025 |
| Assigned Disadvantaged Business Enterprise Goal |

Attach Proposal Guaranty on back of this PAGE.

Firm Name, Address, City, State, Zip Code

## SAMPLE <br> NOT FOR BIDDING PURPOSES

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 $\qquad$
(Signature, Notary Public, State of Wisconsin)
(Bidder Signature)
(Print or Type Name, Notary Public, State Wisconsin)
(Print or Type Bidder Name)
(Date Commission Expires)
(Bidder Title)
Notary Seal

| Type of Work: For Department Use Only |
| :--- | :--- |
| Grade, Storm Sewer, Base, Concrete Pavement, Asphalt Pavement, Curb \& Gutter, Sidewalk, Landscaping, Signing, Signals, Lighting, |
| Marking |

## PLEASE ATTACH PROPOSAL GUARANTY HERE

## 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.

## 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 theinternet.
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 ${ }^{\mathrm{TM}}$ 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 *. 00 x ) is used to submit the final bid.
(4) Interested parties can subscribe to the Bid Express ${ }^{\mathrm{TM}}$ 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:
4. Have a properly executed annual bid bond on file with the department.
5. 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 ${ }^{\mathrm{TM}}$ web site.
2. Use Expedite ${ }^{\mathrm{TM}}$ software to enter a unit price for every item in the schedule of items.
3. Submit the bid according to the requirements of Expedite ${ }^{\mathrm{TM}}$ software and the Bid Express ${ }^{\mathrm{TM}}$ 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 ${ }^{\mathrm{TM}}$ 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 ${ }^{\text {TM }}$ web site to assure that the schedule of items is prepared properly.
(2) Staple an $81 / 2$ by 11 inch printout of the Expedite $\square \square$ 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 ${ }^{\mathrm{TM}}$ generated schedule of items on a $31 / 2$ 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 <br> BNOO <br> 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 $\square \square$ 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 ${ }^{\mathrm{TM}}$ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite ${ }^{\mathrm{TM}}$ 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.

## B 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 Number | Project Number | Letting Date |
| :--- | :--- | :--- |
| Name of Principal | State in Which Surety is Organized |  |
| Name of Surety |  |  |

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

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

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

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

## PRINCIPAL

| (Company Name) (Affix Corporate Seal) |
| :--- |
| (Signature and Title) |
| (Company Name) |
| (Signature and Title) |
| (Company Name) |
| (Signature and Title) |
| (Company Name) |
| (Signature and Title) |


| (Name of Surety) (Affix Seal) |
| :--- |
| (Signature of Attorney-in-Fact) |

## NOTARY FOR PRINCIPAL

(Date)
State of Wisconsin

| 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)
(Date Commission Expires)

## NOTARY FOR SURETY

$\longrightarrow($ Date $)$

| State of Wisconsin | ) |
| :--- | :--- |
|  | (ss. |

On the above date, this instrument was acknowledged before me by the named person(s).
$\qquad$
(Signature, Notary Public, State of Wisconsin)
(Print or Type Name, Notary Public, State of Wisconsin)
(Date Commission Expires)

| 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.

## LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor Class of Work Estimated Value

# 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 .....  2
2. Scope of Work ..... 2
3. Prosecution and Progress ..... 2
4. Traffic .....  3
5. Holiday and Special Event Work Restrictions. ..... 3
6. Utilities ..... 3
7. Public Convenience and Safety .....  4
8. Environmental ..... 4
9. Sod Lawn .....  4
10. Convert Manhole to Valve Box, Item SPV.0060.01 .....  .4
11. Salvage and Relocate Hydrant, Item SPV.0060.02 ..... 5
12. Gate Valve and Box 6-Inch, SPV. 0060.03 ..... 6
13. Marking Arrow Grooved Epoxy, Item SPV.0060.04; Marking Symbol Grooved Epoxy, Item SPV.0060.05; Marking Line Grooved Epoxy 4-Inch, Item SPV.0090.01; Marking Line Grooved Epoxy 8-Inch, Item SPV.0090.02; Marking Dotted Extension Grooved Epoxy 18-Inch, Item SPV.0090.03; Marking Diagonal Grooved Epoxy 12-Inch, Item 0090.04; Marking Crosswalk Grooved Epoxy Transverse Line 6-Inch, Item SPV.0090.05 .....  .7
14. Concrete Control Cabinet Base Type Special, Item SPV.0060.06. ..... 8
15. Lighting Control Cabinet Type Special, Item SPV.0060.07 ..... 8
16. Temporary Lighting, Item SPV.0060.08. .....  .9
17. Manhole Covers Special, Item SPV.0060.09 ..... 10
18. Water Main Fittings, Item SPV.0085.01 ..... 10
19. Water Main Ductile Iron 6-Inch, Item SPV.0090.06 ..... 11
20. Concrete Curb \& Gutter 4-Inch Sloped 24-Inch Type D, Item SPV.0090.07; Concrete Curb \& Gutter 3-Inch Sloped 36-Inch Type T, Item SPV.0090.08. ..... 15
21. Vegetated Porous Pavement, Item SPV.0165.01 ..... 15

SPECIAL PROVISIONS

## 1. General.

Perform the work under this construction contract for Project 5991-02-62, C Onalaska, East Avenue N, Riders Club Road Intersection, Loc Str, La Crosse 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, 2023 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 (20220628)

## 2. Scope of Work.

The work under this contract shall consist of excavation common, base aggregate dense, utility adjustments, HMA pavement, concrete curb and gutter, concrete pavement, concrete sidewalk and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

## 3. Prosecution and Progress.

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

## Interim Completion Date: June 23, 2023

Complete all construction except permanent lighting and open the road to traffic by June 23, 2023. Temporary lighting shall be installed and in operation if the permanent lighting system is not installed by June 23, 2023.

If the contractor fails to complete all construction, and have temporary lighting installed and operational in place of permanent lighting, and have the road open to traffic by June 23, 2023, the department will assess the contractor $\$ 835$ in interim liquidated damages for each calendar day the work remains incomplete beyond 12:01 AM on June 24, 2023. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete beyond 12:01 AM.
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.

## Northern Long-eared Bat (Myotis septentrionalis)

Northern long-eared bats (NLEB) have the potential to inhabit the project limits because they roost in trees, bridges and culverts. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).
Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.
If additional construction activities beyond what was originally specified are required to complete the work, approval from the engineer, following coordination with WisDOT REC, is required prior to initiating these activities. If trees with a 3-inch or greater diameter at breast height (dbh) need to be removed, no tree clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Tree removal will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence or visual emergency survey. Notify the engineer if tree clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

## 4. Traffic.

## General

Close East Avenue N and Riders Club Road intersection to through traffic within the project limits and detour traffic as shown in the plans. Prior to closing East Avenue N or Riders Club Road, implement the detour route as shown in the plans. Maintain access to driveways at all times. If the work dictates a driveway closure, notify and coordinate the closure with the property owner a minimum of 72 hours in advance of the closure.

## Advance Notification

Notify the City of Onalaska first responders (police, fire, EMS) and Onalaska School District two weeks in advance of the intersection closure.

## 5. Holiday and Special Event Work Restrictions.

Do not haul materials of any kind to and from the work site, or perform work that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, May 26, 2023 to 6:00 AM Tuesday, May 30, 2023 for Memorial Day;
- From noon Friday, June 23, 2023 to 6:00 AM Monday, June 26, 2023 for Celebrate Onalaska;
- From noon Friday, June 30, 2023 to 6:00 AM Wednesday, July 5, 2023 for Independence Day;
- From noon Friday, September 1, 2023 to 6:00 AM Tuesday, September 5, 2023 for Labor Day;


## 6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.
stp-107-066 (20080501)
The following utility owners have facilities within the project area; however no adjustments are anticipated:

- Brightspeed - Communication Line
- Charter Communications - Communication Line
- City of Onalaska - Communication Line
- Dairyland Power - Transmission
- Xcel Energy - Gas
- Xcel Energy - Transmission

City of Onalaska - Sewer has a sanitary manhole at Station $10+00^{\prime}$ CID', $22^{\prime}$ RT that will be adjusted at the time of construction. Adjust the manhole to match the new finished pavement elevation. Perform this work according to the requirements of the Adjusting Manhole Covers bid item. Notify the City of Onalaska three calendar days prior to performing said adjustments.
The contact for the City of Onalaska - Sewer is Jarrod Holter, (608) 781-9537, jholter@onalaskawi.gov.

City of Onalaska - Water has four water valve manholes that will be adjusted at the time of construction located at Station 10+27'CID', 12' LT; Station 10+81'CID', 12' LT; Station 11+15'CID', 34' LT; and Station $11+36^{\prime}$ CID', $155^{\prime}$ LT. Convert the manholes to valve boxes. Perform this work according to the requirements of the Convert Manhole to Valve Box bid item. Notify the City of Onalaska three calendar days prior to performing said conversions.

A hydrant near Station $501+66^{\prime}$ ED', 17' RT will be removed, salvaged, and relocated to Station $502+02^{\prime} E D$ ', 20.5' RT at the time of construction. Perform this work according to the requirements of the Salvage and Relocate Hydrant and other applicable bid items. Notify the City of Onalaska three calendar days prior to performing said relocation.
The contact for the City of Onalaska - Water is Jarrod Holter, (608) 781-9537, iholter@onalaskawi.gov.
Riverland Energy (Trempealeau Electric Cooperative) - Electricity will be removing the street light near Station $36+75^{\prime}$ RCD', 36 ' LT one week prior to the beginning of construction under this contract. Contact Riverland Energy at least two weeks prior to the start of construction.
The Riverland Energy contact is Bill Mason, (608) 769-2880, bmason@riverlandenergy.com.

## 7. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:
Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.
stp-107-001 (20060512)

## 8. Environmental.

No work is to take place within the fenced in area to the northwest of the intersection and no work is to impact the day-to-day use of the property.
Disturbance to existing vegetation should be kept to a minimum and no equipment should be parked beyond the sidewalk.

## 9. Sod Lawn.

## Add the following to standard spec 631.3.2:

(4) Prior to installing sod in vegetated porous pavement, confirm that topsoil is at a level so that the crown of the sod will be recessed slightly below the top of the cell after pressing the sod into place and so the bottom of the sod is in contact with the topsoil. Install sod in vegetated porous pavement by pressing into partially emptied cells using a roller or other suitable equipment. Water according to standard spec 631.

## 10. Convert Manhole to Valve Box, Item SPV.0060.01.

## A Description

This special provision describes converting water manhole to a valve box.

## B Materials

## B. 1 Valve Box

Type F (7' bury)
All valve boxes shall be screw type having a $51 / 4$ inch shaft diameter.

Valve boxes shall be cast iron similar to the following: Cast Iron-Tyler 6860 Series or Standard \#6 Base extension 59A Tyler, center section 60A Tyler, top section 26T, cover \#145462 5 1/4 inch Drop Lid marked "Water".

Valve boxes shall be set so that the bottom of the base section is the same elevation as the top of the stuffing box of the valve, shall be centered on the operating nut, and shall not touch the body of the valve in any way with a minimum of 2 inches of clearance.
The contractor shall provide proper length valve boxes and is responsible for checking the plans and determining the lengths needed prior to ordering boxes.
Submit shop drawings to City of Onalaska Water Utility conforming to standard spec 105.2 prior to ordering the material. State the name of the manufacturer, the product name and include information as required to show the product meets the requirements of these specifications.

## C Construction

The contractor shall remove the cone top section and structure walls, leaving only the base section in place. The contractor shall then install the entire valve box, including a valve box adapter to hold the valve box centered over the valve. The contractor shall then backfill the opening with compacted backfill. Prior to the conversion, the contractor will need to coordinate the inspection of the valve with the City of Onalaska Water Utility. The City of Onalaska Water Utility will inspect the valve nuts and bolts and operation of the valve.

Submit shop drawings to City of Onalaska Water Utility conforming to standard spec 105.2 prior to ordering the material. State the name of the manufacturer, the product name and include information as required to show the product meets the requirements of these specifications.
Set valves with stems vertical and plumb on subgrade material adequate to support valve assembly. Firmly support valve boxes and maintain them center and plumb over the wrench nut of the valve utilizing adaptor. Verify that box remains plumb and centered during backfill, by sliding a piece of Schedule 3034 4.25-inch diameter PVC sewer pipe into the box, with box cover adjusted to the final surface or at such other level as may be directed. Valve boxes that become shifted or filled during backfilling shall be entirely uncovered and reset.

## D Measurement

The department will measure Convert Manhole to Valve Box by the unit, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.01 | Convert Manhole to Valve Box | EACH |

Payment is full compensation for removing the cone top section and structure walls, furnishing and installing the entire valve box, including a valve box adapter, and backfill.

## 11. Salvage and Relocate Hydrant, Item SPV.0060.02.

## A Description

This special provision describes salvaging the existing hydrant and installing the salvaged hydrant at the location shown on the plans.

## B Materials

Provide new bolts and nuts and restraint glands. Bolts and nuts shall be Cor-Blue T-Head or approved equal. Restraint glands shall be Megalug series 1100 or approved equal.

## C Construction

Contact the City of Onalaska Water Utility 48 hours advance of removing existing hydrant. The Water Utility will inspect the hydrant upon removal and prior to installation at the new location. At the new location, the hydrant shall be set vertically plumb and be properly braced in ensure against movement during backfilling operations. A minimum of 5 cubic feet of clean gravel ( $3 / 4$ " to 1 " size) shall be placed around the shoe and drain of all hydrants and covered with two layers of approved plastic (8 mil. thick) to
keep the voids open. The branch between the hydrant and valve shall be at least 3 feet long. All joints shall be restrained using Megalug series 1100 or approved equal.

Prior to backfilling, coordinate inspection by the Water Utility. If damage to the hydrant exists that was caused by the contractor, the contractor shall provide and install a new hydrant at no cost.

Restore all surface features to preconstruction condition or better, including, but not limited to, sidewalks, curbs, gutters, mailboxes, and other facilities distributed by the construction.

## D Measurement

The department will measure Salvage and Relocate Hydrant per each hydrant removed, salvaged, and reinstalled, 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 | Salvage and Relocate Hydrant | EACH |

Payment is full compensation for removal and salvaging of existing hydrant; installing salvaged hydrant at new location; for furnishing all materials including crushed stone, gaskets, megalug restraints, buttresses and blocking, polyethylene wrap and other fittings; for furnishing all excavation, trench wall support, backfilling, compacting, disposal of surplus material and cleanup.

## 12. Gate Valve and Box 6-Inch, SPV.0060.03.

## A Description

This work shall consist of furnishing and installing gate valves and valve boxes.

## B Materials

All valves shall conform to the AWWA Specifications, latest edition.
ANSI/AWWA C509 Resilient-Seated Gate Valves, 3 inch through 30 inch NPS, for Water and Sewage will be referred to as AWWA C509.

AWWA C550 Protective Interior Coating for Valves and Hydrants will be referred to as AWWA C550.
Valves shall be resilient-seated gate valves. All valves shall have mechanical joint connections unless otherwise approved by the engineer.
Submit shop drawings to City of Onalaska Water Utility conforming to standard spec 105.2 prior to ordering the material. State the name of the manufacturer, the product name and include information as required to show the product meets the requirements of these specifications.

## B. 1 Resilient-Seated Gate Valves

Valves shall meet or exceed AWWA C509. The resilient-seated gate valve shall have the gate coated with a bonded elastomer, which also forms a seal on the cast iron valve body when the valve is in the closed position. When the valve is closed the seal is to allow no water to pass the valve at rated differential pressure. The valve shall be operated by turning a 2 -inch square operating nut attached to a corrosion resistant bronze stem, acting through a bronze stem nut, fixed into the disc.

All internal parts will be accessible without removing the valve body from the pressure line.
All cast iron internal parts shall be coated completely with a corrosion resistant coating.
The internal diameter of the water passageway shall be at least as large as the pipe inside diameter it is intended to be used with.

Each valve shall be tested by the manufacturer per current C509 requirements.
The only resilient-seated gate valves that will be accepted are:

```
American Darling CRS 80
Kennedy Ken-Seal
M&H (Dresser) 3067-01
Waterous Co. }500\mathrm{ Series
```

Clow Corp. F6100
Mueller Co. A2370 Series
US Pipe Metro Seal

The manufacturer or vendor shall furnish the city an affidavit stating that the inspection and all the specified tests have been made and that the results thereof comply with the requirements of AWWA C509 and C550.

Resilient-Seated valves will be installed with valve boxes.

## B. 2 Valve Box

Type F (7' bury)
All valve boxes shall be screw type having a $51 / 4$ inch shaft diameter.
Valve boxes shall be cast iron similar to the following: Cast Iron-Tyler 6860 Series or Standard \#6 Base, extension 59A Tyler, center section 60A Tyler, top section 26T, cover \#145462 5 1/4 inch Drop Lid marked "Water".

Valve boxes shall be set so that the bottom of the base section is the same elevation as the top of the stuffing box of the valve, shall be centered on the operating nut, and shall not touch the body of the valve in any way with a minimum of 2 inches of clearance.
The contractor will provide proper length valve boxes and is responsible for checking the plans and determining the lengths needed prior to ordering boxes.

## C Construction

Set valves with stems vertical and plumb on subgrade material adequate to support valve assembly. Firmly support valve boxes and maintain them center and plumb over the wrench nut of the valve utilizing adaptor. Verify that box remains plumb and centered during backfill, by sliding a piece of Schedule 3034 4.25 -inch diameter PVC sewer pipe into the box, with box cover adjusted to the final surface or at such other level as may be directed. Valve boxes that become shifted or filled during backfilling shall be entirely uncovered and reset.

## D Measurement

The department will measure Gate Valve \& Box 6-Inch by the each, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.03 | Gate Valve \& Box 6-Inch | EACH |

Payment is full compensation for excavating, backfilling, dewatering, sheeting, shoring, for furnishing and installing gate valves, bolts, nuts, gaskets, and adjusting valve box height.

## 13. Marking Arrow Grooved Epoxy, Item SPV.0060.04; <br> Marking Symbol Grooved Epoxy, Item SPV.0060.05; <br> Marking Line Grooved Epoxy 4-Inch, Item SPV.0090.01; <br> Marking Line Grooved Epoxy 8-Inch, Item SPV.0090.02; <br> Marking Dotted Extension Grooved Epoxy 18-Inch, Item SPV.0090.03; <br> Marking Diagonal Grooved Epoxy 12-Inch, Item 0090.04; <br> Marking Crosswalk Grooved Epoxy Transverse Line 6-Inch, Item SPV.0090.05.

## A Description

Perform work according to the applicable provisions of standard spec 646 and as detailed in the plans.

## B Materials

Provide materials according to standard spec 646.

## C Construction

Perform work according to standard spec 646 and as shown in the plans. Perform grooving as specified in standard spec 646.3.2.3.

## D Measurement

The department will measure Marking Arrow Grooved Epoxy and Marking Symbol Grooved Epoxy by each unit, acceptably completed.
The department will measure Marking Line Grooved Epoxy 4-Inch, Marking Line Grooved Epoxy 8-Inch, Marking Dotted Extension Grooved Epoxy 18-Inch, Marking Diagonal Grooved Epoxy 12-Inch, and Marking Crosswalk Grooved Epoxy Transverse Line 6-Inch by the linear foot, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.04 | Marking Arrow Grooved Epoxy | EACH |
| SPV.0060.05 | Marking Symbol Grooved Epoxy | EACH |
| SPV.0090.01 | Marking Line Grooved Epoxy 4-Inch | LF |
| SPV.0090.02 | Marking Line Grooved Epoxy 8-Inch | LF |
| SPV.0090.03 | Marking Dotted Extension Grooved Epoxy 18-Inch | LF |
| SPV.0090.04 | Marking Diagonal Grooved Epoxy 12-Inch | LF |
| SPV.0090.05 | Marking Crosswalk Grooved Epoxy Transverse Line 6-Inch | LF |

Payment shall be according to standard spec 646.5.

## 14. Concrete Control Cabinet Base Type Special, Item SPV.0060.06.

## A Description

This special provision describes furnishing and installing a concrete lighting control cabinet foundation as shown on the plans and as hereinafter provided.

## B Materials

The concrete foundation shall be constructed with materials and methods as specified in the details in the plan.

## C Construction

The Concrete Control Cabinet Base Type Special shall have an anchor bolt pattern, size, exposure and orientation that will accommodate the lighting control cabinet identified in the details in the plan.

## D Measurement

The department will measure Concrete Control Cabinet Base Type Special by each unit, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.06 | Concrete Control Cabinet Base Type Special | EACH |

Payment is full compensation for furnishing and installing all materials, including anchor bolts, conduit, ground rods, hardware and fittings.

## 15. Lighting Control Cabinet Type Special, Item SPV.0060.07.

## A Description

This special provision describes furnishing and installing lighting control cabinets as shown on the plans and as hereinafter provided.

## B Materials

The cabinet type shall be detailed in the plans. A rigid steel conduit shall be stubbed out of the control cabinet base to accommodate the energy provider's service conduit and conductors.

## C (Vacant)

## D Measurement

The department will measure Lighting Control Cabinet Type Special by each unit, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV. 0060.07 | Lighting Control Cabinet Type Special | EACH |

Payment is full compensation for furnishing and installing all materials, including lighting control cabinets, meter socket, hardware, fittings and coordination with and/or any payments to energy provider as necessary.

## 16. Temporary Lighting, Item SPV.0060.08.

## A Description

This special provision describes the installation and removal of a temporary lighting system. Lighting system shall be provided complete with all circuitry, controls, metering, luminaires, arms, poles, terminations, trenching, directional boring and sealing required for an operational, temporary lighting system during construction and as hereinafter provided. Provide a complete and operational temporary lighting system consisting of two luminaire poles at the intersection until the permanent lighting system is complete and operational.

The removal of the temporary lighting system is included in this item.

## B Materials

Provide all necessary materials required to install a complete an operational temporary lighting system consisting of any combination of the following equipment: wood poles, metal poles, luminaires, pole accessories, screw-in or concrete pole bases, overhead or underground conductors, conduit, controls, metering, circuit breakers, guy wire, pull boxes, and all necessary equipment and connections.
The contractor may coordinate with the electric utility to install, maintain, and remove utility lighting equipment during construction. Any utility costs will be at the contractor's expense.
Temporary luminaries shall be at a minimum, equivalent in lumen output and distribution to the WisDOT LED B luminaire.

Temporary lighting circuitry shall consist of temporary, or permanent conductors as proposed for the final project, and be in compliance with the 2020 NEC.

## C Construction

The temporary lighting system will consist of one lighting unit installed diagonally from the other one at two of the four corners of the intersection. Lighting systems can be energized from either the proposed or an alternate power source, or a combination of both.

Temporary lighting circuitry may be a combination of new or existing circuitry and may be routed underground or overhead or a combination of both. Provide all labor and materials needed to properly hang and support conductors from poles if circuitry is installed overhead. Provide all labor and material for trenching or boring conductors underground or in conduit provide conduit to protect conductors on poles to a point 8 ' above ground.

Poles must be placed in a location that will not interfere with roadway construction operations. The intersection must be illuminated during all hours of darkness. No overnight outages are permitted.

After the permanent lighting system has been installed, energized and approved for an intersection; completely remove all temporary equipment and circuitry used for the temporary lighting.

## D Measurement

The department will measure Temporary Lighting as a single unit, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.08 | Temporary Lighting | EACH |

Payment is full compensation for furnishing, installing, and removing all materials, including, poles, arms, luminaires, lamps, fusing, wiring, excavation, backfill and compaction, and pole accessories.

## 17. Manhole Covers Special, Item SPV.0060.09.

## A Description

Install Neenah Foundry 3250 storm sewer storm sewer manhole frame and cover to final elevation according to standard spec 611, the plans, and as hereinafter provided.

## B Materials

Manhole Covers Special will be supplied by the City of Onalaska.

## C Construction

Use construction methods according to standard spec 611.3.

## D Measurement

The department will measure Manhole Covers Special according to standard spec 611.4.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0060.09 | Manhole Covers Special | EACH |

Payment is full compensation according to standard spec 611.5.

## 18. Water Main Fittings, Item SPV.0085.01.

## A Description

This special provision describes furnishing and installing water main fittings, all as shown on the plans and as provided by these specifications.

## B Materials

Fittings - All water main fittings shall be cast iron or ductile iron conforming to the requirements of AWWA C151 with conductive devices as specified for ductile iron pipe. All water main fittings shall have a fusion bonded epoxy coating according to AWWA C116.

Mechanical joints shall have Megalug or approved equal restraints.
Bolts and nuts shall be Cor-Blue T-Head or approved equal.
Provide concrete for blocking in conformance with standard spec 501.

## C Construction

Comply with construction requirements for adjacent water main items.
Thrust Restraint - Install thrust restraints at all bends, tees and plugs and all joints within 50 feet of all bends, tees and plugs.
Concrete Blocking - In addition to thrust restraints, place concrete blocking between the fitting and undisturbed trench wall. Minimum thickness: 12 inches. Minimum area in square feet shall be according to the following:

| Pipe | Tee <br> or Plug | 1/4 Bend | 1/32 and 1/8 Bend | 1/16 Bend |
| :---: | :---: | :---: | :---: | :---: |
| 6-inch | 2.9 | 3.1 | 1.6 | 0.8 |
| 8-inch | 3.7 | 5.3 | 2.9 | 1.4 |
| 10-inch | 5.7 | 8.1 | 4.4 | 2.2 |
| 12-inch | 8.1 | 13.4 | 6.6 | 3.2 |
| 16-inch | 15.1 | 21.4 | 11.6 | 5.9 |
| 20-inch | 23.2 | 30.2 | 26.1 | 9.3 |
| 24-inch | 33.6 | 48.5 | 13.3 |  |

Size blocking based on the larger main. Verify that bolts are accessible after concrete is poured.

## D Measurement

The department will measure Water Main Fittings by the pound, acceptably installed. No measurement will be made of concrete blocking, glands, gaskets, rods, bolts, nuts and other accessories.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0085.01 | Water Main Fittings | LB |

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

## 19. Water Main Ductile Iron 6-Inch, Item SPV.0090.06.

## A Description

This special provision describes excavating required trenches, furnishing and installing watermains and backfilling the trenches.

## B Materials

All water main pipe, gaskets, fittings, and specials shall conform to AWWA Specifications latest edition.
All piping shall be installed with Class " B " bedding.
All water main connections and fittings shall require mechanical joints.
Ductile iron pipe shall meet AWWA C-150 for thickness design and C-151 for material. Pipe thickness shall meet pressure Class 350 PSI for normal service zone, having the following nominal wall thickness for up to 10 feet of bury.
All ductile iron pipe shall be cement lined according to AWWA C-104 (latest designation).
6 inch ductile iron - 0.25 inch wall
All ductile iron fittings shall conform to AWWA C110 latest designation, specifications for the size indicated on plans. All fittings shall have a pressure rating of 350 psi, shall be cement lined according to AWWA C-104, and shall be mechanical joint. All fittings shall have an exterior strap or cable for electrical conductivity.
In lieu of strapping of the joints and fittings, conductivity may be achieved by use of American Conductivity Gaskets. The conductivity gaskets with copper inserts may be installed throughout the system to provide conductivity. The system must pass the conductive tests as specified.
All gaskets for ductile iron pressure pipe and fittings shall conform to AWWA C-111, latest designation specifications. The gaskets and joints shall have the same pressure rating as the pipe or fitting of which they are a part.

Joint restraints shall be Megalug Series 1100HD or approved equal.
Polyethylene encasement shall be tube or sheet 8 mil thickness and conform to AWWA C-105.

## C Construction

Submit shop drawings to City of Onalaska Water Utility only conforming to standard spec 105.2 prior to ordering the material. State the name of the manufacturer, the product name and include information as required to show the product meets the requirements of these specifications.

Manipulation of existing valves required in order to construct work shall be performed by City of Onalaska Water Utility only. Contact the utility at least 48 hours in advance to coordinate and schedule any required valve manipulation. Shutoffs shall be made with adequate time allowed so that the work may be accomplished, and the water turned on before 4:00 PM of the same day.

Where new water main conflicts with existing water main, removal of existing water main shall be considered incidental to the work.

Inspect water main for defects before placing in trench. Lay pipe to the required alignment and grade. Unless otherwise required, pipe shall be laid with the bell ends facing the direction of laying. Locate hydrants, valves, and fittings according to plans. Remove all foreign matter from the inside of the pipe before installation. If, in the opinion of City of Onalaska Water Utility only, the water pipes are not sufficiently protected or clean, they shall be swabbed and cleaned as directed by City of Onalaska Water Utility only.

## C. 1 Excavation

The contractor shall be in full compliance with the terms and conditions of OSHA Standard 24 C.F.R. ss. 1926.650, excavations and AWWA C600 for Installation of Ductile Iron Water Mains and Their Appurtenances subject to such specific additions as are incorporated in the plans and specifications.

The contractor shall not deviate from the type of excavation indicated on the plans without written approval of the engineer, except in case of driveways and surface obstructions requiring short tunnel sections, which have been indicated on the plans as open trench sections.
The trench in which the water pipe and appurtenances are to be constructed shall be excavated in such manner and to such depths and widths as will give suitable room for the building of the structures they are to contain, and for bracing and supporting, pumping and draining, and for removing from the trench peat, silt or other material which may not be deemed proper for foundations.

The contractor shall furnish, put in place, and maintain at his expense such sheeting, bracing, etc., as may be necessary to support the sides of the excavation, whether above or below the grade of the water pipe, and to prevent any movement which could in any way injure the masonry, diminish the width necessary for proper drainage, or otherwise injure or delay the work; all slides and cave-ins are to be at his expense and cost.

If the engineer is of the opinion that at any point sufficient or proper supports have not been provided, the engineer may order additional supports at the expense of the contractor, and the compliance with such orders shall not relieve or release the contractor from his responsibility for the sufficiency of such supports.
The bottom of the trench is, in general, to be excavated to the exact form and size of the lower portion of the water pipe, which is to be laid in it so that the bearing shall be continuous, and the pressure shall be equally distributed. All construction material shall be so placed as not to endanger the work, and so free and ready access may be had at any time to all parts of the trench and all hydrants and valves in the vicinity. Materials shall be kept neatly piled so as to minimize inconvenience for public travel to the adjoining tenants. Reasonable provision shall be made for travel on the streets, road, railroads, and private ways.
The contractor is to furnish adequate pumping equipment to maintain essential ground water level for the particular construction involved. Water is not to be allowed to rise in the trench until all joints are completed, conductivity tests run, lines pressure tested, and approved, concrete thrust blocks have set, or until such time as the engineer may direct.
All water pumped or bailed from the trench shall be conveyed to a suitable point of discharge, subject to approval of the engineer.

Care shall be taken not to move, without consent of the engineer, any sewers, drains, water or gas pipes, utility conduit, or other structures; and in crossing these, and in running parallel or near them, they shall be sustained securely in place until the work is completed.

Whenever it is necessary to interfere with said structures, the contractor shall maintain their respective services, and if necessary for that purpose, shall lay temporary water, gas, or other pipes. Repair all damage done to any of said structures and leave them in as good condition as they were previous to the commencement of the work.

The contractor shall be responsible for disposing of all excess dirt and debris resulting from construction.

## C. 2 Trenches

Trenches shall be back-sloped or sheathed and braced as required by the OSHA Standard 29 C.F.R. ss. 1926.650 - Excavations, the Plans and Specifications and as may be necessary to protect life, property or the work. When tight sheathing is required, it shall be driven so as to prevent adjacent soil from entering the trench from over, below, or through the sheathing.
Maximum trench width at the pipe elevation shall be 2 feet plus the diameter of the pipe. This maximum width shall apply except where otherwise specified on the plans or in the specifications.

## C. 3 Pipe Laying

Pipe and specials shall be carefully handled at all times. They shall be placed in proper alignment in the trenches and evenly bedded before the joint is made. Each pipe shall be carefully inspected and cleaned before being laid. Those pipes not meeting the specifications shall be rejected. No pipe shall be laid except in the presence of the engineer or his authorized inspector, and the engineer may order the removal and relaying of any pipe not properly laid. Care must be taken to compact the earth solidly under and around the pipe and specials before the filling of the trench begins. No loose rock backfill or rubbish will be allowed within 2 feet of the pipe or specials. Thrust blocks shall be provided.

## C. 4 Joints

All joints shall be slip type Bell \& Spigot except at fittings and valves where mechanical joints will be used. Mechanical joints shall be made according to manufacturer's specifications.

For slip type bell and spigot pipe, a single rubber gasket shall be used to affect the joint seal. The gasket, gasket seat, and the plain end must be wiped clean to affect a good joint. Only rubber gasket lubricant furnished by the manufacturer shall be used.
All joints on the branch between the water main connection and hydrant shall be restrained using Megalug series 1100 or approved equal.

## C. 5 Cleaning Water Main

Pipe will be cleaned immediately before placement in the trench by removing any large particles by hand and as deemed necessary, swabbing the entire length of all pipe and fittings with a $5 \%$ hyprochlorite solution.

A temporary watertight plug will be placed over the open end of pipe to prevent dirt or other contamination from entering the main during trenching for placement of the next pipe. When breaks are taken and at the end of construction for the day, a watertight plug will be installed in the end of the pipe.

## C. 6 Electrical Conductivity

Ductile iron pipe shall be mechanical joint or push-on joint furnished with integrally installed conductors. Each joint, including fittings, shall be electrically banded with an external copper jumper capable of carrying 500 amps of current for an extended period of time to provide integral electric thawing capabilities. These copper jumpers can be either shop or field applied according to these Specifications. For field applied copper jumpers, either the "Burndy - Thermoweld" as manufactured by Burndy Corp. Norwalk, Conn., or "Cadweld" by Erico Products Co., Cleveland, Ohio, will be permitted (American Conductive Gasket shall be considered as an approved equal to copper jumpers).
Contractors or suppliers shall submit the method they propose to use for approval prior to construction.
Copper jumpers shall be a minimum $1 / 16$ inch by $1 / 2$ inch wide flat strip or equal cross section round copper wire in annealed condition conforming ASTM Specs. B152-58 Type DHP. All copper jumpers shall be welded to the pipe fittings by the metal arc welding process if shop applied, or by the exothermic welding process if field applied.

On mechanical joints, fittings shall be attached to the bolts. The copper jumpers can be applied as a single strip welded at each end across the joint, or by multiple strips with bolted connections in the middle. Silicon bronze bolts and nuts shall be used on all bolted connections.

All welded connections shall be made on a clean metal surface, which has been ground to remove coating and oxide. The area at the connection, including weld, shall be refinished with its original coating, or other approved protective coating.
The assembled copper jumper across the joints shall be so installed that expansion, contraction, or relative pipe movement will not damage or sever the connection.

## C. 7 Determination of Conductivity

The contractor shall perform a conductivity test on all iron pipe he installs to establish that electrical thawing may be carried out in the future. Conductivity must be carried out in the engineer's presence and approved before backfilling of trenches.

The entire system including pipeline, valves, fittings, and hydrants shall be tested while the line is at normal pressure, for electrical continuity. The test shall be a direct current of 300 amperes passed through the pipeline for five minutes.

Insufficient current, or intermittent current, or arcing as indicated by large fluctuation of the ammeter needle, shall be evidence of defective electrical contact in the pipe and shall be corrected and retested.
Sources of D.C. current for these tests may be motor generators, arc welding machines, etc., equipped with controls for regulating current output. All such equipment shall be furnished by the contractor subject to the approval of the engineer.

Cables from the power source to the section of system under test should be sufficient size to carry the test without overheating or excessive voltage drop. Usable sized will probably be in the range of $2 / 0$ to 4/0 A.W.G.

In using arc-welding machines, the current control should be set at minimum before starting. After starting the machine, advance the control until the current indicated on the ammeter is at the desired test value. Caution: In case of open circuits at joints or connections, the voltage across the defective connection will be in the order of 50-100 volts.

## C. 8 Backfilling Trenches and Cleanup

All trenches and excavations should be backfilled as ordered by the engineer unless other protection of the pipeline is directed. The backfill should be solidly tamped about the pipes up to a level at least 1 foot above the top. This material shall be deposited in uniform layers of 6 inches; each layer shall be solidly tamped or rammed with proper tools so as not to disturb the pipeline. Backfill material shall be clean and free form rocks or broken concrete exceeding 2 inches in size. The remainder of the trench shall be backfilled in compacted layers not exceeding 12 inches in depth to a point 6 inches below finished grade or as directed by the engineer.
All trenches shall be compacted with use of vibratory compactor in 12 inch layers and compacted to $95 \%$ modified proctor. City will have an independent testing laboratory make selected tests for compaction at various locations and depths. Contractor shall help in digging holes and refilling holes at no cost to the city. Contractor shall pay for areas that fail and have to be retested.
As the work progresses, all excess dirt and debris, all unused materials, equipment and tools, shall be removed at once from the entire street right-of-way. Whenever this cleanup or the repairing of the street surfaces, fences or other damage is neglected, notice may be given to the effect to the contractor; and,

When, for any reason, the work is left unfinished, all trenches and excavations shall be filled if so required and the roadways and sidewalks left unobstructed, and with the surfaces in a safe and satisfactory condition. All trenches left open overnight shall be barricaded and fenced.

No excavated materials, except the road surfacing and a limited amount of sand and gravel to be used for masonry, shall be left on the streets; but such material shall be backfilled into the trench or carted away.

## C. 9 Polyethylene Encasement

Water main pipe, fittings, valves and hydrants shall be encased with polyethylene encasement. The polyethylene encasement shall prevent contact between the pipe and surrounding backfill and bedding materials but is not intended to be airtight or watertight. All rips, punctures, or other damage shall be repaired with adhesive tape or with a short length of new encasement wrapped around damaged area secured in the same manner as overlaps. Overlaps shall be a minimum of 1 foot at the end of each section and shall be secured by use of adhesive tape, plastic string, or other material capable of holding the encasement in place until backfilling operations are completed.

## D Measurement

The department will measure Watermain Ductile Iron 6-Inch by the linear foot, acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0090.06 | Water Main Ductile Iron 6-Inch | LF |

Payment is full compensation for all excavating, backfilling, dewatering, sheeting, shoring, removing existing watermain, sleeves for connection to existing water main, connection to existing water main, for furnishing and installing watermain, pipe joints, joint restraints, polyethylene encasement, temporary flushing points, lowering, and all test procedures.

## 20. Concrete Curb \& Gutter 4-Inch Sloped 24-Inch Type D, Item SPV.0090.07; Concrete Curb \& Gutter 3-Inch Sloped 36-Inch Type T, Item SPV.0090.08.

## A Description

This special provision describes constructing concrete curb \& gutter according to the applicable provisions of standard spec 602 and as detailed in the plans.

## B Materials

Provide materials according to standard spec 602.

## C Construction

Perform work according to standard spec 602 and as shown in the plans.

## D Measurement

The department will measure Concrete Curb \& Gutter 4-Inch Sloped 24-Inch Type D and Concrete Curb \& Gutter 3-Inch Sloped 36-Inch Type T 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.0090.07 | Concrete Curb \& Gutter 4-Inch Sloped 24-Inch Type D | LF |
| SPV.0090.08 | Concrete Curb \& Gutter 3-Inch Sloped 36-Inch Type T | LF |

Payment shall be according to standard spec 602.

## 21. Vegetated Porous Pavement, Item SPV.0165.01.

## A Description

This special provision describes providing all material, labor, tools, and equipment for installation of a vegetated porous pavement system.

## B Materials

(1) The paver units shall be up to 100 percent recycled polyethylene with uniform color throughout, ranging from dark shades of gray to black. Each unit shall have a minimum nominal cell size of 3 inches x 3 inches. There shall be interlocking offset tabs on the edges of the unit.
(2) The vegetated porous pavement system shall be capable of handling HS-20 loadings. Submit manufacturer certification that the system is capable of carrying HS-20 loadings without damage or rutting.
(3) Furnish base and filler materials conforming to the following:
$\qquad$
Base Aggregate Open-Graded
Topsoil.
Sod Lawn631.2

## C Construction

## C. 1 Preparation

${ }^{(1)}$ Excavate and shape the subgrade soils. The engineer shall approve the subgrade before placement of the base material mixture. Approval of the subgrade shall be according to applicable provisions of the standard specifications.
(2) Install the base material according to vegetated porous pavement system Manufacturer's instructions. Place base material mixture to a minimum depth of 6 inches. Constrain the edges of the base appropriately to prevent movement.

## C. 2 Installation

(1) Install the vegetated porous pavement units according to the Manufacturer's instructions. Ensure that all adjacent hard-surfaced paving work is completed before installing the porous pavement system.
(2) Units shall be anchored according to the Manufacturer's recommendations.
(3) Infill units with pulverized topsoil immediately after units are installed. Spread topsoil infill uniformly over units to a level even with the top of the cell wall, using spreading methods to prevent overcompaction of cell infill. Broom or rotary sweep the infilled surface to remove the top portion of topsoil infill to allow room to seat the sod. Remove enough topsoil so that the crown of the sod will be recessed slightly below the top of the cell after pressing sod into place, and so the bottom of sod is in contact with the topsoil.

## D Measurement

The department will measure Vegetated Porous Pavement by the square foot acceptably completed.

## E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | :--- |
| SPV.0165.01 | Vegetated Porous Pavement | SF |

Payment is full compensation for preparation of subgrade; furnishing, mixing, and placing of the base material mixture; furnishing and placing porous pavement units; and for furnishing and placing of topsoil infill.

## 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 _15 (number) TrANS Graduate(s) be utilized on this contract.
2) On-the-Job Training, Item ASP.1TOA, 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 $\qquad$ 6 (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.

## II. 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.

## III. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.
It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.
TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

## IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.
No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

## V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups,
disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal
Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:
(1) To increase the overall effectiveness of the State highway agencies' approved training programs.
(2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. $\S 140$ (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


#### Abstract

Authority Wisconsin Department of Transportation (WisDOT) is a recipient of funds from the US Department of Transportation's Federal Highway Administration. The DBE program is a federal program applicable on all contracts administered by WisDOT that include federal-aid highway funds. The authority for the DBE program is the Transportation Bill as approved by Congress periodically. DBE program guidance and requirements are outlined in the Code of Federal Regulations at 49 CFR Part 26. This contract is subject to DBE provisions because it is financed with federal-aid-highway funds. Additionally, this contract is subject to the State of Wisconsin Standard Specifications for Highway and Structure Construction and all applicable contract documents.


## Requirements

Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE program regulatory provisions will be considered a material breach of contract. This is nonnegotiable.

If a contractor fails to carry out the DBE program requirements and/or the Required Contract Provisions for Federal Aid Contracts (FHWA 1273) referenced in this document, sanctions will be assessed depending upon the facts, reasoning, severity, and remedial efforts of the contractor that may include: termination of contract, withholding payment, assessment of monetary sanctions, and/or suspension/debarment proceedings that could result in the disqualification of the contractor from bidding for a designated period of time.
(1) The Commitment to Subcontract to DBE (Form DT1506 or digital submittal), Attachments A, and Good Faith Effort Documentation (Form DT1202) will be submitted as described in Section 2.
(2) Any change to DBE Commitments thereafter must follow modification of DBE subcontracting commitment as described in Section 9.
(3) The Department requires this list of DBE subcontractors from all bidders at time of bid to ensure the lowest possible cost to taxpayers and fairness to other bidders and subcontractors. Bid shopping is prohibited.
(4) The contractor must utilize the specific DBE firms listed in the approved DBE Commitment to perform the work and/or supply the materials for which the DBE firm is listed unless the contractor obtains written consent in advance from WisDOT. The contractor will not be entitled to payment for any work or materials on the approved DBE Commitment that is not performed or supplied by the listed DBE without WisDOT's written consent.

## Description

The Wisconsin Department of Transportation is committed to the compliant administration of the DBE Program. The DBE provisions work in tandem with FHWA 1273 and WisDOT's Standard Specifications for Highway and Structure Construction and Construction and Materials Manual. The WisDOT Secretary is signatory to assurances of departmentwide compliance.

The Department assigns the contract DBE goal as a percentage of work items that could be performed by certified DBE firms on the contract. The assigned DBE goal is expressed on the bid proposal as a percentage applicable to the total contract bid amount.
(1) WisDOT 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 contract DBE goal by subcontracting work to a DBE firm or by procuring services or materials from a DBE firm.
(2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:

- Produce accurate and complete quotes
- Understand highway plans applicable to their work
- Understand specifications and contract requirements applicable to their work
- Understand contracting reporting requirements
(3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx


## 1. Definitions

Interpret these terms, used throughout this additional special provision, as follows:
a. Assigned DBE Contract Goal: The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.
b. Bid Shopping: In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.
c. DBE: Disadvantaged Business Enterprise - A for-profit small business concern where socially and economically disadvantaged individuals own at least a $51 \%$ interest and control management and daily business operations.
d. DBE Commitment: The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal. The prime contractor will have the option to submit the DT1506 digitally, as an entry with the bid in Bid Express, or as an attachment to the bid.
e. DBE Utilization: The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of the DBE Commitment, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved DBE Commitment, and those submitted after approved commitment with Attachment A.
f. Good Faith Effort: Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.
g. 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.
h. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.
i. 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.
j. Tied quote: Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

## 2. WisDOT DBE Program Compliance

## a. Documentation Submittal

- The Commitment to Subcontract to DBE (Form DT1506 or digital submittal) must be submitted at the time of bid (Tuesday) by all prime contractors.
- Attachments A OR quotes from all DBEs included in the Commitment must be submitted at bid (Tuesday) OR
- Within one-hour following bid submittal by ALL prime contractors via eSubmit (Tuesday).
- If only DBE quotes were submitted, all remaining signed Attachments A must be submitted within 24hours of bid closing via eSubmit (Wednesday).
- If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) and supporting documentation must be submitted within 24 -hours of bid closing (Wednesday) via eSubmit. Instructions for eSubmit.
**Bidders have the option of submitting the DBE Commitment at the time of bid via direct entry through Bid Express OR with attachment of Form DT1506 (Commitment to Subcontract to DBE). The DBE Commitment entered with bid is the digital form of the DT1506. Separate submission of Form DT1506 is not required if the DBE Commitment is entered in Bid Express. Form DT1202, if applicable, is no longer required to be submitted at time of bid; submit DT1202 within the 24-hour supplemental time frame following bid closing.
The DBE Office will not certify Good Faith Effort and the Bureau of Project Development will consider the bid nonresponsive if the contractor fails to furnish the DBE Commitment (digitally entered into the bid OR Form DT1506 as an attachment), Attachments A, and Form DT1202 if applicable, as required. See sample forms in the Appendix.


## b. Verification of DBE Commitment

The documentation related to DBE subcontract commitment submitted prior to contract award is evaluated as follows:

## (1) DBE Goal Met

If the bidder indicates that the contract DBE goal is met, the Department will evaluate the DBE Commitment submitted with bid OR Form DT1506, and Attachments A to verify the actual DBE percentage calculation. If the DBE Commitment is verified, the contract is eligible for award with respect to the DBE Commitment.

## (2) DBE Goal Not Met

a) If the bidder indicates a bid percentage on the DBE Commitment that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) within 24-hours of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24 -hours of bid submission and prior to bid posting. The Department will review the bidder's DBE Commitment and evaluate the bidder's good faith efforts submission.
b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:

1. Approve the request (adequate documentation of GFE has been submitted) - no conditions placed on the contract with respect to the DBE Commitment;
2. Deny the request (inadequate documentation of GFE has been submitted) - the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.
c) If the Department denies the bidder's request, the contract is ineligible for award. The Department will provide a written explanation for denying the request to the bidder. The bidder may appeal the Department's denial (see Section 4).

Supplemental good faith effort documentation must be submitted through eSubmit.

## 3. Department's Criteria for Good Faith Effort Documentation

The Federal-aid Construction Contract Provision, referenced as FHWA-1273, explicitly states that the prime contractor shall be responsible for all work performed on the contract by piecework, station work, or subcontract.

The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of the contract including assurances of equal employment opportunity laws, DBE regulations, and affirmative action. Compliance encompasses responsible and responsive action, documentation, and good faith effort.
Contractually, all contractors, subcontractors, and service providers on the contract are bound by FHWA 1273 and DBE program provisions. Prime contractors should encourage subcontractors to utilize DBE firms whenever possible to contribute to the assigned DBE contract goal.
Bidders are required to document good faith effort. Per 49 CFR Part 26.53, good faith effort is demonstrated in one of two ways. The bidder:
(1) Documents that it has obtained enough DBE participation to meet the goal; OR
(2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

Appendix A of 49 CFR Part 26 provides guidance concerning good faith efforts. WisDOT evaluates good faith effort on a contract basis just as each contract award is evaluated individually.
The efforts employed by the bidder should be those that WisDOT can reasonably expect a bidder to take to actively and aggressively obtain DBE participation sufficient to meet the DBE contract goal. The Department will only approve demonstration of good faith effort if the bidder documents the quality, quantity, and intensity of the variety of activities undertaken that are commensurate with expected efforts to meet the stated goal.

The Department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort activity. 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.
a. Solicitation Guidance for Prime Contractors:
(1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.
(2) As needed, 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. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE_Alert@dot.wi.gov
(3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.
(4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, 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 B. 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 firms 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 quotes are being sought to DBE_Alert@dot.wi.gov
ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): https://www.bidx.com/wi/main, postal mail, email, fax, and phone.
a. Contractors must ask DBE firms for a response in their solicitations. See Sample Contractor Solicitation Letter, Appendix B. This letter may be included as an attachment to the sub-quote request.
b. Solicit quotes at least 10 calendar days prior to the letting date 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. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the 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 record of subcontractor outreach effort

## b. Guidance for Evaluating DBE quotes

(1) Quote evaluation practices required to evaluate DBE quotes:
i. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).
(2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:
i. Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, a discussion between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is 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 indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
a In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
b Additional evaluation - Evaluation of DBE quotes with tied bid items. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear 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.

See Appendix D - Good Faith Effort Evaluation Measures and Appendix E-Good Faith Effort Best Practices.
c. Requesting Good Faith Effort Evaluation At the time of bid- if the DBE goal is not met in full, the prime contractor must indicate they will file form DT1202- Documentation of Good Faith Effort within 24-hours of bid submission. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. Supporting documentation for the DT1202 is to include the following:
(1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.
(2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
(3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.
(4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.
(5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.
(6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials
(7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

If the Good Faith Effort documentation is deemed adequate, the request will be approved and the DBE office will promptly notify the Prime Contractor and Bureau of Project Development.

If the DBE Office denies the request, the Prime Contractor will receive written correspondence outlining the reasons. The Department encourages the Prime Contractor to communicate with DBE staff to clarify any questions related to meeting goals and/or contractor demonstration of good faith efforts.
If the contract is awarded, the Prime Contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved DBE Commitment. No contractor, prime or subsequent tier, shall be paid for completing work assigned to a DBE subcontractor on an approved DBE Commitment unless WisDOT has granted permission for the reduction, replacement, or termination of the assigned DBE in writing. If a prime contractor or a subcontractor on any tier uses its own forces to perform work assigned to a DBE on an approved DBE Commitment, they will not be paid for the work. Any changes to DBE Commitment after the approval of the DBE Commitment must be reviewed and approved by the DBE Office prior to the change (see Section 9).

Additional resources for demonstrating and tracking good faith effort can be found on the "Contracting with a DBE" webpage in the ASP-3 and Good Faith Effort Guidance section.

## 4. Bidder's Documentation of Good Faith Effort Evaluation Request Appeal Process

A bidder can appeal the Department's decision to deny the bidder's demonstration of Good Faith Effort through Administrative Reconsideration. The bidder must provide a written justification refuting the specific reasons for denial as stated in the Department's denial notice. The bidder may meet in person with the Department if so requested. Failure to appeal within 5 business days after receiving the Department's written notice denying the request constitutes a forfeiture of the bidder's right of appeal. Receipt of appeal is confirmed by email date stamp or certified mail signed by WisDOT staff. A contract will not be executed without documentation that the DBE provisions have been fulfilled.

The Department will appoint a representative who did not participate in the original good faith effort determination, to assess the bidder's appeal. The Department will issue a written decision within 5 business days after the bidder presents all written and oral information. In that written decision, the Department will explain the basis for finding that the bidder did or did not demonstrate an adequate good faith effort to meet the contract DBE goal. The Department's decision is final.

## 5. Determining DBE Eligibility

## Directory of DBE firms

a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at:
http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx
b. The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.
c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

## 6. Counting DBE Participation

## Assessing DBE Work

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 UCP agencies. 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:
a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.
b. The Department counts fees and commissions the DBE subcontractor charges for providing 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 program engineer deems reasonable based on experience or prevailing market rates.
c. If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.
d. The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.
e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE 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.
f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it 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.
g. The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment $A$ forms for additional DBE firms.
h. See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

Naming conventions: When emailing files, please use the following language to identify your submission- "Project \#, Proposal \#, Let date, Business Name, Attachment A" Email: DBE_Alert@dot.wi.gov
*Note: A sublet request is required for DBE work, regardless of subcontract tier, and also for reporting materials or supplies furnished by a DBE.

- Sublet Requests via form DT1925 or WS1925 are required for 1st Tier DBEs
- For all 2 nd Tier and below notification of DBE sublet is indicated by the contractor entering them in CRCS


## 7. Credit Evaluation for Trucking

All bidders are expected to adhere to the Department's current trucking policy posted on the HCCl website at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

The prime contractor is responsible for ensuring that all subcontractors including trucking firms, receive Form FHWA 1273: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf
See Section 8 for Broker credit.

## 8. 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 firm provides under the contract for DBE credit based on whether the DBE firm is a manufacturer, supplier, or broker. Generally, DBE credit is determined through evaluation of the DBE owner's role, responsibility, and contribution to the transaction. Maximum DBE credit is awarded when the DBE firm manufactures materials or supplies. DBE credit decreases when the DBE firm solely supplies materials, and minimal credit is allotted when the DBE firm's role is administrative or transactional. It is the bidder's responsibility to confirm that the DBE firm is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506 or DBE Commitment submitted with the bid.

## 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, $\mathbf{1 0 0 \%}$ percent of the cost of the materials or supplies counts 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.
(4) When DBE suppliers are contracted, additional documentation must accompany the DBE Commitment and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with 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 per b.(1) above.
i. The bidder should respond to the following questions and include with submission of form DT1506 or the DBE Commitment entered with bid:
a. What is the product or material?
b. Is this item in the prime's inventory or was the item purchased when contract was awarded?
c. Which contract line items were referenced to develop this quote?
d. What is the amount of material or product used on the project?
(5) Supplies purchased in bulk from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.
i. To ensure that the appropriate credit is assigned, follow the procedure below:
a. When DBE suppliers are contracted for bulk supply or commodity purchases, an invoice or bill-of-sale that includes names of the contractor and the DBE supplier should be submitted to the DBE Office via eSubmit (preferred during letting) or the DBE_Alert email box. The supply/commodity credit may be applied during the federal fiscal year (October- September) in which the purchase was made.
b. When the contractor intends to apply the credit to a particular project, submit a copy of the original invoice, documentation of the calculations for supplies/commodities to be used on the project, and an Attachment A. Indicate on the Attachment A:
c. This supply/commodity is in the prime's inventory or pre-paid in case of commodities
d. The full value of the original invoice submitted to the DBE Office, above in (1)
e. The amount of material or product used on this project
f. Fuel estimate listed on Attachment A will be recorded as a deduction from the full fuel purchase amount shown on the invoice
ii. DBE Office Process (Applies only to bulk purchases)
a. Supply/Commodity commitment is received
b. Engineer verifies amount listed on invoice and enters the full amount into spreadsheet
c. The amount of credit applied for each project is updated on the spreadsheet until the bulk purchase is exhausted
d. Engineer informs contractor when full amount of bulk purchase has been applied

## c. Brokers, Transaction Expediters, 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 are calculated as $\mathbf{1 0 \%}$ 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, fees, or transportation charges for the delivery of materials or supplies required on a job site.
(4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

## 9. DBE Commitment Modification Policy (Formerly "DBE Replacement Policy")

## a. Issuing a Contract Change Order

Any changes or modifications to the contract once executed are considered contract modifications and as such require a change order. In addition, the DBE office must provide consent for reduction, termination, or replacement of subcontractors approved on the DBE Commitment in advance of the modification for the prime contractor to receive payment for work or supplies. Additions to the DBE Commitment do not require advance notification of the DBE office. (see below e. DBE Utilization beyond the approved DBE Commitment)

## b. Contractor Considerations

(1) A prime contractor cannot modify the DBE Commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DBE Commitment 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 nonDBE firm, or with another DBE firm.
(2) If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.
(3) The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.
(4) 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 must undertake efforts to maintain its commitment to the assigned DBE goal.
(5) The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.
i. Before the Prime Contractor can request modification to the approved DBE Commitment, the Prime Contractor must:
a. Make every effort to fulfill the DBE Commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor's expectations for successful performance on the contract. Document these efforts in writing.
b. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor's intent to request to modify the Commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.
c. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who has been approved for DBE credit on a contract, including preparation and coordination efforts.
d. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, 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 engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.
e. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

## c. Request to Modify DBE Subcontracting Commitment

The written request referenced above may be delivered by email or fax. The request must contain the following:
(1) Project ID number
(2) WisDOT Contract Project Engineer's name and contact information
(3) DBE subcontractor name and work type and/or NAICS code
(4) Contract's progress schedule
(5) Reason(s) for requesting that the DBE subcontractor be replaced or terminated
(6) Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

Naming conventions: When emailing files, please use the following language to identify your submission- "Project \#, Proposal \#, Let date, Business Name, MODIFICATION" Email: DBE_Alert@dot.wi.gov + Project Engineer
WisDOT will review the request and any supporting documentation submitted to evaluate if the circumstance and the reasons constitute good cause for replacing or terminating the approved DBE subcontractor.

Good Causes to Replace a DBE subcontractor 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
- The prime has determined that the listed DBE subcontractor is not a responsible contractor
- The listed DBE subcontractor voluntarily withdraws from the project and provides written notice of its withdrawal
- The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required
- A DBE firm owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract.


## d. Evaluation and Response to the Request

WisDOT's timely response to the Prime Contractor's request for modification of the approved DBE Commitment will be provided to the prime and the WisDOT project engineer via email.

If WisDOT determines that the Prime Contractor's basis for reduction in participation, replacement, or termination of the DBE subcontractor is not consistent with the good cause guidelines, the DBE office will provide a response via email within 48 -hours of receipt of request from the Prime Contractor as indicated by email time stamp. The communication will include: the requirement to utilize the committed DBE, actions to support the completion of the contractual commitment, a list of available WisDOT support services, and administrative remedies, including withholding payment to the prime, that may be invoked for failure to comply with federal DBE guidelines for DBE replacement.

The WisDOT contact for all actions related to modification of the approved DBE Commitment is the DBE Program Engineer who can be reached at DBE_Alert@dot.wi.gov or (414) 335-0413.

## e. DBE Utilization beyond the approved DBE Commitment

When the prime or a subcontractor increases the scope of work for an approved DBE subcontractor or adds a DBE subcontractor who was not on the approved form DT1506 or DBE Commitment submitted with bid at any time after contract execution, this is referred to as voluntary DBE contract goal achievement. The contractor must follow these steps to ensure that the participation is accurately credited toward the DBE goal:
(1) Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DBE Commitment based on the email/discussion and the new Attachment A.
(2) When adding to an existing DBE Commitment, submit a new Attachment A to the DBE Alert mailbox
(3) OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete"

Naming conventions: When emailing files, please use the following language to identify your submission"Project \#, Proposal \#, Let date, Business Name, New Attachment A" Email: DBE_Alert@dot.wi.gov

## Special note on trucking

- DBE truckers added to the sublets in CRCS will be approved without DBE credit (You will see a "N" in CRCS instead of "Y")
- Prime Contractors may enter a "place holder" e.g. \$1000.00, for DBE Trucking in CRCS if the full amount of trucking is unknown for sublet purposes only
- The hiring contractor may obtain the Attachment A with DBE signature included but the Prime Contractor must sign the Attachment A before submitting
- DBE truckers need to be added to the DBE commitment once. If the DBE trucker is on the initial commitment (DT1506/E1506) there is no requirement to submit another Attachment A for that trucker for that contract.


## 10. Commercially Useful Function

a. Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.
b. The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if 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 firm 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 work and 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.
d. Offsite Hauling - when DBE truck will haul between a pit and plant or location other than the construction site associated with the commitment
(1) Indicate Offsite Hauling on Attachment A
(2) Discuss offsite hauling at weekly progress meetings with Project Engineer (PE)
(3) PE conducts spot checks of pits/plants to verify DBE truck is hauling and/or verifying hauling log
(4) Prime should be prepared to submit haul tickets, plant/pit tickets, timecards, and other pertinent documentation if requested by PE or DBE Office

## 11. Credit Evaluation for DBE Primes

WisDOT calculates DBE credit based on the amount and type of work performed by DBE certified firms for work submitted with required documentation. If the prime contractor is a DBE certified firm, the Department will only count the work that the DBE prime performs with its own forces for DBE neutral credit. The Department will also calculate DBE credit for work performed by any other DBE certified subcontractor, DBE certified supplier, and DBE certified manufacturer on the contract in each firm's approved NAICS code/work areas that are submitted with required documentation. Crediting for manufacturers and suppliers is calculated consistent with Section 8 of this document and 49 CFR Part 26.

## 12. Joint Venture

A joint venture is an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest. If a DBE performs as a participant in a joint venture, the Department will only credit the portion of the total dollar value of the contract equal to the portion of the work that the DBE performs with its own forces.

## 13. Mentor-Protégé

a. If a DBE performs as a participant in a mentor-protégé agreement, the Department will credit the portion of the work performed by the DBE protégé firm.
b. DBE credit is 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.
(1) DBE credit may only be awarded to a non-DBE mentor firm for using its own protégé firm for less than one half of its goal on any contract; and
(2) Not award DBE credit to a non-DBE mentor firm for using its own protégé firm for more than every other contract performed by the protégé firm.
c. A DBE protégé firm may be eligible for conditional NAICS code extension for training with the mentor. Request permission from the DBE Office- Certification area.
d. Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

## 14. 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 subcontractor, a prime contractor, and the regular dealer or 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 firm in cases where the DBE subcontractor and materials have been approved 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 firm is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE firm 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 Contractor 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 or the 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 approved supplies.
b. The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an 'extra participant' in the transaction. The DBE firm'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 Contractor 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 contractor's negotiated unit price.

## 15. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

## Appendix A

## Substantive Conversation Guidelines

The substantive conversation is critical to all bidders' demonstration of good faith effort to meet the DBE goal prior to bid opening. Relationship building between primes and subcontractors is crucial to DBE goal attainment. Responsible bidders seek to build rapport with potential DBE subcontractors to understand capacity, areas of expertise, and assess contracting feasibility. Bidders who compete for WisDOT contracts are specialty contractors responding to a growing and changing contract environment. Just as these specialists are responsible for care of the roads, they are likewise responsible for contributing to the health of the industry. The substantive conversation drives collaboration that will build industry health and capacity. The following is intended to provide guidance for such discussions but is not an exhaustive list. Contractors are encouraged to incorporate their existing strategies for cultivating business relationships as well.

## Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released weeks prior to each Let)

1. Determine DBE subcontractor's interest in quoting
2. If response indicates inexperience with quoting- offer support/assistance to the DBE in understanding the industry including fundamentals a subcontractor needs to know, required reading and/or resources.
3. Assess their interest and experience in the road construction industry by asking questions such as:

- Have you competed for other WisDOT contracts? Ratio of competed/to wins
- Have you performed on any transportation industry contracts (locally or with other states)?
- What the largest contract you've completed?
- Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
- Does this project fit into your schedule? Are you working on any contracts now?
- Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
- What region do you work in? Home base?
- Which line items are you considering?
- Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
- Do you understand where your work fits in the project schedule, project phases?


## Following Bid Opening- this discussion can happen at any time

1. After reviewing their quote, note the following in your discussion:

- Does the quote look complete? Irregular?
- Are there errors in the quote? Are items very high or very low?
- In general, does the quote look competitive?

2. Questions and Advice for the bidder to share with the potential DBE subcontractor:

- What line items would typically be in a competitive quote for a subcontractor of their specialty?
- How many employees and what is their role/experience/expertise in your firm?
- Do you have resources for labor (union member, family-based, community-resourced) and capital (banking relationship, bond agent, CPA)?
- Where have you worked: cities, states, government, commercial, residential/private sector, etc. Explain similarities or differences.
- Refer them to reliable, trusted, industry resources that can educate or connect them to relevant resources, education/certification resources, more appropriate contract opportunities.
- Discussion about prime contract and subcontract liability, critical path items, contract quantities, schedule risks, and potential profit/loss (for upcoming known projects or in general).
- Discussion of bonding, insurance, and overall business risk considerations.


## Appendix B

## Sample Contractor Solicitation Letter Page 1

(This sample is provided as a guide, not a formatting requirement)

## DBE Solicitation - [Month] [Day], [Year] WisDOT Bid Letting

Attention all DBEs. [Prime Contractor] is actively seeking your quote for the [Month][Day], [Year] Bid Letting. [Prime Contractor] is considering bidding on the projects listed on page 2 as a prime contractor. Please see page 2 for instructions and the sub-contractable opportunities for each proposal.

Does [Prime Contractor] accept quotes in areas we might self-perform? Yes, we do! We support this federal rule and (if needed) we consider areas we might self-perform an opportunity to provide in the field assistance and training if we award your quote.

Where can DBEs find the plans, specifications \& addenda? Please visit [Prime Contractor's] plan room [LINK] or on WisDOT's Highway Construction Contract Information HCCI website: Wisconsin Department of Transportation Highway Construction Contract Information (wisconsindot.gov). This same website can be checked for the contract status.

What should your quote include? All the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should also note items that you are DBE certified to perform, tied items, and any special terms. Please use page 2 as your cover sheet for your quote.

Do you have a question regarding bonding, credit, insurance, equipment, or supplies/materials? We welcome all DBE questions! Please call [Prime Contractor] and ask to speak with [Contact]. [Prime Contractor] can provide basic information as well as a referral to a trusted industry partner for insurance and bonding needs.

## When are quotes due?

[Month] [Day], [Year] at [Time]. We accept quotes via SBN, email, or fax. Please make every effort to have your quotes in by this time or earlier. Quality check your quote so it includes the correct letting date, project ID, proposal number, unit price and extension.

Who can DBEs contact for questions, information, clarification or for a quote evaluation? [Project Manager Name] [Phone] [Email]. If you are quoting [Prime Contractor] for the first time, we encourage you to come meet with us in person to discuss the project. Our office hours are 7:30 a.m. - 5:00 p.m. On bid day, we are in the office by $6: 30$ a.m.

## Why partner with [Prime Contractor]?

DBE partnership is a core part of [Prime Contractor's] mission. Including DBEs at the beginning of each project is essential in the success of each project. We consider DBEs to be important industry partners who bring dedication and knowledge at various stages during construction. We are proud to be an industry leader with our DBE partnership. Your success as a DBE is our success.

## Sample Contractor Solicitation Letter Page 2

(This sample is provided as a guide, not a formatting requirement)
REQUEST FOR QUOTE
[Prime Contractor]
Letting Date: [Month] [Day], [Year]
Project IDs: 1234-56-00 (Proposal \#1) \& 1234-01-78 (Proposal \#6)
Please check all that apply:
____Yes, we will be quoting the projects \& 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 Contact: $\qquad$ DBE: $\qquad$
Phone: $\qquad$ Fax: $\qquad$
Email: $\qquad$

Please circle the proposals and items you will be quoting below and contact us with any questions

| Proposal <br> County | 1 Dane County | $6$ <br> Crawford County |
| :---: | :---: | :---: |
| Clearing \& Grubbing | X | X |
| Dump Truck Hauling | X | X |
| Curb/Gutter/Sidewalk | X |  |
| Erosion Control Items |  | X |
| Excavation | X | X |
| Pavement Marking |  | X |
| Traffic Control | X |  |
| Sawing | X | X |
| QMP, Base |  | X |
| Pipe Underdrain | X |  |
| Landscape |  | X |
| Beam Guard | X |  |
| Electrical | X |  |
| Signs/Posts/Markers |  | X |
| Survey/Staking |  | X |

Again, please make every effort to have your quotes into our office by time deadline prior to the letting date.

## Sample Contractor Solicitation Email - Simplified

(This sample is provided as a guide, not a formatting requirement)

## ATTENTION DBEs

- [Prime Contractor] specializes in municipal projects in the XX Region(s)
- We have successfully competed for and completed XX WisDOT projects over the past XX years
- Consider [Prime Contractor] your partner on WisDOT Projects
[Prime Contractor] is seeking your subcontractor quote for the XX/XX/20XX WisDOT bid letting on the below projects:

| Project | Proposal | County | Region |
| :---: | :---: | :---: | :---: |
| $1234-56-00$ | 2 | Dane | SW |
| $1234-01-78$ | 6 | Crawford | SW |

- Please review the attachments [attach Solicitation Letter] and respond with your intent to quote (or not) along with the work items you are interested in performing and respond via fax or email by date. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Please include labor, equipment, material, and related bonding or insurance.
- If you have any questions regarding bonding, credit, insurance, equipment and/or materials/supplies, please feel free to call [Prime Contractor] and ask for [Contact]. (Include if your company is willing to answer these types of DBE questions)
- Plans and Specifications can be found: WisDOT HCCI Website: List webpage where plans are located
- If you do choose to quote, please make every effort to have your quote into our office by time and date. Make sure the correct letting date, project number, unit price and extension are included in your quote.
- Should you have questions regarding the mentioned project, please call our office at (414) 555-5555 and we will direct you to the correct estimator/project manager.
Our office hours are 7:30 a.m. - 5:00 p.m.
Thank you - we look forward to working with your company on this project!
Prime Contractor
Project Manager
Direct: 414-555-5555
Cell: 414-555-5556


# Sample Contractor Solicitation Email to non-DBE WisDOT Subcontractors Simplified 

(This sample is provided as a guide, not a formatting requirement)

## ATTENTION WisDOT SUBCONTRACTORS

[Prime Contractor] is considering bidding on the below projects for the XX/XX/20XX WisDOT Bid Letting:

| Project | Proposal | County | Region | DBE Goal |
| :--- | :--- | :--- | :--- | :--- |
| $1234-56-00$ | 2 | Dodge | SW | $6.00 \%$ |
| $1234-01-78$ | 11 | Adams | NC | $3.00 \%$ |
| $1234-00-99$ | 20 | Buffalo | NW | $5.00 \%$ |
| $1234-00-98$ | 33 | Portage | NC | $6.00 \%$ |

The above projects have DBE goals and [Prime Contractor] is committed to DBE inclusion with every project. As such, we are requesting:

- All WisDOT Subcontractors to solicit and utilize DBEs in your quotes.
- DBE participation can be achieved through purchasing materials from DBE suppliers, using DBE subcontractors and/or DBE trucking firms or any combination of these.
- If there is an opportunity to untie an item in your quote so a DBE can be utilized, please look for those opportunities as well.
- Your quote will be evaluated based on the amount of DBE participation your company is able to provide when compared to other quotes for the same work.

If you do choose to quote, please make every effort to have your quote into our office by time and date. Please submit all quotes to [Email]. Make sure the correct letting date, project number, unit price and extension are included in your quote.

Should you have questions regarding the mentioned project, the Project Manager contact is: [Name] [Phone Number] [Email]

Thank you for utilizing DBEs who are trusted industry partners with WisDOT projects.
Prime Contractor
Project Manager
Direct: 414-555-5555
Cell: 414-555-5556

## Appendix C Small Business Network (SBN) Overview

The Small Business Network is a part of the Bid Express ${ }^{\circledR}$ 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 later completion.
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 help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. The DBE will provide free SBN accounts to DBEs when requested. Use DBE_Alert@dot.wi.gov to request an account. DBE firms can:

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.

## Appendix D

## Good Faith Effort Evaluation Measures by categories referenced in DBE regulations

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met or if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- Review and response to DBE quotes including provision of information about plans, specifications, and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (\#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's $30 \%$
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (points added for each day prior to letting)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- Evidence of negotiation with the DBE firm about current and future Let opportunities
- Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements


## GFE Evaluation Rubric - Phase 1 - Initial Review

| DT1202 | Examples | Rating | OBOEC Feedback |
| :---: | :---: | :---: | :---: |
| Solicitation Documentation | Identify all reasonable and available activities performed to solicit the interest of all certified DBEs who have capacity and ability to perform work on the project. <br> Such as: Updated solicitation letter and email, timely solicitation, and follow-up, and/or utilized various methods to communicate solicitation (ex: letter, email, publication, posting and/or website) |  |  |
| Selected Work Items Documentation | All work items are broken out into economically feasible units to facilitate DBE participation. <br> Such as: Selected work items are specific to each proposal and clearly identified in all solicitation(s) |  |  |
| Documentation of Project Information provided to Interested DBEs | Provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation. <br> Such as: Project information is clearly identified in all solicitation(s) |  |  |
| Documentation of Negotiation with Interested DBEs | Provide sufficient evidence demonstrating that good faith negotiations took place during the bid letting. <br> Such as: Documented attempts with DBEs or on behalf of DBEs to increase DBE participation |  |  |
| Documentation of Sound Reason for Rejecting DBEs | Provide sufficient evidence demonstrating that DBEs are rejected for sound reasons. <br> Such as: Detailed and thoughtful analysis that considers both the percentage and dollar difference when rejecting a DBE including past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, and other tangible factors. |  |  |
| Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials | Documented assistance in both solicitation(s) and outreach to DBEs. |  |  |
| Documentation of Outreach to <br> Minority, Women, and <br> Community organizations and other DBE Business Development Support | Effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well participation in activities that support DBE business development. <br> Such as: Variety of activities that translate into meaningfuI DBE participation |  |  |
| Documentation of other GFE activities | Such as: Used DT1202 Excel Workbook, Diversity \& Inclusion company policy, Mentor-Protégé participant, awarded neutral DBE after bid submission, included company GFE overview/strategy information and/or company website highlights DBE opportunities and participation |  |  |
| Overall Demonstration of GFE |  |  |  |

## GFE EVALUATION RATING LEGEND - PHASE 1 - Initial Review

Documentation provided by bidder is evaluated and rated on the rubric. Bidders should include activities characterized by the following types of effort:

ACTIVE \& AGGRESSIVE: Demonstrated through engaged and assertive activity
QUALITY: Demonstrated through essential character of conscientious and serious activity
QUANTITY: Demonstrated through a measurable number of activities
SCOPE \& INTENSITY: Demonstrated through a rigorous approach to an appropriate and purposeful range of activities
TIMING: Demonstrated through engagement efforts beyond simple solicitation, initiated early in the process

## GFE EVALUATION - PHASE 2 - Team Review

## GFE Team completes:

- Review of activities included on the rubric
- Review of the intent to award and sound reasoning submitted by Prime
- Bid analysis to confirm if any bid submitted met the DBE goal
- Review average of other bidders DBE goal achievement
- Team review of combined efforts documented in Phase 1 and 2 constitute final GFE determination

Rating Scale:

- GFE Approval:

Bona Fide = 6 or more categories color coded green.
Genuine effort characterized by sincere and earnest activities - "Solicitation" and "Sound Reasoning" must be green

- GFE Approval:

Sufficient = 5 or more categories color coded green or yellow
Adequate effort documented with a variety of quality activities - "Solicitation" and "Sound Reasoning" must be green or yellow

- GFE Denial:

Pro Forma efforts $\mathbf{= 4}$ or less categories color coded green or yellow. Perfunctory effort characterized by routine or superficial activities

| Green $=$ Exceeds expectations |
| :--- |
| Yellow $=$ Meets expectations |
| Red = Areas in need of attention and/or |
| absence of documentation |
| See OBOEC Rubric Analysis_Feedback |

Excerpt from Appendix A to 49 CFR Part 26:
V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. 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 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. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed

| GFE RUBRIC ANALYSIS |  |
| :--- | :--- |
| OBOEC DECISION | APPROVAL OR DENIAL |
|  |  |
| Prime Contractor |  |
| Proposal |  |
| Project |  |
| Bid Letting |  |
| DBE Goal Amount |  |
| DBE Goal Amount Achieved |  |
| Bid Analysis | \% |
| Goal \% |  |
| Apparent Low Bidder $\%$ |  |
| Bidder B |  |
| Bidder C |  |
| Average of OTHER Bidders |  |
| (Not including Apparent |  |
| Low Bidder) |  |
| DBE Quotes Received |  |
| DBE Quotes Awarded |  |
| DBE Quote(s) Rejected |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Appendix E Good Faith Effort Best Practices

This list is not a set of requirements; it is a list of potential strategies

## Primes

$>$ Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance.
> Participate in speed networking and mosaic exercises as arranged by DBE office.
$>$ Host information sessions not directly associated with a bid letting.
$>$ Participate in a formal mentor protégé or joint venture with a DBE firm.
> Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
$>$ Facilitate a small group DBE 'training session' clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
$>$ Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
$>$ Quality of communication, not quantity creates the best results. Contractors should be thorough in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

## DBE

$>$ DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
$>$ Continually check for contract addendums on the HCCl website through the Thursday prior to letting to stay abreast of changes.
$>$ Review the status of contracts on the HCCl website reviewing the 'apparent low bidder' list and bid tabs at a minimum.
> Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
> Participate in DBE office assessment programs.
$>$ Participate on advisory and mega-project committees.
$>$ Sign up to receive the DBE Contracting Update.
$>$ Consider membership in relevant industry or contractor organizations.
$>$ Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

## Appendix F Good Faith Effort Evaluation Guidance Appendix A of 49 CFR Part 26

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract for procuring construction, equipment, services, or any other purpose, a bidder must, in order to be responsible and/or responsive, make sufficient 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, you have the responsibility 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, based on the regulations and the guidance in this Appendix.

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. Determinations should not be made using quantitative formulas.
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. (1) Conducing market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.
(2) The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should 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 (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.
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 with their offer for the subcontract.
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. (1) 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 status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.
(2) A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.
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, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. 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 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. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.
VI. A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.
[79 FR 59600, Oct. 2, 2014]

## Appendix G

(SAMPLE) Forms DT1506 and DT1202

Official Form DT1506 can be found here: https://wisconsindot.gov/Documents/formdocs/dt1506.pdf

COMMITMENT TO SUBCONTRACT TO DBE

Clear
Project ID:
Proposal \#
Wisconsin Department of Transportation

| DT1506 | $12 / 2021$ | s. $84.06(2)$ Wis. Stats. $\quad \square$ Non-Traditional Project |
| :--- | :--- | :--- |
| Prime Contractor: |  |  |
| County: |  |  |

This contract requires that a specified percentage of the work be subcontracted to a disadvantaged business enterprise and that this information be submitted as described in ASP-3. The submittal of this form with the bid proposal constitutes your DBE commitment. Include Attachment A for DBEs included on commitment.

Letting Date:
Total \$ Value of Prime Contract: DBE Contract Goal: DBE Goal Achieved:


This form must be completed and returned for this proposal. See page 2 for instructions.

| 1. DBE Firm | 2. Work or Items to be subcontracted | 3. Supplier Y/N | 4. Trucking Only | 5. DBE Full Subcontract \$ | 6. DBE Amount for Credit \$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { O\# } \\ & \text { L\# } \end{aligned}$ |  |  |
|  |  |  | $\begin{aligned} & \text { O\# } \\ & \text { L\# } \end{aligned}$ |  |  |
|  |  |  | O\# <br> L\# |  |  |
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|  |  |  | $\begin{aligned} & \text { O\# } \\ & \text { L\# } \end{aligned}$ |  |  |
|  |  |  |  | \$ 0.00 | \$ 0.00 |


| Government Use Only <br> Approved Amounts |  |  |
| ---: | :--- | :--- |
| $A=$ | $\$$ | $\%$ |
| $V=$ | $\$$ | $\%$ |
| Total $=$ | $\$$ | $\%$ |
| Signature: <br> Date: <br> Good faith effort approved: $\quad$ Yes $\square$ | No $\square$ |  |

## COMMITMENT TO SUBCONTRACT TO DBE ATTACHMENT A

CONFIRMATION OF PARTICIPATION

| Project I.D.: | Proposal Number: |
| :--- | :--- |
| Letting Date: |  |


| Name of DBE Firm Participating in this Contract: |  |
| :--- | :--- |
| Name of the Prime/Subcontractor who hired the DBE Firm: (list all names of tiers if more than one) |  |
| Type of Work or Type of Material Supplied: | Total DBE Credit Value: |
| Total Subcontract Value: |  |


| FOR PRIME CONTRACTORS ONLY: <br> I certify that I made arrangements with the participating <br> DBE firm to perform the type of work listed or supply the <br> material indicated above for the subcontract value listed <br> above. | Prime Contractor Representative's Signature |
| :--- | :--- |
|  |  |
|  | Prime Contractor Representative's Name (Print Name) |
|  |  |


| FOR PARTICIPATING DBE FIRMS ONLY: <br> I certify that I made arrangements with the Prime Contractor or the Hiring Contractor to perform the type of work or supply the material indicated above for the subcontract value listed above. | Participating DBE Firm Representative's Signature | Date |
| :---: | :---: | :---: |
|  | Participating DBE Firm Representative's Name (Print Name) |  |
| FOR DBE TRUCKING FIRMS ONLY: <br> I certify that I will utilize, for DBE credit, only trucks listed on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks as listed below. | Participating DBE Firm (Print Company Name) |  |
|  | DBE Firm's Address: |  |


| \# Owned Trucks | \# Leased Trucks | \# DBE-Owned Leased <br> Trucks | \# Non-DBE-Owned <br> Leased Trucks |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

Off site Hauling

DOCUMENTATION-OF-GOOD-FAITH-EFFORT.
Wisconsin-Department of Transportation
DT1202

| $\begin{aligned} & \text { Praject ID } \\ & =0.08 \end{aligned}$ | $\begin{aligned} & \text { Proposal No. } \\ & =:=s . \end{aligned}$ | $\begin{aligned} & \text { Letting } \\ & =0000 \end{aligned}$ |
| :---: | :---: | :---: |
| Prime Contractor $0=8=0$ |  | County $0.0=8$ |
| Person'Submitting Document: $0.0 .08$ |  | Telephone Number 0.0 .0 |
| Address <br> © $0=0$ |  | Email-Address <br> s $s=0$ |

All-bidders-must-undertake-necessary-and-reasonable-steps-to-achieve-the-assigned-DBE-contract-goal-per-federal-regulatory guidance-at-49-CFR•Part-26.-Bidders-use-this-form-to document-all-efforts employed-to-meet-the-assigned-goal-as a-record-of contractor-good-faith efforts•(GFE) -Refer•to-ASP3-or-49-CFR•Part-26-for-guidance-on-actions that-demonstrate good faith effort.

It-is-critical-to-list-all-efforts, attach documentation,-and-follow the-instructions to complete-this submission. Documentation-of-good-faith effort-includes-copies of-each-DBE-and-non-DBE-subcontractor quote-submitted to-the-bidder for the-same-line-items.-Utilize-the-sample-documentation-logs-to-document and-organize-efforts...

Submit-good•faith effort-documentation-per-ASP-3 guidelines.
Instructions:-Provide-a-narrative description-of-all-activities pursued to demonstrate good-faith-efforts,-any-corresponding-documentation, and-applicable-explanation-on-separate-pages.-Include-the-following-items, organized-in the-order-listed below.

## 1. $\rightarrow$ Solicitation-Documentation:•

a. $\rightarrow$ Purpose:-To-identify-all-reasonable-and-available-activities-the-bidder-performed-to-solicit-the-interest-of-all-certified-DBEs-who-have-the-capacity-and-ability-to-perform-work-on-the project. All-solicitation-efforts-should-begin-as-early-as-possible-to-ensure-DBEs-have-ample-time-to-respond-and-ask-questions.
b. $\rightarrow$ Action:-Identify-and-list-all-activities engaged-in-to-solicit-DBEs-using-all-reasonable-and-available-means-such as-written-notice-and•follow-up-communications;-substantive-conversations;'pre-bid-meetings;-networking-events;-market-research;-advertising.

## $2 . \rightarrow$ Selected-Work-Items-Documentation:-

a. $\rightarrow$ Purpose:-To ensure-that all-work-items-are-broken-out-into-economically-feasible units-to-facilitate-DBE-participation.-This-must-occur-even-when-you-prefer-to-perform-the-work-yourself.
b. $\rightarrow$ Action:-Identify-economically-feasible-work-units to be-performed-by-DBEs-to-include-activities-such-as: list-of work-items-to-be performed;-breaking-up-of-large-work-items-into-smaller-tasks-or-quantities;-flexible-time-frames-for-performance-and-delivery-schedules.
$3 . \rightarrow$ Documentation $o f \cdot$ Project•Information-provided•to•Interested-DBEs:-
a. $\rightarrow$ Purpose:-To-provide-interested-DBEs-with adequate-information-about-the-plans, specifications; and-any-other-contractual-requirements-in-a-timely-manner-to-assist-DBEs-in-response-tosolicitation.
b. $\rightarrow$ Action:-Provide-DBEs-access -to-plans, specifications, and-other-contract-requirements - Early-solicitation-allows-ample-opportunity-to-provide-project-information,-links-to-Let-advertisements,• and-substantive-engagement-with-DBEs.

## $4 . \rightarrow$ Documentation $\cdot$ of $\cdot$ Negotiation with-Interested•DBEs:-

a. $\rightarrow$ Purpose:-To ensure-that-negotiations-with $\cdot$ interested-DBEs-were-made-in-good•faith $\cdot$ providing-evidence-as to why-agreements could-not-be-reached for-DBEs to perform-work.-
b. $\rightarrow$ Action:-Provide-sufficient evidence-to demonstrate-that good-faith-negotiations-took-place.-Merely-sending•out-solicitations requesting-bids from-DBEs does not-constitute-sufficient-goodfaith efforts. A-bidder-using good-business-judgment-considers-a-number-of-factors-in-negotiating-with all-subcontractors, and-the-firm's price-and-capabilities in-addition to-contract-goals-are-taken-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-failing to-meet the-DBE-goal-as-long•as-costs are•reasonable.(see•49-CFR•Part-26-Appendix-A)

## $5 . \rightarrow$ Documentation•of•Sound•Reason•for•Rejecting•DBEs:•

a. $\rightarrow$ Purpose: To ensure-that bidders avoid-rejecting•DBEs-as-unqualified-without sound $\cdot$ reasons. Reasons-for-rejection-must-be-based-on-thorough -investigation-of-DBE-capabilities.
b. $\rightarrow$ Action:-Provide-sufficient-evidence-to-demonstrate-that-DBE-was-rejected-for-sound-reasons-such-as past performance, relevant•business-experience-and-stability, safety•record, business-ethic-and-integrity,-technical-capacity,-other tangible-factors.
$6 . \rightarrow$ Documentation-of•Assistance-to-Interested•DBEs-Bonding,'Credit,-Insurance,'Equipment,' Supplies/Materials:-
a. $\rightarrow$ Purpose: $\cdot$ To assist-interested-DBEs-in-obtaining-bonds, lines-of credit, insurance, equipment, $\cdot$ supplies, materials,-and-other-assistance-or-services.
b. $\rightarrow$ Action:-Assist-interested-DBEs-in-obtaining-bonding,-lines-of-credit-or-insurance, and-provide-technical-assistance-or-information-related to plans,-specifications,-and-project-requirements. Assist-DBEs-in-obtaining-equipment, supplies, materials-or-other-services related-to-meeting-project-requirements-(excluding-supplies-or-equipment-the-DBE-purchases-from-the-prime).
$7 . \rightarrow$ Documentation $\cdot$ of $\cdot$ outreach $\cdot$ to-Minority, $\cdot$ Women, $\cdot$ and $\cdot$ Community-Organizations and $\cdot$ other•DBE• Business-Development-Support:-
a. $\rightarrow$ Purpose:-To effectively-use-the-services-of-minority, women, and-community-organizations as-well-as-contractors'groups,-local,-state,-and-federal-business-assistance-offices-andorganization that-provide-assistance-in-recruiting-and-supporting-DBEs, as-well-as-participationin activities that-support-DBE-business-development.
b. $\rightarrow$ Action:-Contact-organizations-and agencies for assistance-in-contacting, recruiting, and-providing-support-to-DBE-subcontractors, suppliers, manufacturers,-and-truckers at-least-14-days-before-bid-opening. Participate-in-or-host-activities-such-as-networking-events, mentor-protégé-programs,small-business-development-workshops, and-others consistent-with-DBEsupport.

Return to:
Wisconsin Department of Transportation
DBE Program-Office
PO Box-7965
Madison,-WI-53707-7965
DBE_Alerigudat.wi.gav


## Good-Faith•Effort---Sample-Documentation•Logs

The-sample-logs below-are-provided as-guides rather than exhaustive-list.-See-ASP3,-Appendix-A-foradditional examples-of demonstrable-good faith efforts.-Attach documentation for each-activity-listed.

Acceptable-forms-of-documentation-include-copies-of-solicitations-sent-to-DBEs, notes from-substantiveconversations and-negotiations-with-DBEs, copies-of advertisements-placed, email-communications, all-quotesreceived from-DBEs and-from-all-subcontractors who-were-considered-alongside-DBE-quotes, proof-of-attendance-at-applicable-networking-events;-flyers-for-events-or-workshops-for-DBEs-offered-by-the-prime,-and-other-physical-records of good faith-efforts activities.
SOLICITATION-LOG-

| Date | Activity | Name-of-DEE-Solicited | Follow-up |
| :---: | :---: | :--- | :--- |
| 4/1/2020 | Sent-May-Let•solicitation | Winterland-Electric | Spoke with•Mark•Winterland-on-4/15/20-to-ask-if• <br> he-would-quote- |

## SELECTED-WORK-ITEMS-SOLICITED•LOG

| Work•Type | DBE•Firm | Contact-Person | Date | Contact•Mode |
| :--- | :--- | :--- | :--- | :--- |
| Pavement•Marking | ABC-Marking | Leslie•Lynch | $4 / 1 / 2020$ | Email; phone |
|  | $\# 1 \cdot M a r k i n g-C o . ~$ | Mark-Smart | $4 / 1 / 2020$ | Email; left•VM |
| Electrical | Winterland-Electric | Tabitha-Tinker | $4 / 3 / 2020$ | Email, left•VM |
|  | Superstar-Wiring | Jose•Huascar | $4 / 3 / 2020$ | Email;phone |

INFORMATION-PROVIDED-LOG

| Request Date | DBE-Firm | Information-Requested \&-Provided | ResponseDate |
| :---: | :---: | :---: | :---: |
| 4/1/2020 | Winterland•Electric | Requested-info-on-electrical-requirements;-providedplan and-link to-specs | 4/3/2020 |
| 4/21/2020 | Absolute-Construction | Wanted to know how and when supplies-are paid for by WisDOT-referred to-spec that covers stockpiling | 4/21/2020 |

NEGOTIATIONS•LOG

| Date | DBE-Firm | Contact-Name | Work-Type | Quotes- <br> Rec'd? | Considere <br> d-for- <br> project? | If-not-selected, why? |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $4 / 12 / 2020$ | ABC-Landscape | John-Dean | Erosion-Control | Yes | No | Cannot-perform-all-items |
| $4 / 17 / 2020$ | Wild-Ferns | Sandy-Lynn | Erosion-Control | Yes | Yes |  |
| $4 / 20 / 2020$ | \#1-Marking | Mark-Smart | Electrical | Yes | Yes |  |

ASSISTANCE-LOG

| Date | DBE-Firm | Contact-Person | Assistance-Provided |
| :---: | :---: | :---: | :---: |
| 4/1/2020 | ABC-Sawing | Jackie-Swiggle | Informed-DBE on how to obtain bonding |
| 4/17/2020 | Supreme-Construction | Winston-Walters | Provided-contact for wholesale supplypurchase |

OUTREACH•\&•BUSINESS•DEVELOPMENT•LOG

| Date | Agency/Organization Contacted | Contact-Person | Assistance $\cdot$ Requested |
| :---: | :---: | :---: | :---: |
| 4/1/2020 | Women-in-Construction | LaTonya Klein | Contact-information for woman-owned suppliers |
| 4/28/2020 | WBIC | Sam-Smith | Asked for-information to provide to-DBE-regardingfinancing'programs through'WBIC |

Official Form DT1202 can be found here: https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx

## ADDITIONAL SPECIAL PROVISION 4

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.

## 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 is not allowed to withhold 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.

## Acceptance and Final Payment

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.

## ADDITIONAL SPECIAL PROVISIONS 5 FUEL COST ADJUSTMENT

## A Description

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section $B$ as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

## B Categories of Work Items

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

| (1) Earthwork. |  | Unit | Gal. Fuel <br> Per Unit |
| :--- | :--- | :---: | ---: |
| 205.0100 | Excavation Common | CY | 0.23 |
| 205.0200 | Excavation Rock | CY | 0.39 |
| 205.0400 | Excavation Marsh | CY | 0.29 |
| 208.0100 | Borrow | CY | 0.23 |
| 208.1100 | Select Borrow | CY | 0.23 |
| 209.1100 | Backfill Granular Grade 1 | CY | 0.23 |
| 209.1500 | Backfill Granular Grade 1 | Ton | 0.115 |
| 209.2100 | Backfill Granular Grade 2 | CY | 0.23 |
| 209.2500 | Backfill Granular Grade 2 | Ton | 0.115 |
| 350.0102 | Subbase | CY | 0.28 |
| 350.0104 | Subbase | Ton | 0.14 |
| 350.0115 | Subbase 6-Inch | SY | 0.05 |
| 350.0120 | Subbase 7-Inch | SY | 0.05 |
| 350.0125 | Subbase 8-Inch | SY | 0.06 |
| 350.0130 | Subbase 9-Inch | SY | 0.07 |
| 350.0135 | Subbase 10-Inch | SY | 0.08 |
| 350.0140 | Subbase 11-Inch | SY | 0.09 |
| 350.0145 | Subbase 12-Inch |  | 0.09 |
|  |  |  |  |

## C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is $\$ 2.55$ per gallon.

## D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15 , inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:
(1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
(2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
(3) The engineer will summarize the total gallons $(Q)$ of fuel used in that month for the items categorized in Section B.
(4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$
F A=\left(\frac{C F I}{B F I}-1\right) \times Q \times B F I
$$

(plus is payment to contractor; minus is credit to the department)

| Where | FA | $=$ | Fuel Cost Adjustment (plus or minus) |
| :--- | :--- | :--- | :--- |
|  | CFI $=$ | Current Fuel Index |  |
| BFI | $=$ | Base Fuel Index |  |
|  | Q | $=$ | Monthly total gallons of fuel |

## E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

# Additional Special Provision 6 (ASP-6) <br> Modifications to the standard specifications 

## Make the following revisions to the standard specifications:

## 108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

### 108.9.4.1 Winter Suspension for Completion Date Contracts

${ }^{(1)}$ The contractor may request a winter suspension for a completion date contract. If the department determines weather conditions do not allow for the completion of the remaining work, the department may approve the contractor's request and determine the start date of the winter suspension. The end date of the winter suspension is March 31 or a date mutually agreed upon by both parties. For multi-year contracts, the department will only consider winter suspension for the final year of the contract.
(2) During winter suspension, store all materials in a manner that does not obstruct vehicular and pedestrian traffic and protect the materials from damage. Install traffic control and other safety devices necessary to protect the traveling public and pedestrians. Provide suitable drainage and install temporary erosion control where necessary. If the winter suspension begins when liquidated damages are being assessed, or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the cost of necessary pre-suspension work is incidental. If the winter suspension begins prior to the contract completion date, and the work has progressed as scheduled and would have been completed prior to the completion date, the cost of pre-suspension work will be paid as specified under 109.4.
(3) For a winter suspension that begins prior to the contract completion date and the work has progressed as scheduled and would have been completed prior to the completion date, the engineer will extend contract time to correspond with the end of the winter suspension and liquidated damages will not be assessed during the winter suspension.
(4) For a winter suspension that begins when liquidated damages are being assessed or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the engineer will not extend contract time. Time will be suspended until the end of the winter suspension. Liquidated damages will not be assessed during the winter suspension and liquidated damages will resume at the end of the winter suspension.

### 108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:
${ }^{(1)}$ Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
(2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
(3) The following are non-compensable delays:

1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
4. Delays from fires or epidemics.
5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
6. Altered quantities as specified in 109.3.

### 108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:
${ }_{(1)}$ Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
${ }^{(2)}$ The following are compensable delays:

1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
2. A contract change for an engineer-ordered suspension under 104.2.2.3.
3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25.
4. The unexpected discovery of a hazardous substance consistent with 107.24.
5. The non-completion of work that utilities or other third parties perform, if that work is not completed as specified in the contract.
(3) For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under 108.11, and will pay the contractor for delay costs determined as follows:
6. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
7. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

## 310 Open Graded Base

### 310.2 Materials

## Replace paragraph two with the following effective with the November 2023 letting:

(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in Table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (\% passing by weight)

| AASHTO No. 67 ${ }^{\text {[1] }}$ |  |
| :---: | :---: |
| SEIVE | COARSE AGGREGATE (\% <br> PASSING by WEIGHT) <br> AASHTO No. 67 |
| 2 -inch | - |
| $11 / 2$-inch | - |
| 1-inch | 100 |
| $3 / 4$-inch | $90-100$ |
| $1 / 2$-inch | - |
| $3 / 8$-inch | $20-55$ |
| No. 4 | $0-10$ |
| No. 8 | $0-5$ |
| No. 16 | - |
| No. 30 | - |
| No. 50 | - |
| No. 100 | - |
| No. 200 | $<=1.5$ |

${ }^{[1]}$ Size according to AASHTO M43.

## 390 Base Patching

### 390.4 Measurement

Replace entire section with the following effective with the November 2023 letting:
${ }^{(1)}$ The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.
${ }^{(2)}$ The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.
${ }^{(3)}$ The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

### 390.5 Payment

## Replace entire section with the following effective with the November 2023 letting:

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

| ITEM NUMBER | DESCRIPTION | UNIT |
| :--- | :--- | ---: |
| 390.0100 | Removing Pavement for Base Patching | CY |
| 390.0201 | Base Patching Asphaltic | TON |
| 390.0305 | Base Patching Concrete HES | CY |
| 390.0405 | Base Patching Concrete SHES | CY |

(2) Payment for Removing Pavement for Base Patching is full compensation for removing old pavement; for preparing the foundation and bringing up to grade. If the engineer orders the contractor to excavate yielding or unstable subgrade materials and backfill with suitable materials, the department will pay for that work with contract bid items or as agreed upon using 109.4.
(3) Payment for Base Patching Asphaltic is full compensation for providing and compacting asphaltic mixture including asphaltic binder.
(4) Payment for Base Patching Concrete HES and Base Patching Concrete SHES is full compensation for providing, curing, and protecting concrete. Payment also includes providing tie bars and dowel bars in unhardened concrete and steel within the patch. For tie bars and dowel bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5.
${ }_{\text {(5) }}$ Payment for Base Patching SHES also includes providing test data to the engineer as specified in 416.2.4.
${ }^{(6)}$ The department will pay for sawing existing concrete pavement for removal under the Sawing Concrete bid item as specified in 690.5.

## 460 Hot Mix Asphalt Pavement

### 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:
(4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:
Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.
Batch plants:
- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
Asphalt content (AC) in percent:
Determine AC using one of the following methods:
- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

Bulk specific gravity of the compacted mixture:
According to WTM T166.
Theoretical maximum specific gravity:
According to WTM T209.
Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

### 460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:
${ }^{(3)}$ The department will perform testing conforming to the following standards:
Bulk specific gravity ( $\mathrm{G}_{\mathrm{mb}}$ ) of the compacted mixture according to WTM T166.
Maximum specific gravity (Gmm) according to WTM T209.
Air voids (Va) by calculation according to WTM T269.
VMA by calculation according to WTM R35.
Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

## 503 Prestressed Concrete Members

### 503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:
${ }^{\text {(5) }}$ Furnish prestressed concrete members cast from air-entrained concrete, except I-type girders may use non-air-entrained concrete. Use type I, IL, IS, IP, IT, II, or III cement. The contractor may replace up to 30 percent of type I, IL, II, or III cement with an equal weight of fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.4.2.2 and slag conforms to 501.2.4.2.3. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.5.2 for air-entrained concrete. Use only coarse aggregate conforming to 310.2(2).

## 604 Slope Paving

### 604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:
${ }^{\text {(3) }}$ Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

TABLE 604-01 COARSE AGGREGATE (\% passing by weight)

| AASHTO No. 4 ${ }^{[1]}$ |  |
| :---: | :---: |
| SEIVE | COARSE AGGREGATE (\% PASSING <br> by WEIGHT) AASHTO No. 4 |
| 2-inch | 100 |
| 1 1/2-inch | $90-100$ |
| 1-inch | $20-55$ |
| 3/4-inch | $0-15$ |
| 1/2-inch | - |
| $3 / 8$-inch | $0-5$ |
| No. 4 | - |
| No. 8 | - |
| No. 16 | - |
| No. 30 | - |
| No. 50 | - |
| No. 100 | No. 200 |

${ }^{[1]}$ Size according to AASHTO M43.

## 612 Underdrains

### 612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:
${ }^{(1)}$ Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

## 614 Semi-rigid Barrier Systems and End Treatments

### 614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:
${ }^{(1)}$ Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

TABLE 614-2 FINE AGGREGATE GRADATION

| SEIVE | FINE AGGREGATE (\% <br> PASSING by WEIGHT) |
| :---: | :---: |
| 3/8-inch | 100 |
| No. 4 | $90-100$ |
| No. 8 | - |
| No. 16 | $45-85$ |
| No. 30 | - |
| No. 50 | $5-30$ |
| No. 100 | $0-10$ |
| No. 200 | $<=3.5$ |

## 628 Erosion Control

### 628.2.13 Rock Bags

Replace paragraph two with the following effective with the November 2023 letting:
${ }^{(2)}$ Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

## 639 Drilling Wells

### 639.2.1 General

Replace paragraph two with the following effective with the November 2023 letting:
(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

## 652 Electrical Conduit

### 652.3.1.2 Installing Underground

Replace paragraph two with the following effective with the November 2023 letting:
${ }^{(2)}$ Excavate trenches true to line and grade to provide the conduit uniform bearing throughout its length. Do not backfill the trench before inspecting the conduit. Carefully tamp the backfill in place as specified for placing backfill in layers in 651.3. Place at least 0.7 cubic feet of coarse aggregate gradation conforming to 604.2(3) directly under each drainage hole.

ERRATA

### 390.3.4 Special High Early Strength Concrete Patching

Correct errata link in paragraph (1) by changing from 416.3.8 to 416.3.7.
${ }^{(1)}$ Construct as specified for special high early strength repairs under 416.3.7 except as follows:

- The contractor may delay removal for up to 14 calendar days after cutting the existing pavement.
- Open to traffic as specified for concrete base in 320.3.


## ADDITIONAL SPECIAL PROVISION 7

A. Reporting $1^{\text {st }}$ 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 $\mathrm{A}(2)$.
5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
6. 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).
7. All agreements made by a contractor shall include the provisions in $A(1)$, (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.
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.

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# ADDITIONAL SPECIAL PROVISION 9 <br> Electronic Certified Payroll or Labor Data Submittal 

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information ( HCCl ) 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, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data are due within sevencalendar 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 their submittals. 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 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/labor 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. Non-segregated 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. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

## 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, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild 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) in accordance with 23 CFR 633.102. 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 solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).
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. 23 CFR 633.102(d).
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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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 Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 601.4(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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 230, Subpart A, 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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) \& (5).
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, sexual orientation, gender identity, 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 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 or other knowledgeable company official.
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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
b. The contractor, subrecipient 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 recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as nonresponsible.
c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
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 nonminority 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 nonminority 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 more than $\$ 10,000.41$ CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 FHWA1273 format and FHWA program requirements.

## 1. Minimum wages (29 CFR 5.5)

a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. $3141(2)(B)$ ) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
(ii) The classification is used in the area by the construction industry; and
(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
c. Conformance. (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
(3) 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 will be sent by the contracting officer by email to DBAconformance@dol.gov. 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.
(4) 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 will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.
(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division
under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

## d. Fringe benefits not expressed as an hourly rate.

 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.e. Unfunded plans. 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, in accordance with the criteria set forth in $\S 5.28$, 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.
f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in $\S 5.2$ ). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.
b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph
2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
(2) A contracting agency for its reprocurement costs;
(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
(4) A contractor's assignee(s);
(5) A contractor's successor(s); or
(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

## 3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. $3141(2)(B)$ of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must 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.
(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Actscovered work is performed, certified payrolls to the contracting
agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
(ii) That each laborer or mechanic (including each helper and apprentice) working 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 29 CFR part 3; and
(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.
(5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
(6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729 .
(7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by $\S 5.1$, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
(2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to §5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
(3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address
of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

## 4. Apprentices and equal employment opportunity (29 CFR

 5.5)a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(2) Fringe benefits. Apprentices must 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, fringe benefits must be paid in accordance with that determination.
(3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
(4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with
the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

> c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 DavisBacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.9. Disputes concerning labor standards. As provided in 29 CFR 5.5, 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 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 40 U.S.C. 3144(b) or §5.12(a).
b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or §5.12(a).
c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.
11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or $\underline{3}$;
b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or $\underline{3}$;
c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or $\underline{3}$; or
d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or $\underline{3}$.

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

## 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 and interest from the date of the underpayment. 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 ormechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* 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.

* $\$ 31$ as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.


## 3. Withholding for unpaid wages and liquidated damages

a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in §5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
(2) A contracting agency for its reprocurement costs;
(3) A trustee(s) (either a court-appointed trustee or a U.S trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
(4) A contractor's assignee(s);
(5) A contractor's successor(s); or
(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.
4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the
event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lowertier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.
5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
d. Informing any other person about their rights under CWHSSA or this part.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116 .

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)
(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. 23 CFR 635.102.
2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on longstanding interpretation of 23 CFR 635.116).
5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## 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 Part 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. 23 CFR 635.108.
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 Part 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). 29 CFR 1926.10.
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 Federalaid 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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)This provision is applicable to all Federal-aid construction contracts in excess of $\$ 150,000$ and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

## 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. 2 CFR 180.220 and 1200.220 .

## 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. 2 CFR 180.320.
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. 2 CFR 180.325.
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. 2 CFR 180.345 and 180.350 .
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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.
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. 2 CFR 180.220 and 180.300.
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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.
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 CFR 180.325.

## 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 CFR 180.335;
(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, 2 CFR 180.800;
(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).
(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

## 3. 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). 2 CFR 180.220 and 1200.220.
a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.
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, Subpart I, 180.900-180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.
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. 2 CFR 180.220 and 1200.220.
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 System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
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. 2 CFR 180.325.

## 4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should 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 Part 20, App. A.

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.

## XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor 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. 46 CFR 381.7.
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 Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

## ATTACHMENT A - EMPLOYMENT AND MATERIALS

PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
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 Nondiscrimination 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 nondiscrimination 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, subrecipients 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).


## NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

| County | \% | County | \% | County | \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adams | 1.7 | lowa | 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<br>Office of Federal Contract Compliance Programs<br>Ruess Federal Plaza<br>310 W. Wisconsin Ave., Suite 1115<br>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.

## 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.

## BUY AMERICA PROVISION

Buy America (as documented in 88 FR 57750 (2 CFR part 184 and 200) from the Office of Management and Budget: Federal Register: Guidance for Grants and Agreements ) shall be domestic products and permanently incorporated in this project as classified in the following three categories, and as noted in the Construction and Materials Manual (CMM):

1. Iron and Steel

All iron and steel manufacturing and coating processes (from the initial melting stage through the application of coatings) 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 the iron and steel manufacturing and coating processes Buy America 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.

## 2. Manufactured Product

All manufactured products (as defined in CMM 228.5) are covered under a previous waiver from 1983 and are currently exempt from Buy America.

## 3. Construction Material

All construction materials (as defined in 88 FR 57750 (2 CFR part 184 and 200) and as referenced in CMM 228.5) must comply with Buy America. All manufacturing process of construction materials must occur in the United States.

88 FR 55817 (DOT-OST-2022-0124) allows a limited waiver of Buy America requirements for de minimis costs and small grants.

- The Total value of the non-compliant products is no more than the lesser of $\$ 1,000,000$ or $5 \%$ of total applicable costs for the project ${ }^{1}$; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below $\$ 500,000^{2}$

The contractor shall take actions and provide documentation conforming to CMM 228.5 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 DT4567 that all iron and steel, manufactured products, and construction materials conform to this Buy America provision.
Form DT4567 is available at: https://wisconsindot.gov/Documents/formdocs/dt4567.docx
Attach a list of iron or steel and construction material exemptions and their associated costs to the certification form.

[^1]
## 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 <br> 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. Itis 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

Superseded General Decision Number: WI20220010

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: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

| \|If the contract is entered |into on or after January 30, |2022, or the contract is |renewed or extended (e.g., an |option is exercised) on or |after January 30, 2022: | . Executive Order 14026 generally applies to the contract. <br> . The contractor must pay all covered workers at least $\$ 16.20$ 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 2023. |
| :---: | :---: |
| If the contract was awarded on \|or between January 1, 2015 and |January 29, 2022, and the |contract is not renewed or |extended on or after January |30, 2022: | . Executive Order 13658 generally applies to the contract. <br> . The contractor must pay all covered workers at least $\$ 12.15$ per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023. |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

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Modification Number Publication Date
    0
    01/06/2023
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| 1 | $01 / 13 / 2023$ |
| :--- | :--- |
| 2 | $01 / 20 / 2023$ |
| 3 | $03 / 31 / 2023$ |
| 4 | $04 / 07 / 2023$ |
| 5 | $05 / 26 / 2023$ |
| 6 | $06 / 02 / 2023$ |
| 7 | $06 / 16 / 2023$ |
| 8 | $06 / 23 / 2023$ |
| 9 | $07 / 07 / 2023$ |
| 10 | $07 / 14 / 2023$ |
| 11 | $07 / 28 / 2023$ |
| 12 | $08 / 18 / 2023$ |
| 13 | $09 / 01 / 2023$ |
| 14 | $09 / 08 / 2023$ |
| 15 | $10 / 13 / 2023$ |
| 16 | $12 / 15 / 2023$ |
| 17 | $12 / 22 / 2023$ |

BRWI0001-002 06/01/2023
CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES
Rates Fringes

BRICKLAYER......................... $\$ 40.1825 .88$

BRWI0002-002 06/01/2023
ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

|  | Rates | Fringes |
| ---: | ---: | ---: |
| BRICKLAYER. . . . . . . . . . . . . . . . . . . $\$ 47.10$ | 25.16 |  |

BRWI0002-005 06/01/2023
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
 BRWI0004-002 06/01/2023

KENOSHA, RACINE, AND WALWORTH COUNTIES

> Rates Fringes

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES
Rates Fringes

BRICKLAYER
\$ 40.08
25.98

## BRWI0007-002 06/01/2023

GREEN, LAFAYETTE, AND ROCK COUNTIES
Rates Fringes
BRICKLAYER
\$ 40.95
26.80

BRWI0008-002 06/05/2023

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes

BRICKLAYER
$\$ 44.96$
25.67

BRWI0011-002 06/01/2023
CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES
Rates Fringes
BRICKLAYER
\$ 40.00
26.06

BRWI0019-002 06/01/2023
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES


COLUMBIA AND SAUK COUNTIES
Rates Fringes

BRICKLAYER
\$ 41.56
26.19

CARP0068-011 05/02/2022
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
\$ 41.19
27.05

CARP0264-003 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

Rates Fringes

| CARPENTER. . . . . . . . . . . . . . . . . . . . $\$ 38.86$ | 27.06 |
| ---: | ---: | :--- |
| Piledriver. . . . . . . . . . . $\$ 39.43$ | 27.02 |

CARP0804-001 06/05/2023
Adams, Juneau, Portage and Wood
Rates Fringes

| 27.06 |  |
| ---: | ---: |
| CARPENTER. . . . . . . . . . . . . . . . . . . . . $\$ 38.86$ | 27.02 |

CARP0955-002 06/05/2023
Calumet (western portion of County), Fond Du Lac, Green Lake, Marquette, Outagamie and Winnebago

## Rates <br> Fringes



CARP1146-002 06/05/2023

Brown, Door, Florence, Kewaunee, Marinette, Menominee and Shawano


| ELEC0014-007 05/29/2022 |  |
| :---: | :---: |
| REMAINING COUNTIES |  |
| Rates | Fringes |
| Teledata System Installer |  |
| Installer/Technician....... \$ 29.63 | 3\%+16. 18 |
| 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) |  |

$\qquad$
ELEC0127-002 06/01/2023

KENOSHA COUNTY

| Rates | Fringes |
| :--- | :--- |
| Electricians: . . . . . . . . . . . . . . . . $\$ 46.05$ | $30 \%+13.15 ~$ |

## ELEC0158-002 05/30/2021

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES
Rates Fringes

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ELECTRICIAN.
$ 36.14
29.75%+10.26
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ELEC0159-003 05/30/2021

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
ELECTRICIAN.

\$ 43.38

23.13

ELEC0219-004 06/01/2019
FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

> Rates Fringes

Electricians:
Electrical contracts over \$180,000 . 33.94

Electrical contracts under $\$ 180,000$
\$ 31.75
21.73
ELEC0242-005 $05 / 30 / 2021$
DOUGLAS COUNTY
Electricians:................... $\$ 41.37$
ELEC0388-002 06/01/2023
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: | \$ 38.74 | 26\%+11.76 |

RACINE COUNTY (Except Burlington Township)
Rates Fringes

Electricians:...................... $\$ 46.7025 .02$
--------------------------------------------------------------------

* ELEC0494-005 05/28/2023

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes
Electricians:.....................\$ $47.75 \quad 26.72$
ELEC0494-006 06/01/2021
CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

> Rates Fringes

Electricians:....................\$ 37.9122 .74

* ELEC0494-013 05/28/2023

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.................... $\$ 34.65 \quad 18.36$
Technician...................\$ 34.6518 .36

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, 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

ELEC0577-003 06/01/2022
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 |
| ---: | :--- |$\quad$ Fringes

ELEC0890-003 06/01/2022
DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

| Rates | Fringes |
| :---: | :---: |
| Electricians:.................... $\$ 40.70$ | 25.95\%+11.26 |
| ELEC0953-001 06/02/2019 |  |
| Rates | Fringes |
| Line Construction: |  |
| (1) Lineman. . . . . . . . . . . . . $\$ 47.53$ | 21.43 |
| (2) Heavy Equipment |  |
| Operator.....................\$ 42.78 | 19.80 |
| (3) Equipment Operator..... \$ 38.02 | 18.40 |
| (4) Heavy Groundman Driver..\$ 33.27 | 16.88 |
| (5) Light Groundman Driver.. \$ 30.89 | 16.11 |
| (6) Groundsman...............\$ 26.14 | 14.60 |
| ENGI0139-005 06/01/2023 |  |
| Rates | Fringes |
| Power Equipment Operator |  |
| Group 1......................\$ 43.77 | 27.40 |
| Group 2....................... \$ 43.27 | 27.40 |
| Group 3......................\$ 42.77 | 27.40 |
| Group 4......................\$ 42.51 | 27.40 |


| Group | . \$ 42.22 | 27.40 |
| :---: | :---: | :---: |
| Group | \$ 36.32 | 27.40 |

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; bituminious 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, day light machine

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2023
BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:
Rates Fringes

IRONWORKER.........................\$43.40 30.67
Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0008-003 06/01/2023
KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

> Rates Fringes

IRONWORKER \$ 41.73
30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0383-001 06/01/2023
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....................... $\$ 41.00$ | 30.13 |

IRON0498-005 06/01/2023
GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

|  | Rates | Fringes |
| ---: | ---: | ---: |
| IRONWORKER. . . . . . . . . . . . . . . . . . . $\$ 45.18$ | 47.08 |  |

IRON0512-008 04/30/2023
BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

Rates Fringes

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

Rates Fringes
IRONWORKER
\$ 39.14
34.00

## LAB00113-002 06/01/2023

MILWAUKEE AND WAUKESHA COUNTIES
Rates Fringes

## LABORER

| Group | \$ 33.56 | 23.86 |
| :---: | :---: | :---: |
| Group 2 | ......\$ 33.71 | 23.86 |
| Group 3 | ...................... \$ 33.91 | 23.86 |
| Group 4 | ..................... $\$ 34.06$ | 23.86 |
| Group 5 | ...................... \$ 34.21 | 23.86 |
| Group 6 | ......................\$ 30.05 | 23.86 |

## 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 Sawer 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

LAB00113-003 06/01/2023

OZAUKEE AND WASHINGTON COUNTIES

> Rates Fringes

## LABORER

| Group | ...\$ 32.81 | 23.86 |
| :---: | :---: | :---: |
| Group | . . . . . . . . . . . . . . . . . . $\$ 32.91$ | 23.86 |
| Group 3 | . . $\$ 32.96$ | 23.86 |
| Group 4 | . .\$ 33.16 | 23.86 |
| Group 5 | . .\$ 33.01 | 23.86 |
| Group 6 | ......................\$ 29.90 | 23.86 |

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 Sawer 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

LAB00113-011 06/01/2023
KENOSHA AND RACINE COUNTIES

> Rates Fringes

LABORER

| Group 1 | 1..................... \$ 32.62 | 23.86 |
| :---: | :---: | :---: |
| Group 2 | 2......................\$ 32.77 | 23.86 |
| Group 3 | 3..................... \$ 32.97 | 23.86 |
| Group 4 | 4............. . . . . . . . \$ 32.94 | 23.86 |
| Group 5 | 5...................... \$ 33.27 | 23.86 |
| Group 6 | 6..................... \$ 29.76 | 23.86 |

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 Sawer 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

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, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

> Rates Fringes

LABORER

| Group | ...\$ 37.57 | 19.25 |
| :---: | :---: | :---: |
| Group 2 | 2..................... \$ 37.67 | 19.25 |
| Group 3 | 3...................... \$ 37.72 | 19.25 |
| Group 4 | 4..................... \$ 37.92 | 19.25 |
| Group 5 | 5....................... \$ 37.77 | 19.25 |
| Group 6 | 6......................\$ 34.20 | 19.25 |

## 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; Bitminous 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 Sawer 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 Secialist

GROUP 5: Blaster; powderman
GROUP 6: Flagperson; Traffic Control

LAB00464-003 06/01/2023

DANE COUNTY

Rates Fringes
LABORER

| Group | .\$ 37.85 | 19.25 |
| :---: | :---: | :---: |
| Group 2 |  | 19.25 |
| Group 3 | 3...................... \$ 38.00 | 19.25 |
| Group 4 |  | 19.25 |
| Group 5 | 5.................. . . . . \$ 38.05 | 19.25 |
| Group 6 | 6...................... \$ 34.20 | 19.25 |

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; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer 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 05/01/2023

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES
Rates Fringes

Painters:
New:
Brush, Roller..............\$ 34.5924 .84
Spray, Sandblast, Steel....\$ 35.1924 .84

Repaint: Brush, Roller..............\$ 33.0924 .84 Spray, Sandblast, Steel....\$ 33.6924 .84

PAIN0108-002 06/01/2023
RACINE COUNTY
Rates Fringes
Painters:
Brush, Roller................\$ 41.0421 .95
Spray \& Sandblast............\$ 42.0421 .95
PAIN0259-002 05/01/2008
BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

Rates Fringes
PAINTER........................... $\$ 24.11 \quad 12.15$
PAIN0259-004 05/01/2015
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

Rates Fringes
PAINTER
\$ 22.03
12.45

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
 ROCK, AND SAUK COUNTIES
Rates

$\quad$| Rrush...........................\$ 35.00 |
| :--- |

PREMIUM PAY:

| Structural Steel, Spray, Bridges |
| :--- |
| hour. |

PAIN0802-003 06/01/2023

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.............................. $\$ 35.00 \quad 20.62$
$\qquad$
PAIN0934-001 06/01/2022
KENOSHA AND WALWORTH COUNTIES

|  | Rates | Fringes |
| :---: | :---: | :---: |
| Painters: |  |  |
| Brush. | \$ 36.70 | 24.69 |
| Spray.. | \$ 37.70 | 24.69 |
| Structural Steel.. | \$ 36.85 | 24.69 |
| PAIN1011-002 06/06/2021 |  |  |
| FLORENCE COUNTY |  |  |
|  | Rates | Fringes |
| Painters: | \$ 26.71 | 14.38 |
| PLAS0599-002 06/01/2023 |  |  |

Rates Fringes

CEMENT MASON/CONCRETE FINISHER
$\qquad$

| Area B | B....................... $\$ 39.97$ | 25.02 |
| :---: | :---: | :---: |
| Area C | C. . . . . . . . . . . . . . . . . . \$ 40.40 | 25.25 |
| Area D | D. . . . . . . . . . . . . . . . . . $\$ 41.16$ | 24.49 |
| Area E | E....................... $\$ 40.50$ | 25.14 |
| Area F | F....................... $\$ 36.98$ | 28.67 |

AREA DESCRIPTIONS

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, 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 C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES
AREA F: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2023
Rates Fringes
TRUCK DRIVER
1 \& 2 Axles.................. $\$ 35.57$ 26.09
3 or more Axles; Euclids,
Dumptor \& Articulated,
Truck Mechanic...............\$ 35.7226 .09

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
https://www.dol.gov/agencies/whd/government-contracts.

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 National Office because National Office has 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:

[^2]Washington, DC 20210
4.) All decisions by the Administrative Review Board are final.


END OF GENERAL DECISION
"

## 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 ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
$\left.\begin{array}{llrl}\begin{array}{c}\text { Proposal } \\ \text { Line }\end{array} \\ \text { Number }\end{array} \quad \begin{array}{c}\text { Item ID } \\ \text { Description }\end{array} \quad \begin{array}{c}\text { Approximate } \\ \text { Quantity and } \\ \text { Units }\end{array}\right)$

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
| :---: | :---: | :---: | :---: | :---: |
| 0060 | 601.0331 | 12,547.000 |  |  |
|  | Concrete Curb \& Gutter 31-Inch | LF |  |  |
| 0062 | 601.0600 | 650.000 |  |  |
|  | Concrete Curb Pedestrian | LF |  |  |
| 0064 | 602.0410 | 77,367.000 |  |  |
|  | Concrete Sidewalk 5-Inch | SF |  |  |
| 0066 | 602.0420 | 130.000 |  |  |
|  | Concrete Sidewalk 7-Inch | SF |  |  |
| 0068 | 602.0515 | 1,840.000 |  |  |
|  | Curb Ramp Detectable Warning Field Natural Patina | SF |  |  |
| 0070 | 602.0815 | 1,730.000 |  |  |
|  | Concrete Driveway 7-Inch | SY |  |  |
| 0072 | 602.0820 | 560.000 |  |  |
|  | Concrete Driveway 8-Inch | SY |  |  |
| 0074 | 602.0865 | 230.000 |  |  |
|  | Concrete Driveway HES 7-Inch | SY |  |  |
| 0076 | 602.1000 | 560.000 |  |  |
|  | Concrete Loading Zone | SF |  |  |
| 0078 | 608.0412 | 1,077.000 |  |  |
|  | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF |  |  |
| 0080 | 611.2004 | 2.000 |  |  |
|  | Manholes 4-FT Diameter | EACH |  |  |
| 0082 | 611.3225 | 3.000 |  |  |
|  | Inlets $2 \times 2.5-\mathrm{FT}$ | EACH |  |  |
| 0084 | 611.8120.S | 41.000 |  |  |
|  | Cover Plates Temporary | EACH |  |  |
| 0086 | 618.0100 | 1.000 |  |  |
|  | Maintenance and Repair of Haul Roads (project) 001. 2395-05-71 | EACH |  |  |
| 0088 | 619.1000 | 1.000 |  |  |
|  | Mobilization | EACH |  |  |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal <br> Line | Item ID <br> Dumber | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

RED HORSECHESTNUT 3" CAL B\&B

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| $\begin{array}{c}\text { Proposal } \\ \text { Line }\end{array}$ | $\begin{array}{c}\text { Item ID } \\ \text { Number }\end{array}$ | $\begin{array}{c}\text { Description }\end{array}$ | $\begin{array}{c}\text { Approximate } \\ \text { Quantity and } \\ \text { Units }\end{array}$ | Unit Price |
| :--- | :--- | :--- | :--- | :--- |$]$ Bid Amount

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :--- | :--- |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal <br> Line | Item ID <br> Number | Description <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :--- | :--- |

Proposal Schedule of Items
Page 10 of 19
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal <br> Line <br> Number | Item ID <br> Description | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :--- | :--- |

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
| :---: | :---: | :---: | :---: | :---: |
| 0320 | 658.5070 | 1.000 |  |  |
|  | Signal Mounting Hardware (location) 007. S CLEMENT AVE | EACH |  |  |
| 0322 | 659.5000.S | 200.000 |  |  |
|  | Lamp, Ballast, LED, Switch Disposal by Contractor | EACH |  |  |
| 0324 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 001. S 6TH ST | EACH |  |  |
| 0326 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 002. S 5th ST | EACH | - |  |
| 0328 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 003. S 3RD ST | EACH |  |  |
| 0330 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 004. S HOWELL AVE | EACH |  |  |
| 0332 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 005. S WHITNALL AVE | EACH |  |  |
| 0334 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 006. S PINE AVE | EACH |  |  |
| 0336 | 661.0201 | 1.000 |  |  |
|  | Temporary Traffic Signals for Intersections (location) 007. S CLEMENT AVE | EACH |  |  |
| 0338 | 674.0300 | 960.000 |  |  |
|  | Remove Cable | LF |  |  |
| 0340 | 690.0150 | 2,379.000 |  |  |
|  | Sawing Asphalt | LF |  |  |
| 0342 | 690.0250 | 2,199.000 |  |  |
|  | Sawing Concrete | LF |  |  |
| 0344 | 715.0715 | 10,550.000 |  |  |
|  | Incentive Flexural Strength Concrete Pavement | DOL | 1.00000 | 10,550.00 |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:

## contract items

Alt Mbr ID:

| Proposal <br> Line | Item ID <br> Number | Description <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Proposal Schedule of Items
Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:
$\left.\begin{array}{llll}\begin{array}{c}\text { Proposal } \\ \text { Line }\end{array} & & \begin{array}{c}\text { Approximate } \\ \text { Quantity and } \\ \text { Units }\end{array} & \text { Unit Price }\end{array}\right]$

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal <br> Line | Item ID <br> Number | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :--- | :--- |

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID

Alt Mbr ID:

| Proposal <br> Line | Item ID <br> Dumber | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :---: | :---: | :---: |

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:

Alt Mbr ID:

| $\begin{array}{c}\text { Proposal } \\ \text { Line }\end{array}$ | $\begin{array}{c}\text { Item ID } \\ \text { Number }\end{array}$ | $\begin{array}{c}\text { Description } \\ \text { Quantity and } \\ \text { Units }\end{array}$ | Unit Price |
| :--- | :--- | :--- | :--- |$]$ Bid Amount

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID:
contract items
Alt Mbr ID:

| Proposal <br> Line | Item ID <br> Number | Description <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | :--- | :--- |

Proposal ID: 20240213011 Project(s): 2395-05-71 Federal ID(s): WISC 2024223

SECTION: 0001
Alt Set ID
contract items

| Proposal <br> Line | Item ID <br> Dumber | Approximate <br> Quantity and <br> Units | Unit Price |
| :--- | :--- | ---: | :--- |

Section: 0001

Total: $\qquad$

Total Bid: $\qquad$

## PLEASE ATTACH ADDENDA HERE

Wisconsin Department of Transportation

Division of Transportation Systems Development

January 18, 2024
Bureau of Project Development
4822 Madison Yards Way, $4^{\text {th }}$ Floor South
Madison, WI 53705
Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

## NOTICE TO ALL CONTRACTORS:

## ASP-6 Addendum \#01

## Letting of February 13, 2024

Attached is a copy of the revised ASP-6. This ASP-6 replaces ASP-6 in all proposals in the February 13, 2024 Letting.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

## Mike Coleman

Proposal Development Specialist
Proposal Management Section

# Additional Special Provision 6 (ASP-6) <br> Modifications to the standard specifications 

## Make the following revisions to the standard specifications:

## 108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

### 108.9.4.1 Winter Suspension for Completion Date Contracts

${ }^{(1)}$ The contractor may request a winter suspension for a completion date contract. If the department determines weather conditions do not allow for the completion of the remaining work, the department may approve the contractor's request and determine the start date of the winter suspension. The end date of the winter suspension is March 31 or a date mutually agreed upon by both parties. For multi-year contracts, the department will only consider winter suspension for the final year of the contract.
(2) During winter suspension, store all materials in a manner that does not obstruct vehicular and pedestrian traffic and protect the materials from damage. Install traffic control and other safety devices necessary to protect the traveling public and pedestrians. Provide suitable drainage and install temporary erosion control where necessary. If the winter suspension begins when liquidated damages are being assessed, or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the cost of necessary pre-suspension work is incidental. If the winter suspension begins prior to the contract completion date, and the work has progressed as scheduled and would have been completed prior to the completion date, the cost of pre-suspension work will be paid as specified under 109.4.
(3) For a winter suspension that begins prior to the contract completion date and the work has progressed as scheduled and would have been completed prior to the completion date, the engineer will extend contract time to correspond with the end of the winter suspension and liquidated damages will not be assessed during the winter suspension.
(4) For a winter suspension that begins when liquidated damages are being assessed or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the engineer will not extend contract time. Time will be suspended until the end of the winter suspension. Liquidated damages will not be assessed during the winter suspension and liquidated damages will resume at the end of the winter suspension.

### 108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:
${ }^{(1)}$ Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
(2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
(3) The following are non-compensable delays:

1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
4. Delays from fires or epidemics.
5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
6. Altered quantities as specified in 109.3.

### 108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:
${ }_{(1)}$ Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
${ }^{(2)}$ The following are compensable delays:

1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
2. A contract change for an engineer-ordered suspension under 104.2.2.3.
3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25 .
4. The unexpected discovery of a hazardous substance consistent with 107.24.
5. The non-completion of work that utilities or other third parties perform, if that work is not completed as specified in the contract.
${ }^{(3)}$ For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under 108.11, and will pay the contractor for delay costs determined as follows:
6. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
7. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

## 310 Open Graded Base

### 310.2 Materials

Replace paragraph two with the following effective with the November 2023 letting:
(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in Table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (\% passing by weight)

| AASHTO No. 67 ${ }^{[1]}$ |  |
| :---: | :---: |
| SEIVE | COARSE AGGREGATE (\% <br> PASSING by WEIGHT) <br> AASHTO No. 67 |
| 2 -inch | - |
| $11 / 2$-inch | - |
| 1-inch | 100 |
| $3 / 4$-inch | $90-100$ |
| $1 / 2$-inch | - |
| $3 / 8-$ inch | $20-55$ |
| No. 4 | $0-10$ |
| No. 8 | $0-5$ |
| No. 16 | - |
| No. 30 | - |
| No. 50 | - |
| No. 100 | - |
| No. 200 | $<=1.5$ |

${ }^{[1]}$ Size according to AASHTO M43.

## 390 Base Patching

### 390.4 Measurement

Replace entire section with the following effective with the November 2023 letting:
(1) The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.
(2) The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.
${ }^{(3)}$ The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

### 390.5 Payment

## Replace entire section with the following effective with the November 2023 letting:

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

| $\frac{\text { ITEM }}{3} \frac{\text { NUMBER }}{390.0100}$ | DESCRIPTION | $\frac{\text { UNIT }}{\text { Removing Pavement for Base Patching }}$ |
| :--- | :--- | ---: |
| 390.0201 | Base Patching Asphaltic | CY |
| 390.0305 | Base Patching Concrete HES | TON |
| 390.0405 | Base Patching Concrete SHES | CY |

(2) Payment for Removing Pavement for Base Patching is full compensation for removing old pavement; for preparing the foundation and bringing up to grade. If the engineer orders the contractor to excavate yielding or unstable subgrade materials and backfill with suitable materials, the department will pay for that work with contract bid items or as agreed upon using 109.4.
(3) Payment for Base Patching Asphaltic is full compensation for providing and compacting asphaltic mixture including asphaltic binder.
(4) Payment for Base Patching Concrete HES and Base Patching Concrete SHES is full compensation for providing, curing, and protecting concrete. Payment also includes providing tie bars and dowel bars in unhardened concrete and steel within the patch. For tie bars and dowel bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5.
${ }_{\text {(5) }}$ Payment for Base Patching SHES also includes providing test data to the engineer as specified in 416.2.4.
${ }^{(6)}$ The department will pay for sawing existing concrete pavement for removal under the Sawing Concrete bid item as specified in 690.5.

## 460 Hot Mix Asphalt Pavement

### 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:
${ }_{(4)}$ Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:
Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.
Batch plants:
- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
Asphalt content (AC) in percent:
Determine $A C$ using one of the following methods:
- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

Bulk specific gravity of the compacted mixture:
According to WTM T166.
Theoretical maximum specific gravity:
According to WTM T209.
Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

### 460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:
${ }^{(3)}$ The department will perform testing conforming to the following standards:
Bulk specific gravity ( $\mathrm{G}_{\mathrm{mb}}$ ) of the compacted mixture according to WTM T166.
Maximum specific gravity ( Gmm ) according to WTM T209.
Air voids (Va) by calculation according to WTM T269.
VMA by calculation according to WTM R35.
Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

### 460.3.3.2 Pavement Density Determinations

Replace entire section with the following effective with the February 2024 letting:
${ }^{(1)}$ The engineer will determine the target maximum density using department procedures described in WTM T355. The engineer will determine density according to CMM 815 and WTM T355 as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.
${ }^{(2)}$ Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.
${ }^{(3)}$ A lot is defined as one day's production for each sublot type or one production shift if running 24 hours per day and placed within a single layer for each location and target maximum density category indicated in table 460-3. The lot density is the average of the tests taken for that lot. The department determines the number of tests per lot according to WTP H-002.
(4) An HTCP-certified Nuclear Density Technician I (NUCDENSITYTEC-I) or a nuclear density ACT working under a NUCDENSITYTEC-I technician, will locate samples and perform the testing. A NUCDENSITYTEC-I technician will coordinate and take responsibility for the work an ACT performs. No more than one ACT can work under a single NUCDENSITYTEC-I technician. The responsible NUCDENSITYTEC-I technician will ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly.

## 503 Prestressed Concrete Members

### 503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:
${ }^{\text {(5) }}$ Furnish prestressed concrete members cast from air-entrained concrete, except l-type girders may use non-air-entrained concrete. Use type I, IL, IS, IP, IT, II, or III cement. The contractor may replace up to 30 percent of type I, IL, II, or III cement with an equal weight of fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.4.2.2 and slag conforms to 501.2.4.2.3. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.5.2 for air-entrained concrete. Use only coarse aggregate conforming to 310.2(2).

## 604 Slope Paving

### 604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:
${ }^{(3)}$ Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

TABLE 604-01 COARSE AGGREGATE (\% passing by weight)
AASHTO No. $4^{[1]}$

| SEIVE | COARSE AGGREGATE (\% PASSING <br> by WEIGHT) AASHTO No. 4 |
| :---: | :---: |
| 2-inch | 100 |
| 1 1/2-inch | $90-100$ |
| 1-inch | $20-55$ |
| $3 / 4$-inch | $0-15$ |
| $1 / 2$-inch | - |
| $3 / 8$-inch | $0-5$ |
| No. 4 | - |
| No. 8 | - |
| No. 16 | - |
| No. 30 | - |
| No. 50 | No. 100 |

${ }^{[1]}$ Size according to AASHTO M43.

## 612 Underdrains

### 612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:
${ }^{(1)}$ Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

## 614 Semi-rigid Barrier Systems and End Treatments

### 614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:
${ }_{(1)}$ Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

TABLE 614-2 FINE AGGREGATE GRADATION

| SEIVE | FINE AGGREGATE (\% <br> PASSING by WEIGHT) |
| :---: | :---: |
| $3 / 8$-inch | 100 |
| No. 4 | $90-100$ |
| No. 8 | - |
| No. 16 | $45-85$ |
| No. 30 | - |
| No. 50 | $5-30$ |
| No. 100 | $0-10$ |
| No. 200 | $<=3.5$ |

## 628 Erosion Control

### 628.2.13 Rock Bags

Replace paragraph two with the following effective with the November 2023 letting:
${ }^{(2)}$ Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

## 639 Drilling Wells

### 639.2.1 General

Replace paragraph two with the following effective with the November 2023 letting:
(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

## 652 Electrical Conduit

### 652.3.1.2 Installing Underground

Replace paragraph two with the following effective with the November 2023 letting:
(2) Excavate trenches true to line and grade to provide the conduit uniform bearing throughout its length. Do not backfill the trench before inspecting the conduit. Carefully tamp the backfill in place as specified for placing backfill in layers in 651.3. Place at least 0.7 cubic feet of coarse aggregate gradation conforming to 604.2(3) directly under each drainage hole.

## ERRATA

### 390.3.4 Special High Early Strength Concrete Patching

## Correct errata link in paragraph (1) by changing from 416.3.8 to 416.3.7.

${ }^{(1)}$ Construct as specified for special high early strength repairs under 416.3 .7 except as follows:

- The contractor may delay removal for up to 14 calendar days after cutting the existing pavement.
- Open to traffic as specified for concrete base in 320.3 .

Wisconsin Department of Transportation

February 6, 2024
Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, th $^{\text {th }}$ Floor South
Madison, WI 53705
Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

## NOTICE TO ALL CONTRACTORS:

## Federal Wage Rate Addendum \#01

## Letting of February 13, 2024

Attached is a copy of the revised WI 10 Highway Davis Bacon Prevailing Wage Rates that are included in proposals $04-15,17,18,20-25,28$, and $30-39$; WI 8 Heavy (Sewer \& Water Line \& Tunnel) Davis Bacon Prevailing Wage Rates that are included in proposals 21 and 31; and WI 15 Heavy Davis Bacon Prevailing Wage Rates that are included in proposal 15. These wage rates are effective for all proposals they are included in in the February 13, 2024 letting. The updated wage rates are dated February 2, 2024 and are effective on or after February 12, 2024.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

## Mike Coleman

Proposal Development Specialist
Proposal Management Section

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: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

| \|If the contract is entered |into on or after January 30, |2022, or the contract is |renewed or extended (e.g., an |option is exercised) on or |after January 30, 2022: | . Executive Order 14026 generally applies to the contract. <br> . The contractor must pay all covered workers at least $\$ 17.20$ 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 2024. |
| :---: | :---: |
| \|If the contract was awarded on |or between January 1, 2015 and |January 29, 2022, and the |contract is not renewed or |extended on or after January |30, 2022: | . Executive Order 13658 generally applies to the contract. <br> . The contractor must pay all covered workers at least $\$ 12.90$ per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024. |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

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Modification Number Publication Date

BRWI0001-002 06/01/2023

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES
Rates Fringes
BRICKLAYER......................... \(\$ 40.18\) 25.88

BRWI0002-002 06/01/2023
ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES


Rates Fringes
CEMENT MASON/CONCRETE FINISHER...\$39.97 25.02
BRWI0003-002 06/01/2023

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

> Rates Fringes

BRICKLAYER......................... \(\$ 40.00 \quad 26.06\)

BRWI0004-002 06/01/2023
KENOSHA, RACINE, AND WALWORTH COUNTIES
Rates Fringes
BRICKLAYER........................\$ 44.5026 .96

\section*{BRWI0006-002 06/01/2023}

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

Rates Fringes
BRICKLAYER
\(\$ 40.08\)
25.98
Rates Fringes


BRWI0011-002 06/01/2023
CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES
Rates Fringes

BRICKLAYER.........................\$40.00 26.06
BRWI0019-002 06/01/2023
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline BRICKLAYER. . & \$ 39.32 & 26.74 \\
\hline \multicolumn{3}{|l|}{BRWI0034-002 06/01/2023} \\
\hline \multicolumn{3}{|l|}{COLUMBIA AND SAUK COUNTIES} \\
\hline & Rates & Fringes \\
\hline BRICKLAYER. & \$ 41.56 & 26.19 \\
\hline \multicolumn{3}{|l|}{CARP0068-011 05/02/2022} \\
\hline BURNETT (W. of Hwy 48), PIER 35, 48 \& 65), AND ST. CROIX & W. of Hwy & \[
\begin{aligned}
& \text { OLK (W. } \\
& \text { IES }
\end{aligned}
\] \\
\hline
\end{tabular}
Rates Fringes

Carpenter \& Piledrivermen........\$41.19 27.05
    CARP0264-003 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES
Rates Fringes
CARPENTER \$ 41.91 ..... 29.72
CARP0310-002 06/05/2023

Ashland, Bayfield, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Shawano, Taylor and Vilas

Rates Fringes
\begin{tabular}{r|r} 
CARPENTER. . . . . . . . . . . . . . . . . . . . \(\$ 38.86\) & 27.06 \\
Piledriver. . . . . . . . . . . . \(\$ 39.43\) & 27.02
\end{tabular}

\section*{CARP0804-001 06/05/2023}

Adams, Juneau, Portage and Wood

> Rates Fringes
27.06
CARPENTER. . . . . . . . . . . . . . . . . . . . . . \(\$ 38.86\)
Piledriver. . . . . . . . . . . 39.43
* CARP0955-002 06/05/2023

Calumet (western portion of County), Fond Du Lac, Green Lake, Marquette, Outagamie, Waupaca, and Winnebago

> Rates Fringes
\begin{tabular}{r|r|} 
& 27.06 \\
CARPENTER. . . . . . . . . . . . . . . . . . . \$ 38.86 & 27.02
\end{tabular}

CARP1056-002 06/01/2023
\begin{tabular}{rrr} 
& Rates & Fringes \\
MILLWRIGHT. . . . . . . . .............. \(\$ 40.00\) & 27.77
\end{tabular}

CARP1074-002 06/05/2023
Barron, Burnett, Chippewa, Clark, Dunn, Eau Claire, Pepin, Pierce, Polk, Rusk, Sawyer, St. Croix and Washburn


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).
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ELEC0127-002 06/01/2023

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KENOSHA COUNTY
\begin{tabular}{rl} 
& Rates \\
Electricians:..................... \(\$ 46.05\) & Fringes \\
\(30 \%+13.15\)
\end{tabular}

\section*{ELEC0158-002 05/30/2021}

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES
Rates Fringes
ELECTRICIAN. . . . . . . . . . . . . . . . . . . . \(\$ 36.14 \quad 29.75 \%+10.26\)

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

ELECTRICIAN......................... \(\$ 43.3823 .13\)
-------------------------------------------------------------------ELEC0219-004 06/01/2019

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

> Rates Fringes

Electricians:
Electrical contracts over \$180,000...................... \(\$ 33.9421 .80\)
Electrical contracts under \$180,000....................... 31.75 21.73

ELEC0242-005 05/30/2021
DOUGLAS COUNTY
Rates Fringes
Electricians:....................... \(\$ 41.37\) 69.25\%
ELEC0388-002 06/01/2023

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
\begin{tabular}{|c|c|}
\hline Rates & Fringes \\
\hline Electricians:.................... \(\$ 38.74\) & 26\%+11.76 \\
\hline \multicolumn{2}{|l|}{ELEC0430-002 06/01/2023} \\
\hline \multicolumn{2}{|l|}{RACINE COUNTY (Except Burlington Township)} \\
\hline Rates & Fringes \\
\hline Electricians:....................\$ 46.70 & 25.02 \\
\hline \multicolumn{2}{|l|}{ELEC0494-005 05/28/2023} \\
\hline \multicolumn{2}{|l|}{MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES} \\
\hline Rates & Fringes \\
\hline Electricians:....................\$ 47.75 & 26.72 \\
\hline
\end{tabular}

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC
(Schleswig), and SHEBOYGAN COUNTIES

> Rates Fringes

Electricians:....................\$ 37.9122 .74

\section*{ELEC0494-013 05/28/2023}

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
\begin{tabular}{lll} 
Installer....................... \(\$ 34.65\) & 18.36 \\
Technician................... \(\$ 34.65\) & 18.36
\end{tabular}

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, 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

ELEC0577-003 06/01/2022

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
\begin{tabular}{|c|c|c|c|}
\hline & & Rates & Fringes \\
\hline & Electricians: & \$ 37.41 & 29.50\%+10.00 \\
\hline & \multicolumn{3}{|l|}{ELEC0890-003 06/01/2022} \\
\hline & \multicolumn{3}{|l|}{DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES} \\
\hline
\end{tabular}
Rates Fringes

Electricians:....................... . \(\$ 40.70 \quad 25.95 \%+11.26\)
ELEC0953-001 06/02/2019
Rates Fringes
Line Construction:
\begin{tabular}{lll} 
(1) Lineman. . . . . . . . . . . . . . \(\$ 47.53\) & 21.43 \\
(2) Heavy Equipment & \\
Operator................... \(\$ 42.78\) & 19.80 \\
(3) Equipment Operator..... \(\$ 38.02\) & 18.40 \\
(4) Heavy Groundman Driver.. \(\$ 33.27\) & 16.88 \\
(5) Light Groundman Driver..\$ 30.89 & 16.11 \\
(6) Groundsman.............. \(\$ 26.14\) & 14.60
\end{tabular}

ENGI0139-005 06/01/2023

> Rates Fringes

Power Equipment Operator
Group 1...................... \(\$ 43.7727 .40\)
Group 2...................... \(\$ 43.27\) 27.40
Group 3....................... \(\$ 42.77\) 27.40
Group 4.......................\$ \(42.51 \quad 27.40\)
Group 5...................... \(\$ 42.22\) 27.40
Group 6....................... \(\$ 36.32\) 27.40

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; bituminious 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, day light machine

GROUP 6: Off-road material hauler with or without ejector.

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:
Rates Fringes

IRONWORKER........................\$ 43.40 30.67

Day, Thanksgiving Day \& Christmas Day.

IRON0008-003 06/01/2023
KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

> Rates Fringes

IRONWORKER . 41.73
30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0383-001 06/01/2023
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
\begin{tabular}{rrr} 
Rates & Fringes \\
IRONWORKER....................... \(\$ 41.00\) & 30.13
\end{tabular}

IRON0498-005 06/01/2023
GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:
\begin{tabular}{rrr} 
Rates & Fringes \\
IRONWORKER...................... \(\$ 45.18\) & 47.08
\end{tabular}

IRON0512-008 04/30/2023
BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES


Rates Fringes
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LABORER
Group 1...................... \$ 33.56 23.86
Group 2....................\$ 33.71 23.86
Group 3....................\$ 33.91 23.86
Group 4....................\$ 34.06 23.86
Group 5....................\$ 34.21 23.86
Group 6....................\$ 30.05 23.86

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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 Sawer 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
    LAB00113-003 06/01/2023
OZAUKEE AND WASHINGTON COUNTIES
Rates Fringes

\section*{LABORER}
\begin{tabular}{|c|c|c|}
\hline Group & . \$ 32.81 & 23.86 \\
\hline Group 2 & . \$ 32.91 & 23.86 \\
\hline Group 3 & ...................... \$ 32.96 & 23.86 \\
\hline Group 4 & ..................... . \(\$ 33.16\) & 23.86 \\
\hline Group 5 & 5...................... \$ 33.01 & 23.86 \\
\hline Group 6 & ......................\$ 29.90 & 23.86 \\
\hline
\end{tabular}

\section*{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 Sawer 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

LAB00113-011 06/01/2023
KENOSHA AND RACINE COUNTIES

> Rates Fringes

LABORER
\begin{tabular}{|c|c|c|}
\hline Group 1 & .\$ 32.62 & 23.86 \\
\hline Group 2 & ..................... \(\$ 32.77\) & 23.86 \\
\hline Group 3 & 3. . . . . . . . . . . . . . . . . \(\$ 32.97\) & 23.86 \\
\hline Group 4 & ......................\$ 32.94 & 23.86 \\
\hline Group 5 & 5..................... \(\$ 33.27\) & 23.86 \\
\hline Group 6 & 6.....................\$ 29.76 & 23.86 \\
\hline
\end{tabular}

\section*{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 Sawer 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

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, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES
\begin{tabular}{|c|c|c|}
\hline Group 1 & \$ 37.57 & 19.25 \\
\hline Group 2 & ......................\$ 37.67 & 19.25 \\
\hline Group 3 & . . . . . . . . . . . . . . . . . . \(\$ 37.72\) & 19.25 \\
\hline Group 4 & . . . . . . . . . . . . . . . . . \(\$ 37.92\) & 19.25 \\
\hline Group 5 & ...................... \$ 37.77 & 19.25 \\
\hline Group 6 & ...................... \$ 34.20 & 19.25 \\
\hline
\end{tabular}

\section*{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; Bitminous 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 Sawer 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 Secialist
GROUP 5: Blaster; powderman
GROUP 6: Flagperson; Traffic Control

LABO0464-003 06/01/2023

DANE COUNTY
Rates Fringes

LABORER
\begin{tabular}{|c|c|c|}
\hline Group 1 & 1..................... \$ 37.85 & 19.25 \\
\hline Group 2 & 2..................... \$ 37.95 & 19.25 \\
\hline Group 3 & 3..................... \$ 38.00 & 19.25 \\
\hline Group 4 & 4..... . . . . . . . . . . . . . \$ 38.20 & 19.25 \\
\hline Group 5 & 5...................... \$ 38.05 & 19.25 \\
\hline Group 6 & 6..................... \(\$ 34.20\) & 19.25 \\
\hline
\end{tabular}

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; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer 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
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PAIN0106-008 05/01/2023
ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES
Rates Fringes
Painters:
New:
Brush, Roller.............\$ 34.59 24.84
Spray, Sandblast, Steel....\$ 35.19 24.84
Repaint:
Brush, Roller.............\$ 33.09 24.84
Spray, Sandblast, Steel....\$ 33.69 24.84

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    PAIN0108-002 06/01/2023
RACINE COUNTY
    Rates Fringes
Painters:
    Brush, Roller................\$ 41.0421 .95
    Spray \& Sandblast........... \$ 42.0421 .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, TREMPEALEAU, AND
VERNON COUNTIES


Rates Fringes
PAINTER
\(\quad\) Brush............................ \(\$ 35.00\)
PREMIUM PAY:
Structural Steel, Spray, Bridges \(=\$ 1.00\) additional per
hour.

PAIN0802-003 06/01/2023
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


OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST. CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES
AREA F: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2023
Rates Fringes
TRUCK DRIVER
\(1 \& 2\) Axles.................... \(\$ 35.57\) 26.09
3 or more Axles; Euclids, Dumptor \& Articulated, Truck Mechanic...............\$ 35.7226 .09

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 https://www.dol.gov/agencies/whd/government-contracts.

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) (iii)).

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).

\section*{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.

\section*{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.
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 National Office because National Office has 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"

Superseded General Decision Number: WI20230008
State: Wisconsin
Construction Types: Heavy (Sewer and Water Line and Tunnel)

Counties: Wisconsin Statewide.
TUNNEL, SEWER \& WATER LINE CONSTRUCTION PROJECTS
Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).
\begin{tabular}{|c|c|}
\hline If the contract is entered into on or after January 30, 2022, or the contract is |renewed or extended (e.g., an option is exercised) on or |after January 30, 2022: & \begin{tabular}{l}
. Executive Order 14026 generally applies to the contract. \\
. The contractor must pay all covered workers at least \(\$ 17.20\) 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 2024.
\end{tabular} \\
\hline If the contract was awarded on or between January 1, 2015 and |January 29, 2022, and the contract is not renewed or extended on or after January |30, 2022: & \begin{tabular}{l}
. Executive Order 13658 generally applies to the contract. \\
. The contractor must pay all covered workers at least \(\$ 12.90\) per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.
\end{tabular} \\
\hline
\end{tabular}

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.
\begin{tabular}{cc} 
Modification Number & Publication Date \\
0 & \(01 / 05 / 2024\) \\
1 & \(01 / 19 / 2024\)
\end{tabular}

BRWI0001-002 06/01/2023
CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$39.97 25.02
\(\qquad\) BRWI0003-002 06/01/2023

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES
Rates Fringes
BRICKLAYER......................... \$ 40.0026 .06

BRWI0004-002 06/01/2023

KENOSHA, RACINE, AND WALWORTH COUNTIES
Rates Fringes
BRICKLAYER........................... \$ \(44.50 \quad 26.96\)
BRWI0006-002 06/01/2023
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES
\begin{tabular}{rrr} 
& Rates & Fringes \\
BRICKLAYER....................... \(\$ 40.08\) & 25.98
\end{tabular}
BRWI0007-002 06/01/2023

GREEN, LAFAYETTE, AND ROCK COUNTIES
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BRICKLAYER
.\$40.95
26.80

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    BRWI0008-002 06/05/2023
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
    Rates Fringes
BRICKLAYER
                                \$ 44.96
                                25.67
    BRWI0009-001 06/01/2023
GREEN LAKE, MARQUETTE, OUTAGAMIE, SHAWANO, WAUPACA, WASHARA,
AND WINNEBAGO COUNTIES


DANE, GRANT, IOWA, AND RICHLAND COUNTIES
Rates Fringes

BRICKLAYER
\$ 41.56
26.19

BRWI0019-002 06/01/2023
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

Rates Fringes
BRICKLAYER
\$ 39.32
26.74

BRWI0021-002 06/01/2023
DODGE AND JEFFERSON COUNTIES
\begin{tabular}{rrr} 
Rates & \multicolumn{1}{c}{ Fringes } \\
BRICKLAYER....................... \(\$ 40.49\) & 27.24
\end{tabular}

BRWI0034-002 06/01/2023
COLUMBIA AND SAUK COUNTIES
Rates Fringes
BRICKLAYER
. \$ 41.56
26.19

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........\$41.19 27.05

CARP0264-003 06/05/2023
KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline CARPENTER. & \$ 41.91 & 29.72 \\
\hline \multicolumn{3}{|l|}{CARP0310-002 06/05/2023} \\
\hline \multirow[t]{2}{*}{Ashland, Bayfield, Fores Oneida, Shawano, Taylor} & Langlad & ln, Marat \\
\hline & Rates & Fringes \\
\hline CARPENTER.. & \$ 38.86 & 27.06 \\
\hline Piledriver. & \$ 39.43 & 27.02 \\
\hline \multicolumn{3}{|l|}{CARP0314-001 06/05/2023} \\
\hline \multicolumn{3}{|l|}{Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk and Walworth} \\
\hline & Rates & Fringes \\
\hline CARPENTER.......... & \$ 38.86 & 27.06 \\
\hline Piledriver.. & \$ 39.43 & 27.02 \\
\hline
\end{tabular}

CARP0361-004 05/01/2018
BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES
Rates Fringes

CARPENTER
\$ 36.15
20.43

CARP0731-002 06/05/2023
Calumet (Eastern portion of the County), Fond Du Lac, Manitowoc and Sheboygan

Rates Fringes
CARPENTER.......................... \(\$ 38.8627 .06\)
Piledriver...................\$ 39.4327 .02
CARP0804-001 06/05/2023
Adams, Juneau, Portage and Wood
\begin{tabular}{rrr} 
CARPENTER. . . . . . . . . . . . . . . . . . . . . \(\$ 38.86\) & 27.06 \\
Piledriver. . . . . . . . . \(\$ 39.43\)
\end{tabular}
----------------------------------------
* CARP0955-002 06/05/2023

Calumet (western portion of County), Fond Du Lac, Green Lake, Marquette, Outagamie, Waupaca, and Winnebago

> Rates Fringes
\begin{tabular}{rrr} 
CARPENTER. . . . . . . . . . . . . . . . . . . . \(\$ 38.86\) & 27.06 \\
PILEDRIVER. . . . . . . . . . \(\$ 39.43\) & 27.02
\end{tabular}

CARP1056-002 06/01/2023
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline MILLWRIGHT. & \$ 40.00 & 27.77 \\
\hline \multicolumn{3}{|l|}{CARP1074-002 06/05/2023} \\
\hline \multicolumn{3}{|l|}{Barron, Burnett, Chippewa, Clark, Dunn, Eau Claire, Pierce, Polk, Rusk, Sawyer, St. Croix and Washburn} \\
\hline & Rates & Fringes \\
\hline CARPENTER.. & \$ 38.86 & 27.06 \\
\hline PILEDRIVER...... . . . . . & \$ 39.43 & 27.02 \\
\hline
\end{tabular}

CARP1143-002 06/05/2023
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU AND VERNON COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline CARPENTER.. & \$ 38.86 & 27.06 \\
\hline PILEDRIVER. & \$ 39.43 & 27.02 \\
\hline
\end{tabular}

CARP1146-002 06/05/2023

Brown, Door, Florence, Kewaunee, Marinette, Menominee and Shawano
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline CARPENTER. & . .\$ 38.86 & 27.06 \\
\hline PILEDRIVER. & ...\$ 39.43 & 27.02 \\
\hline \multicolumn{3}{|l|}{CARP2337-009 06/05/2023} \\
\hline \multirow[t]{2}{*}{KENOSHA, MILWAUKEE,} & RACINE, WASHINGTON, & AND WAUKESHA \\
\hline & Rates & Fringes \\
\hline PILEDRIVERMAN. . . . . . . . . . . . . & ....\$ 39.22 & 34.01 \\
\hline
\end{tabular}
Rates Fringes
```

MILLWRIGHT
39.31
32.21
ELEC0014-002 11/26/2023
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, TREMPEALEAU, VERNON, AND WASHBURN
COUNTIES

```
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline Electricians: & \$ 41.32 & 22.91 \\
\hline
\end{tabular}

KENOSHA COUNTY
\begin{tabular}{rl} 
& Rates
\end{tabular} \begin{tabular}{c} 
Fringes \\
Electricians:...................... \(\$ 46.05\)
\end{tabular}\(\quad 30 \%+13.15\)
    ELEC0158-002 05/30/2021

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline ELECTRICIAN. & \$ 36.14 & 29.75\%+10. 26 \\
\hline
\end{tabular}
```

    ELEC0159-003 05/30/2021
    ```

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

ELECTRICIAN
\(\$ 43.38\)
23.13

ELEC0219-004 06/01/2019
FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

> Rates Fringes

Electricians:
Electrical contracts over
\$180,000......................\$ 33.94

Electrical contracts under
--------------------------------------------------------------------

ELEC0242-005 05/30/2021
DOUGLAS COUNTY
\begin{tabular}{rlr} 
& Rates & Fringes \\
Electricians:..................... \$ 41.37 & \(69.25 \%\)
\end{tabular}
```

    ELEC0388-002 06/01/2023
    ```

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


RACINE COUNTY (Except Burlington Township)
Rates Fringes

Electricians:......................\$ 46.7025 .02
ELEC0494-005 05/28/2023
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes
Electricians:.....................\$ \(47.75 \quad 26.72\)
ELEC0494-006 06/01/2021
CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Rates Fringes
Electricians:.................... \(\$ 37.91\)
22.74

ELEC0577-003 06/01/2022
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:.....................\$ 37.41 29.50\%+10.00

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline Electricians: & \$ 40.70 & 25.95\%+11.26 \\
\hline \multicolumn{3}{|l|}{ENGI0139-003 06/05/2023} \\
\hline \multicolumn{3}{|l|}{REMAINING COUNTIES} \\
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{Power Equipment Operator} \\
\hline Group 1.. & \$ 47.53 & 25.89 \\
\hline Group 2......... & \$ 46.28 & 25.89 \\
\hline Group 3.. & \$ 43.23 & 25.89 \\
\hline Group 4. & \$ 42.70 & 25.89 \\
\hline Group 5.. & \$ 40.63 & 25.89 \\
\hline Group 6............. & \$ 39.10 & 25.89 \\
\hline
\end{tabular}

HAZARDOUS WASTE PREMIUMS:
EPA Level ""A"" Protection: \(\$ 3.00\) per hour
EPA Level ""B"" Protection: \(\$ 2.00\) per hour
EPA Level ""C"" Protection: \(\$ 1.00\) per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS
GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp ); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers.
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GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp);
Tampers -Compactors, riding type; Stump Chipper, large;
Roller, Rubber Tire; Backfiller; Trencher, chain type
(bucket under 8 inch); Concrete Auto Breaker, large;
Concrete Finishing Machine (road type); Concrete Batch
Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or
over; Pumps, Screw Type and Gypsum); Hydrohammers, small;
Brooms and Sweeeprs; Lift Slab Machine; Roller under 5
tons; Industrial Locomotives; Fireman (Pile Drivers and
Derricks); Pumps (well points); Hoists, automatic; A-Frames
and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety,
Work Barges and Launches); Assistant Engineer
GROUP 6: Shouldering Machine Operator; Farm or Industrial
Tractor mounted equipment; Post Hole Digger; Auger
(vertical and horizontal); Skid Steer Loader with or
without attachments; Robotic Tool Carrier with or without
attachments; Power Pack Vibratory/Ultra Sound Driver and
Extractor; Fireman (Asphalt Plants); Screed Operator; Stone
Crushers and Screening Plants; Air, Electric, Hydraulic
Jacks (Slip Form); Prestress Machines; Air Compressor, 400
CFM or over; Refrigeration Plant/Freese Machine; Boiler
Operators (temporary heat); Forklifts; Welding Machines;
Generators; Pumps over 3""; Heaters, Mechanical; Combination
small equipment operator; Winches, small electric; Oiler;
Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

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ENGI0139-007 06/05/2023

DODGE, FOND DU LAC, JEFFERSON, KENOSHA, MILWAUKEE, OZAUKEE, RACINE, SHEBOYGAN, WALWORTH, WASHINGTON, AND WAUKESHA COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{Power Equipment Operator} \\
\hline Group 1. & \$ 44.54 & 25.35 \\
\hline Group 2. & \$ 43.76 & 25.35 \\
\hline Group 3. & \$ 42.81 & 25.35 \\
\hline Group 4. & \$ 41.76 & 25.35 \\
\hline Group 5..... & \$ 40.36 & 25.35 \\
\hline
\end{tabular}

HAZARDOUS WASTE PREMIUMS:
EPA Level ""A"" Protection: \(\$ 3.00\) per hour
EPA Level ""B"" Protection: \(\$ 2.00\) per hour
EPA Level ""C"" Protection: \$1.00 per hour
POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes, and Derricks with or without attachments, with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Backhoes (Excavators) 130,000 lbs and over; Caisson Rigs and Pile Drivers

GROUP 2: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or under; or Cranes, Tower Cranes, and Derricks with boom, lead, and \or jib lengths measuring 175 feet or under; Backhoes (Excavators) under 130,000 lbs; Skid Rigs; Dredge Operator: Traveling Crane (Bridge type); Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Pumps and Boring Machines (directional)

GROUP 3: Material Hoists; Stack Hoists; Tractor or Truck mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane, 5 tons or under; Manhoist; Tractor over 40 hp; Bulldozer over 40 hp ; Endloader over 40 hp ; Forklift, 25 ft and over; Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Mechanic and Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Percussion Drill Operator; Rotary Drill Operator; Blaster; Air Track Drill; Trencher (wheel type or chain type having over 8 inch bucket); Elevator; Milling Machine and Boring Machine (horizontal or vertical); Backhoe Mounted Compactor

GROUP 4: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machine (road type); Roller, Rubber Tire; Concrete Batch Hopper; Concrete Conveyor System; Concrete Mixers (14S or over); Screw type Pumps and Gypsum Pumps; Grout Pumps; Tractor, Bulldozer, End Loader, under 40 hp ; Pumps (well points); Trencher (chain type 8 inch or smaller bucket; Industrial Locomotives; Roller under 5 tons; Fireman (Piledrivers and Derricks); Robotic Tool Carrier with or without attachments.

GROUP 5: Hoists (Automatic); Forklift, 12 ft to 25 ft ; Tamper-Compactors, riding type; A-Frame andWinch Trucks; Concrete Auto Breaker; Hydrohammer, small; Brooms and Sweepers; Hoist (Tuggers); Stump Chipper, large; Boats (Tug, Safety, Work Barges and Launch); Shouldering Machine Operator; Screed Operator; Farm or Industrial Tractor; Post Hole Digger; Stone Crushers and Screening Plants; Firemen (Asphalt Plants) ; Air Compressor (400 CFM or over); Augers (vertical and horizontal); Generators, 150 KW and over; Air, Electric Hydraulic Jacks (Slipform); Prestress Machines; Skid Steer Loader with or without attachments; Boiler operators (temporary heat); Forklift, 12 ft and under; Screed Operator Milling Machine; Refrigeration Plant/Freeze Machine; Power Pack Vibratory/Ultra Sound Driver and Extractor; Generators under 150 KW; Combination small equipment operator; Compressors under 400 CFM; Welding Machines; Heaters, Mechanical; Pumps; Winches, Small Electric; Oiler and Greaser; Conveyor; High pressure utility locating machine (daylighting machine).

IRON0008-002 06/01/2023
BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:
\begin{tabular}{ccc} 
Rates & Fringes \\
IRONWORKER......................... \(\$ 43.40\) & 30.67 \\
Paid Holidays: New Year's Day, Memorial Day, July 4 4th, Labor \\
Day, Thanksgiving Day \& Christmas Day. &
\end{tabular}

IRON0008-003 06/01/2023
KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

IRONWORKER......................... \(\$ 41.73\) 30.67

Rates

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0383-001 06/01/2023
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


IRON0512-021 04/30/2023
ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

> Rates Fringes

IRONWORKER.
. \$ 39.14
34.00

LAB00113-004 06/05/2023
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes
Laborers: (Open Cut)
Group 1.......................\$18.72 22.75

Group 2....................... \(\$ 21.10\) 22.75
Group 3........................ 24.81 22.75
Group 4.......................\$ 34.62 22.75
Group 5...................... \(\$ 34.78\) 22.75
\begin{tabular}{|c|c|c|}
\hline Group & .\$ 34.84 & 22.75 \\
\hline Group 7 & 7......... . . . . . . . . . . \(\$ 38.88\) & 22.75 \\
\hline Group 8 & 8. . . . . . . . . . . . . . . . . . \(\$ 41.83\) & 22.75 \\
\hline Group 9 & \$ 42.50 & 22.75 \\
\hline
\end{tabular}

LABORERS CLASSIFICATIONS [OPEN CUT]
GROUP 1: Yard Laborer
GROUP 2: Landscaper
GROUP 3: Flag Person
GROUP 4: Paving Laborer
GROUP 5: General Laborer on Surface; Top Man
GROUP 6: Mud Mixer
GROUP 7: Mucker; Form Stripper; Bottom Digger and Misc;
Bottom Man and Welder on Surface
GROUP 8: Concrete Manhole Builder; Caisson Worker; Miner;
Pipe Layer; Rock Driller and Joint Man; Timber Man and
Concrete Brusher; Bracer in Trench Behind Machine \& Tight
Sheeting; Concrete Formsetter and Shoveler; Jackhammer
Operator

GROUP 9: Blaster

LAB00113-005 06/05/2023
SEWER, TUNNEL \& UNDERGROUND

KENOSHA AND RACINE COUNTIES
Rates Fringes
Laborers:
\begin{tabular}{|c|c|c|}
\hline Group & \$ 25.71 & 22.75 \\
\hline Group 2 & 2.......................\$ 31.93 & 22.75 \\
\hline Group 3 & 3.... . . . . . . . . . . . . . . \(\$ 36.33\) & 22.75 \\
\hline Group 4 & 4..................... \$ 38.19 & 22.75 \\
\hline
\end{tabular}

TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30 lbs add \(\$ 2.00\), over 30 lbs add \(\$ 3.00\)

LABORERS CLASSIFICATIONS
GROUP 1: Flagperson
GROUP 2: Top Man, General Laborer, Wellpoint Installation, Wire Mesh and Reinforcement, Concrete Worker, Form Stripper, Strike-off Work

GROUP 3: Machine and Equipment Operator, Sheeting, Form Setting, Patch Finisher, Bottom Man, Joint Sawer, Gunnite Man, Manhole Builder, Welder-Torchman, Blaster, Caulker, Bracer, Bull Float, Conduit Worker, Mucker and Car Pusher, Raker and Luteman, Hydraulic Jacking of Shields, Shield Drivers, Mining Machine, Lock Tenders, Mucking Machine Operator, Motor Men \& Gauge Tenders and operation of incidental Mechanical Equipment and all Power Driven Tools


GROUP 1: Flagperson
GROUP 2: General Laborer on surface

GROUP 3: Lock Tender on surface

GROUP 4: Form Stripper; Car Pusher
GROUP 5: Mucker; Dinkey
GROUP 6: Mucking Machine; Miner; Mining Machine; Welder \& Rock Driller; Lock Tender in tunnel; Concrete Buster; Jack Hammer Operator; Caisson Worker; Pielayer and Joint Man; Bracerman; Nozzle Man on Gunite; Timber Man; Concrete Brusher

GROUP 7: Blaster
NOTE: Hazardous \& Toxic Waste Removal: add \(\$ 0.15\) per hour.

ADAMS, ASHLAND, BARRON, BROWN, BUFFALO, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE,FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LACROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, ST CROIX, SAUK, SAWYER, SHAWANO, SHEBOYGAN, TAYLOR, TREMMPEALEAU, VERNON, VILAS, WALWWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES
Rates Fringes

LABORER (SEWER \& WATER)
\begin{tabular}{|c|c|c|}
\hline Group & . \$ 33.88 & 19.25 \\
\hline Group 2 & ..... \$ 35.73 & 19.25 \\
\hline Group 3 & . \(\$ 35.93\) & 19.25 \\
\hline Group 4 & \$ 36.68 & 19.25 \\
\hline
\end{tabular}

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, \(15-30\) lbs add \(\$ 2.00\), over 30 lbs add \(\$ 3.00\)

\section*{LABORER CLASSIFICATIONS:}

GROUP 1: Flagperson
GROUP 2: General Laborer, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man;
Joint Sawer; Gunnite Man; Manhole Builder; Welder;
Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Drivers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LABO0464-002 06/05/2023
DANE AND DOUGLAS COUNTIES
Rates Fringes
\begin{tabular}{|c|c|c|}
\hline Group 1 & . \$ 33.78 & 19.25 \\
\hline Group 2 & 2....................... \$ 35.98 & 19.25 \\
\hline Group 3 & 3................. . . . . \$ 36.18 & 19.25 \\
\hline Group 4 & 4.....................\$ 36.93 & 19.25 \\
\hline
\end{tabular}

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0 - 15 lbs add \(\$ 1.00,15-30\) lbs add \(\$ 2.00\), over 30 lbs add \(\$ 3.00\)

\section*{LABORERS CLASSIFICATIONS:}

GROUP 1: Flagperson
GROUP 2: General Laborer; Wellpoint Installation; Concrete Worker; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Dirvers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LAB01091-010 06/05/2023
BAYFIELD, BURNETT, IRON, SAWYER, AND WASHBURN COUNTIES
Rates Fringes

Laborers: (SEWER \& WATER)
Group 1...................... \(\$ 33.57\) 19.25
Group 2....................... 35.63 19.25
Group 3.......................\$ 35.83 19.25
Group 4....................... \(\$ 36.58\) 19.25
FOR ALL TUNNEL WORK UNDER COMPRESSED AIR:
0 - 15 lbs add \(\$ 1.00,15-30\) lbs add \(\$ 2.00\), over 30 lbs add \(\$ 3.00\)

\section*{LABORERS CLASSIFICATIONS:}

GROUP 1: Flagperson
GROUP 2: Laborers, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Dirvers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator
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CEMENT MASON/CONCRETE FINISHER
Area A........................... $\$ 45.17$ 27.27
.\$ 39.97
Area C....................\$ 40.40 25.25
Area D....................\$ 41.16 24.49
Area E.....................\$ 40.50 25.14
Area F.....................\$ 36.98 28.67

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AREA DESCRIPTIONS

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, 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 C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES
AREA F: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2023
Rates Fringes

\section*{TRUCK DRIVER}

1 \& 2 Axles..................\$ 35.5726 .09
3 or more Axles; Euclids, Dumptor \& Articulated,
\(\qquad\)

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
https://www.dol.gov/agencies/whd/government-contracts.
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) (iii)).

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).

\section*{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.

\section*{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.

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 National Office because National Office has 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:

\section*{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"

State: Wisconsin

Construction Type: Heavy
Counties: Wisconsin Statewide.
HEAVY CONSTRUCTION PROJECTS (Excluding Tunnel, Sewer, and Water Lines).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).
\begin{tabular}{|c|c|}
\hline |If the contract is entered |into on or after January 30, |2022, or the contract is |renewed or extended (e.g., an |option is exercised) on or |after January 30, 2022: & \begin{tabular}{l}
|. Executive Order 14026 generally applies to the contract. \\
|. The contractor must pay all covered workers at least \(\$ 17.20\) 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 2024.
\end{tabular} \\
\hline If the contract was awarded on |or between January 1, 2015 and |January 29, 2022, and the |contract is not renewed or |extended on or after January |30, 2022: & \begin{tabular}{l}
|. Executive Order 13658 generally applies to the contract. \\
|. The contractor must pay all covered workers at least \(\$ 12.90\) per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.
\end{tabular} \\
\hline
\end{tabular}

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.
\begin{tabular}{cc} 
Modification Number & Publication Date \\
0 & \(01 / 05 / 2024\) \\
1 & \(01 / 26 / 2024\)
\end{tabular}

BOIL0107-001 01/01/2021
Rates Fringes


BRWI0001-002 06/01/2023
CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES
\begin{tabular}{|c|c|}
\hline & Rates Frin \\
\hline & BRICKLAYER.......................\$ 40.18 25.88 \\
\hline & BRWI0002-002 06/01/2023 \\
\hline & ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES \\
\hline & Rates Fringes \\
\hline & BRICKLAYER....................... \$ 47.10 25.16 \\
\hline & BRWI0002-005 06/01/2023 \\
\hline & 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 \\
\hline
\end{tabular}

\section*{Rates Fringes}

CEMENT MASON/CONCRETE FINISHER...\$39.97 25.02
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    BRWI0003-002 06/01/2023
BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES
                                    Rates Fringes
BRICKLAYER..........................\$ \(40.00 \quad 26.06\)
BRWI0004-002 06/01/2023
KENOSHA, RACINE, AND WALWORTH COUNTIES
Rates Fringes
BRICKLAYER.......................... \(\$ 44.5026 .96\)
---------------------------------------------------------------------
    BRWI0006-002 06/01/2023
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES


DANE, GRANT, IOWA, AND RICHLAND COUNTIES
Rates Fringes

BRICKLAYER.......................... \(\$ 41.5626 .19\)
BRWI0019-002 06/01/2023
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

Rates Fringes
BRICKLAYER
\$ 39.32
26.74

BRWI0021-002 06/01/2023
DODGE AND JEFFERSON COUNTIES
Rates Fringes

BRICKLAYER
\(\$ 40.49\)
27.24

COLUMBIA AND SAUK COUNTIES
Rates Fringes
BRICKLAYER
\$ 41.56
26.19

CARP0068-011 05/02/2022
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........\$41.19 27.05
CARP0264-003 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES
Rates Fringes

CARPENTER \(\$ 41.91\)
29.72

CARP0310-002 06/05/2023
Ashland, Bayfield, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Shawano, Taylor and Vilas
Rates Fringes
\begin{tabular}{r|rr} 
CARPENTER. . . . . . . . . . . . . . . . . . . . . \(\$ 38.86\) & 27.06 \\
Piledriver. . . . . . . . . . . . . . \(\$ 39.43\) & 27.02
\end{tabular}

CARP0314-001 06/05/2023
Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk and Walworth

\section*{Rates Fringes}
\begin{tabular}{rrr} 
CARPENTER. . . . . . . . . . . . . . . . . . . . . . \(\$ 38.86\) & 27.06 \\
Piledriver. . . . . . . . . . . \(\$ 39.43\) & 27.02
\end{tabular}

CARP0361-004 05/01/2018
BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES
Rates Fringes
CARPENTER
\$ 36.15
20.43

CARP0731-002 06/05/2023
Calumet (Eastern portion of the County), Fond Du Lac, Manitowoc and Sheboygan


KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA
Rates Fringes

Rates Fringes
Electricians: \$ 41.32

22.91

\section*{ELEC0014-007 05/28/2023}

REMAINING COUNTIES
Rates Fringes

Teledata System Installer Installer/Technician........\$29.82 17.70

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 06/01/2023
KENOSHA COUNTY
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline Electricians: & \$ 46.05 & 30\%+13. 15 \\
\hline
\end{tabular}

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

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


DOUGLAS COUNTY
Rates Fringes

Electricians: \$ 41.37 69.25\%
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    ELEC0388-002 06/01/2023
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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
\begin{tabular}{|c|c|}
\hline Rates & Fringes \\
\hline Electricians:................... \(\$ 38.74\) & 26\%+11.76 \\
\hline ELEC0430-002 06/01/2023 & \\
\hline RACINE COUNTY (Except Burlington Township) & \\
\hline Rates & Fringes \\
\hline Electricians:.................... \$ 46.70 & 25.02 \\
\hline
\end{tabular}

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes

CALUMET (Township of New Holstein), DODGE (East of Hwy 26
including Chester Township), FOND DU LAC, MANITOWOC
(Schleswig), and SHEBOYGAN COUNTIES
Rates Fringes

Electricians:......................\$ \(37.91 \quad 22.74\)
ELEC0494-013 05/28/2023
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...................... \(\$ 34.65\) 18.36

Technician.................... \(\$ 34.6518 .36\)
Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, 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

ELEC0577-003 06/01/2022
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:...................... \(\$ 37.41 \quad 29.50 \%+10.00\)
-------------------------------------------------------------------ELEC0890-003 06/01/2022

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES


ENGI0139-001 06/01/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{Power Equipment Operator} \\
\hline Group 1. & \$ 50.21 & 24.05 \\
\hline Group 2. & \$ 49.71 & 24.05 \\
\hline Group 3. & \$ 49.21 & 24.05 \\
\hline Group 4. & \$ 48.37 & 24.05 \\
\hline Group 5. & \$ 44.39 & 24.05 \\
\hline Group 6. & \$ 39.24 & 24.05 \\
\hline
\end{tabular}

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, Pedestal Tower Cranes and Derricks with or w/o attachments with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Self-Erecting Tower Cranes over 4000 lbs lifting capacity; All Cranes with Boom Dollies; Boring Machines (directional); Master Mechanic. \(\$ 0.50\) additional per hour per 100 tons or 100 ft of boom over 200 ft or lifting capacity of crane over 200 tons to a maximum of 300 tons or 300 ft . Thereafter an increase of \(\$ 0.01\) per ft or ton, whichever is greater.

GROUP 2: Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; or Cranes, Tower Cranes Portable Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leadsand/or jib lengths measuring 175 feet or less; Backhoes (excavators) 130,000 lbs and over; Caisson Rigs; Pile Drivers; Boring Machines (vertical or horizontal), Versi-Lift, Tri-Lift, Gantry 20,000 lbs \& over.

GROUP 3: Backhoe (excavator) under 130,000 lbs;Self-erecting Tower Crane 4000 lbs \& under lifting capacity;Traveling Crane (bridge type); Skid Rigs; Dredge Operator; Mechanic;

Concrete Paver (over 27E); Concrete Spreader and Distributor; Forklift/ Telehandler (machinery- moving / steel erection); Hydro Blaster, 10,000 psi and over

GROUP 4: Material Hoists; Stack Hoists; Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 5 tons or under (tractor or truck mounted); Hoist (tuggers 5 tons \& over) ; Hydro-Excavators/Daylighters; Concrete Pumps Rotec type Conveyors; Tractor/Bulldozer/End Loader (over 40 hp ); Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Rotary Drill Operator and Blaster; Percussion Drill Operator; Air Track Drill and/or Hammers; Gantrys (under 20,000 lbs); Tencher (wheel type or chain type having 8 inch or larger bucket); Milling Machine; Off-Road Material Haulers.

GROUP 5: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machines (road type); Rubber Tired Roller; Concrete Batch Hopper; Concrete Conveyor Systems; Grout Pumps; Concrete Mixers (14S or over); Screw Type Pumps and Gypsum Pumps; Tractor, Bulldozer, End Loader (under 40 hp ); Trencher (chain type, bucket under 8 inch); Industrial Locomotives; Rollers under 5 tons; Stump Grinder/Chipper (Large); Timber Equipment; Firemen (pile drivers and derricks); Personnel Hoist, Telehandler over 8000 lbs; Robotic Tool Carrier with or without attachments

GROUP 6: Tampers - Compactors (riding type); Assistant Engineer; A-Frames and Winch Trucks; Concrete Auto Breaker; Hydrohammers (small); Brooms and Sweepers; Hoist (tuggers under 5 tons); Boats (Tug, Safety, Work Barges, Launch); Shouldering Machine Operator; Prestress Machines; Screed Operator; Stone Crushers and Screening Plants; Screed Operators (milling machine), Farm or Industrial Tractor Mounted Equipment; Post Hole Digger; Fireman (asphalt plants); Air Compressors over 400 CFM; Generators, over 150 KW; Augers (vertical and horizontal); Air, Electric, Hydraulic Jacks (slipform); Skid Steer Loaders (with or without attachments); Boiler Operators (temporary heat); Refrigeration Plant/Freeze Machines; Power Pack Vibratory/Ultra Sound Drivers and Extractors; Welding Machines; Heaters (mechanical); Pumps; Winches (small electric); Oiler and Greaser; Rotary Drill Tender; Conveyor; Forklifts/Telehandler 8000 lbs \& under; Elevators: Automatic Hoists; Pumps (well points); Combination Small Equipment Operators

ENGI0139-003 06/05/2023
REMAINING COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{Power Equipment Operator} \\
\hline Group 1. & \$ 47.53 & 25.89 \\
\hline Group 2. & \$ 46.28 & 25.89 \\
\hline Group 3. & \$ 43.23 & 25.89 \\
\hline Group 4. & \$ 42.70 & 25.89 \\
\hline Group 5. & \$ 40.63 & 25.89 \\
\hline Group 6. & \$ 39.10 & 25.89 \\
\hline
\end{tabular}

EPA Level ""A"" Protection: \$3.00 per hour
EPA Level ""B"" Protection: \(\$ 2.00\) per hour
EPA Level ""C"" Protection: \(\$ 1.00\) per hour
POWER EQUIPMENT OPERATORS CLASSIFICATIONS
GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp ); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers.

GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp ); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweeeprs; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer

GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freese Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3""; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler;

Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

IRON0008-002 06/01/2023

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

\section*{Rates Fringes}
IRONWORKER \(\$ 43.40\)
30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0008-003 06/01/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes

IRONWORKER \(\$ 41.73\)
30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day \& Christmas Day.

IRON0383-001 06/01/2023

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
\begin{tabular}{rrr} 
Rates & Fringes \\
IRONWORKER....................... \(\$ 41.00\) & 30.13
\end{tabular}

IRON0512-008 04/30/2023
BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

> Rates Fringes

IRONWORKER
. 43.00
34.11

\section*{IRON0512-021 04/30/2023}

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

MILWAUKEE AND WAUKESHA COUNTIES
Rates Fringes
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LABORER
Group 1.....................\$ 33.56 23.86
Group 2....................\$ 33.71 23.86
Group 3....................\$ 33.91 23.86
Group 4....................\$ 34.06 23.86
Group 5....................\$ 34.21 23.86
Group 6...................\$ 30.05 23.86

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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 Sawer 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
    LAB00113-003 06/01/2023
OZAUKEE AND WASHINGTON COUNTIES
Rates Fringes

\section*{LABORER}
\begin{tabular}{|c|c|c|}
\hline Group & .\$ 32.81 & 23.86 \\
\hline Group & ..\$ 32.91 & 23.86 \\
\hline Group 3 & .\$ 32.96 & 23.86 \\
\hline Group 4 & .\$ 33.16 & 23.86 \\
\hline Group 5 & ..\$ 33.01 & 23.86 \\
\hline Group 6 & ...................... \$ 29.90 & 23.86 \\
\hline
\end{tabular}

\section*{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 Sawer 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

LAB00113-011 06/01/2023
KENOSHA AND RACINE COUNTIES

> Rates Fringes

LABORER
\begin{tabular}{|c|c|c|}
\hline Group 1 & ... \$ 32.62 & 23.86 \\
\hline Group 2 & 2..................... \$ 32.77 & 23.86 \\
\hline Group 3 & 3. . . . . . . . . . . . . . . . . \(\$ 32.97\) & 23.86 \\
\hline Group 4 & 4..................... . \({ }^{\text {S }} 32.94\) & 23.86 \\
\hline Group 5 & 5. . . . . . . . . . . . . . . . . . \(\$ 33.27\) & 23.86 \\
\hline Group 6 & 6..................... \$ 29.76 & 23.86 \\
\hline
\end{tabular}

\section*{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 Sawer 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

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, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Rates Fringes
\begin{tabular}{|c|c|c|}
\hline LABORER & & \\
\hline Group 1 & ............\$ 37.57 & 19.25 \\
\hline Group 2 & ..................... \$ 37.67 & 19.25 \\
\hline Group 3 & 3..................... . \({ }^{\text {S }} 37.72\) & 19.25 \\
\hline Group 4 & ..................... \$ 37.92 & 19.25 \\
\hline Group 5 & ....\$ 37.77 & 19.25 \\
\hline Group 6 & 6..................... \(\$ 34.20\) & 19.25 \\
\hline
\end{tabular}

\section*{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; Bitminous 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 Sawer 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 Secialist
GROUP 5: Blaster; powderman
GROUP 6: Flagperson; Traffic Control

LAB00464-003 06/01/2023

DANE COUNTY
Rates Fringes
LABORER
\begin{tabular}{|c|c|c|c|}
\hline Group & \$ & 37.85 & 19.25 \\
\hline Group 2 & 2............ . . . . . . . . \(\$\) & 37.95 & 19.25 \\
\hline Group 3 & 3 . . . . . . . . . . . . . . . . . . \(\$\) & 38.00 & 19.25 \\
\hline Group 4 & 4. . . . . . . . . . . . . . . . . . . \$ & 38.20 & 19.25 \\
\hline Group 5 & 5. . . . . . . . . . . . . . . . . . . \(\$\) & 38.05 & 19.25 \\
\hline Group 6 & 6........ . . . . . . . . . . . \$ & 34.20 & 19.25 \\
\hline
\end{tabular}

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; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer 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 05/01/2023

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

> Rates Fringes

Painters:
New:
Brush, Roller..............\$ 34.5924 .84
Spray, Sandblast, Steel....\$ 35.1924 .84
Repaint: Brush, Roller..............\$ 33.0924 .84 Spray, Sandblast, Steel....\$ 33.6924 .84

PAIN0108-002 06/01/2023
RACINE COUNTY
Rates Fringes

Painters:
Brush, Roller............... \(\$ 41.0421 .95\)
Spray \& Sandblast...........\$ 42.0421 .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
\(\qquad\)
PAIN0259-004 05/01/2015
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

> Rates Fringes

PAINTER............................ \(\$ 22.03\) 12.45
\(\qquad\)
PAIN0781-002 06/01/2023
JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
Rates Fringes
Painters:
Bridge.......................... 39.8424 .86
Brush....................... \(\$ 39.09\) 24.86
Spray \& Sandblast...........\$ 39.8424 .86

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES
Rates
\begin{tabular}{l} 
PAINTER \\
Brush.......................... \(\$ 35.00\)
\end{tabular}
\begin{tabular}{l} 
PREMIUM PAY: \\
Structural Steel, Spray, Bridges \(=\) \\
hour.
\end{tabular}

PAIN0802-003 06/01/2023

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.............................. \(\$ 35.00 \quad 20.62\)
\begin{tabular}{|c|c|}
\hline & \\
\hline & PAIN0934-001 06/01/2022 \\
\hline
\end{tabular}

KENOSHA AND WALWORTH COUNTIES
\begin{tabular}{|c|c|c|}
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{Painters:} \\
\hline Brush. & \$ 36.70 & 24.69 \\
\hline Spray. & \$ 37.70 & 24.69 \\
\hline Structural Steel. & \$ 36.85 & 24.69 \\
\hline \multicolumn{3}{|l|}{PAIN1011-002 06/06/2021} \\
\hline \multicolumn{3}{|l|}{FLORENCE COUNTY} \\
\hline & Rates & Fringes \\
\hline Painters:........... & \$ 26.71 & 14.38 \\
\hline \multicolumn{3}{|l|}{PLAS0599-002 06/01/2023} \\
\hline & Rates & Fringes \\
\hline \multicolumn{3}{|l|}{CEMENT MASON/CONCRETE FINISHER} \\
\hline Area A......... & \$ 45.17 & 27.27 \\
\hline Area B... & \$ 39.97 & 25.02 \\
\hline Area C. & \$ 40.40 & 25.25 \\
\hline Area D... & \$ 41.16 & 24.49 \\
\hline Area E... & \$ 40.50 & 25.14 \\
\hline Area F... & \$ 36.98 & 28.67 \\
\hline
\end{tabular}

AREA DESCRIPTIONS

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE, SAWYER, AND WASHBURN COUNTIES
```

AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK,
COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST,
GREEN LAKE, 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 C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA
CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND
VERNON COUNTIES
AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES
AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES
AREA F: KENOSHA AND RACINE COUNTIES
    PLUM0011-003 05/01/2023
ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, SAWYER, AND WASHBURN
COUNTIES

    PLUM0075-009 06/01/2016
COLUMBIA, DANE, IOWA, MARQUETTE, RICHLAND AND SAUK COUNTIES
    Rates Fringes
PLUMBER
        . \$ 38.82
        20.12
    PLUM0111-007 05/28/2018
MARINETTE COUNTY (Niagara only)
    Rates Fringes
PLUMBER/PIPEFITTER
. 33.33
    24.48
--------------------------------------------------------------------

Rates Fringes
Plumber and Steamfitter..........\$50.50 25.47
PLUM0400-003 05/29/2023
ADAMS, BROWN, CALUMET, DODGE (except Watertown), DOOR, FOND DU LAC, GREEN LAKE,KEWAUNEE, MANITOWOC, MARINETTE (except Niagara), MENOMINEE, OCONTO, OUTAGAMIE, SHAWANO, SHEBOYGAN, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

> Rates Fringes

PLUMBER/PIPEFITTER............... \(\$ 49.8520 .94\)
--------------------------------------------------------------------
PLUM0434-002 05/28/2023
BARON, BUFFALO, CHIPPEWA, CLARK, CRAWFORD, DUNN, EAU CLAIRE, FLORENCE, FOREST, GRANT, JACKSON, JUNEAU, LA CROSSE, LANGLADE, LINCOLN, MARATHON, MONROE, ONEIDA, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RUSK, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILAS, AND WOOD COUNTIES
\begin{tabular}{rrr} 
Rates & Fringes \\
PIPEFITTER....................... \(\$ 46.89\) & 22.73
\end{tabular}

PLUM0601-003 06/01/2022
DODGE (Watertown), GREEN, JEFFERSON, LAFAYETTE, MILWAUKEE, OZAUKEE, ROCK, WASHINGTON AND WAUKESHA COUNTIES

> Rates Fringes

PIPEFITTER
\$ 50.00
28.93

PLUM0601-009 06/01/2022
COLUMBIA, DANE, IOWA, MARQUETTE, RICHLAND AND SAUK COUNTIES

> Rates Fringes

PIPEFITTER......................... \(\$ 52.06\) 26.86


WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
= = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = = =
** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 ( \(\$ 12.90\) ). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

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
https://www.dol.gov/agencies/whd/government-contracts.
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) (iii)).

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).

\section*{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.

\section*{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.

\section*{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.

\section*{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 National Office because National Office has 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"

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, \(4^{\text {th }}\) Floor South
Madison, WI 53705
Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

\section*{NOTICE TO ALL CONTRACTORS:}

\section*{Proposal \#11: 2395-05-71, WISC 2024223 \\ C Milwaukee E/W Howard Avenue \\ S 6th Street to S Clement Avenue LOC STR \\ Milwaukee County}

Letting of February 13, 2024
This is Addendum No. 01, which provides for the following:

\section*{Special Provisions:}

The wrong project's special provisions were inadvertently inserted in the proposal. This addendum adds the correct special provisions.

\section*{Plan Sheets:}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{ Revised Plan Sheets } \\
\hline Plan Sheet & Plan Sheet Title (brief description of changes to sheet) \\
\hline 3 & Utility Contacts - Utility contacts updated \\
\hline
\end{tabular}

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

\section*{Mike Coleman}

Proposal Development Specialist
Proposal Management Section

END OF ADDENDUM

\section*{Special Provisions}

\section*{Table of Contents}
Article Description Page \#
1. General .....  4
2. Scope of Work .....  4
3. Prosecution and Progress ..... 4
4. Traffic ..... 6
5. Holiday and Special Event Work Restrictions ..... 11
6. Utilities ..... 11
7. Notice to Contractor-City of Milwaukee Coordination. ..... 15
8. Notice to Contractor - Tree and Planting Area Protection. ..... 17
9. Notice to Contractor - Work without a Construction Permit. ..... 18
10. Notice to Contractor - Restoration within Right-of-Way ..... 18
11. Notice to Contractor - Survey ..... 18
12. Notice to Contractor - Installing City Furnished Signs ..... 19
13. Notice to Contractor - Sod. ..... 19
14. Notice to Contractor-Temporary Lighting Installation ..... 19
15. Notice to Contractor - Signalized Intersections ..... 19
16. Notice to Contractor - Milwaukee County Transit System. ..... 19
17. Public Convenience and Safety ..... 20
18. Archaeological Site ..... 20
19. Removing Traffic Signals W Howard Ave \& S 6th St, Item 204.9060.S.001; Removing Traffic Signals W Howard Ave \& 3rd St, Item 204.9060.S.002; Removing Traffic Signals W Howard Ave \& S Howell Ave, Item 204.9060.S.003; Removing Traffic Signals W Howard Ave \& S Whitnall Ave, Item 204.9060.S.004: Removing Traffic Signals W Howard Ave \& S Pine Ave, Item 204.9060.S.005: Removing Traffic Signals W Howard Ave \& S Clement Ave, Item 204.9060.S.006 ..... 20
20. Removing City Installed Wood Poles, Item 204.9060.S.310. ..... 21
21. Removing Poles, Item 204.9060.S.311 ..... 22
22. Removing Aerial Cable, Item 204.9090.S.001 ..... 23
23. Notice to Contractor - Contamination Beyond Construction Limits ..... 23
24. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S ..... 24
25. Erosion Control. ..... 27
26. Protection of Concrete. ..... 27
27. Concrete Aggregates ..... 27
28. Concrete Identification Stamping ..... 27
29. Cover Plates Temporary, Item 611.8120.S. ..... 27
30. Landscape Planting Surveillance and Care Cycles ..... 28
31. Signs Type II Reflective SH, Item 637.2220; Signs Type II Reflective F, Item 637.2230. ..... 28
32. Construction Staking Electrical Installations (Project), Item 650.8501 ..... 29
33. Lamp Ballast, LED, Switch Disposal by Contractor, Item 659.5000.S ..... 29
34. Temporary Traffic Signals for Intersections (Location), Item 661.0201 ..... 30
35. Adjusting Water Service Boxes, Item SPV.0060.001 ..... 31
36. Water Main Protection, Item SPV.0060.002 ..... 31
37. Signature Beds, Item SPV.0060.015. ..... 32
38. Utility Line Opening (ULO), Item SPV.0060.050 ..... 32
39. Adjusting Sanitary Manholes; Item SPV. 0060.100. ..... 33
40. Inlet Covers Type MS 55, Item SPV.0060.101; Inlet Covers Type MS 57, Item SPV.0060.102; Manhole Covers Type MS 58-A, Item SPV.0060.103; Storm Inlet Type 45A, Item SPV.0060.112. ..... 34
41. Install City Precast Controller Base, Item SPV.0060.201 ..... 35
42. ATC Controller and Cabinet Installed, Item SPV.0060.205. ..... 35
43. Fiber Optic Patch Panel, Item SPV.0060.212. ..... 43
44. Ethernet Switch, Item SPV.0060.213. ..... 43
45. Electrical Service Pedestal, Item SPV.0060.215 ..... 44
46. EVP 1 Direction Detector, Item SPV.0060.218 ..... 44
47. EVP Phase Selector Card 4 Channel, Item SPV.0060.221 ..... 45
48. EVP Confirmation Light, Item SPV.0060.223. ..... 45
49. Vehicular Video Detection System-2 Cameras, Item SPV.0060.225. ..... 45
50. Vehicular Video Detection System-4 Cameras, Item SPV.0060.227. ..... 46
51. Electrical Riser, Item SPV.0060.228 ..... 47
52. Pedestrian Countdown Signal Face 12-Inch, Item SPV.0060.267 ..... 48
53. Voice Instruction Audible Pushbutton, Item SPV.0060.268. ..... 48
54. Voice Instruction Audible Control Unit, Item SPV.0060.269 ..... 49
55. Round Aluminum Sign Post System in Soft Surface 7-Foot, Item SPV.0060.280. ..... 49
56. Round Aluminum Sign Post System in Soft Surface 10-Foot, Item SPV.0060.281 ..... 50
57. Round Aluminum Sign Post System in Soft Surface 12-Foot, Item SPV.0060.283 ..... 50
58. Round Aluminum Sign Post System in Concrete Surface 10-Foot, Item SPV.0060.285. ..... 51
59. Street Name Sign Mounting Hardware on Mast Arm, Item SPV.0060.291 ..... 51
60. \(24 " X 24\) " Blankout Sign "No Turn on Red", Item SPV.0060.292. ..... 52
61. Removing Sign Post Assembly and Type II Signage, Item SPV.0060.293 ..... 52
62. Pull Boxes 13-Inch x 24-Inch x 24-Inch; Item SPV.0060.302. ..... 52
63. Pull Boxes 17-Inch \(\times\) 30-Inch \(\times 24-I n c h ;\) Item SPV.0060.303. ..... 53
64. Poles Type 22-AL, Item SPV.0060.00.315. ..... 54
65. Poles Type 26-AL, Item SPV.0060.316. ..... 56
66. Poles Type 25-AL-BD, Item SPV.0060.320. ..... 58
67. Poles Type 30-AL-BD, Item SPV.0060.321 ..... 59
68. 35-FT. Wood Pole, Item SPV.0060.323. ..... 61
69. City Furnished High Pressure Sodium Ballasts 1HSX - Single Coil, Item SPV.0060.337; City Furnished High Pressure Sodium Ballasts 11HSX - Double Coil, Item SPV.0060.338 ..... 62
70. Submersible Multitap 3-Port Pre-Insulated Connector, Item SPV.0060.342; Submersible Multitap 4-Port Pre-Insulated Connector, Item SPV.0060.343 ..... 64
71. Luminaire Arms Single Member 6-Ft. (Special) Item SPV.0060.345. ..... 65
72. Luminaire Arms Single Member 6-Ft (WP Mount); Item SPV.0060.346. ..... 65
73. Luminaire Arms Single Member 8-Ft. (Special), Item SPV.0060.347. ..... 66
74. Luminaire Arms Single Member 8-Ft (WP Mount); Item SPV.0060.348. ..... 67
75. City Furnished High Pressure Sodium Ballasts 2HSX - Single Coil, Item SPV.0060.360; City Furnished High Pressure Sodium Ballasts 22HSX - Double Coil, Item SPV.0060.361 ..... 67
76. City Furnished Luminaire Utility HPS 2 Multiple, Item SPV.0060.366; City Furnished Luminaire Utility HPS 3 Multiple, Item SPV.0060.367. ..... 69
77. City Furnished Luminaire Utility HPS 2 Series, Item SPV.0060.368; City Furnished Luminaire Utility HPS 3 Series, Item SPV.0060.369. ..... 70
78. City Furnished High Pressure Sodium Ballasts 3HSX - Single Coil, Item SPV.0060.370; City Furnished High Pressure Sodium Ballasts 33HSX - Double Coil, Item SPV.0060.371 ..... 72
79. Luminaire Utility 1LED2, Item SPV.0060.374; Luminaire Utility 2LED2, Item SPV.0060.375; Luminaire Utility 3LED2, Item SPV.0060.376; Luminaire Utility 2LED3, Item SPV.0060.377; Luminaire Utility 3LED3, Item SPV.0060.379 ..... 73
80. Remove Luminaire; Item SPV.0060.387 ..... 76
81. Adjusting CUC Manhole Cover, Item SPV.0060.400 ..... 76
82. 4' Diameter Manhole Type CUC, Item SPV.0060.401 ..... 77
83. 5' Diameter "Doghouse" Manhole Type CUC, Installed over Conduit, Item SPV.0060.413. ..... 78
84. Installing Conduit Into Existing Manhole, Item SPV.0060.425 ..... 81
85. Sawing Concrete Encased Duct Package, Item SPV.0060.426 ..... 82
86. Sawing and Removal of Concrete Encased Duct Package, Item SPV.0060.427 ..... 82
87. Concrete Curb \& Gutter Integral 19-Inch, Item SPV.0090.001 ..... 83
88. Electrical Cable Type 3 \#4/ 1\#8 XLP, Item SPV.0090.240. ..... 83
89. City Furnished Electrical Cable Type 1\#8 AWG 5kV Concentric, Item SPV.0090.300 ..... 84
90. City Furnished Electrical Cable Type 1\#6 AWG 5kV; Item SPV.0090.301 ..... 85
91. Electrical Cable Type 3\#6 AL, Item SPV.0090.302 ..... 85
92. Electrical Cable Type 2\#2/1\#4 AL., Item SPV.0090.304 ..... 86
93. Electrical Cable Type 3\#12 AWG with Ground, Item SPV.0090.309. ..... 88
94. Liquidtight Flexible Nonmetallic Conduit 1 ½-Inch, Item SPV.0090.319 ..... 88
95. Electrical Cable Type 4\#8/1\#8 XLP, Item SPV.0090.321; Electrical Cable Type 4\#6/1\#8 XLP, Item SPV.0090.322; Electrical Cable Type 4\#2/1\#8 XLP, Item SPV.0090.324. ..... 89
96. 2-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.402 ..... 92
97. 4-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.404 ..... 95
98. 6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.406. ..... 99
99. 8-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.408. ..... 102
100. Duct Removal from Concrete Encased Duct Package, Item SPV.0090.422 ..... 106
101. Marking Crosswalk Epoxy Transverse Line 12-Inch, SPV.0090.704 ..... 106
102. Marking Crosswalk Epoxy Block Style 12-inch, SPV.0090.705 ..... 107
103. Marking Stop Line Epoxy 24-Inch, SPV.0090.706. ..... 107
104. Joint Sealing, Item SPV.0180.001. ..... 108

\author{
SPECIAL PROVISIONS
}

\section*{1. General.}

Perform the work under this construction contract for Project 2395-05-71, C Milwaukee, E/W Howard Avenue, S \(6^{\text {th }}\) Street to S Clement Avenue, Local Street, Milwaukee 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, 2024 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 (20230629)

\section*{2. Scope of Work.}

The work under this contract shall consist of concrete roadway reconstruction, new curb \& gutter, new sidewalk, new storm inlets \& lateral connections, new curb extensions and pedestrian ramps, planting trees, monotube poles and mast arms, conduit, control vaults traffic signals and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

\section*{3. Prosecution and Progress.}

\section*{A General}

Begin work within 10 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.

Do not commence work under this contract until the required traffic control devices and markings are in place and the engineer approves the installations.
Take special precautions to avoid damage to all existing utility facilities in the proximity of the construction area.

\section*{Supplement standard spec 107.18 with the following:}

Use equipment having vacuum or water-spray mechanisms to eliminate the dispersion of dust when performing roadway-cleaning operations. Provide suitable, self-contained particulate collectors, if vacuum equipment is used, to prevent discharge from collection bin into the atmosphere.
Except where noted, keep all intersections accessible at all times. Include any costs associated with staging operations at intersections that are to remain accessible at all times in the unit bid price for Traffic Control (2395-05-71).

Maintain or provide where necessary, as directed by the engineer, pedestrian access to adjacent properties, businesses, recreation areas, and bus stops. Provide adequate temporary sidewalk and bridging between the curb and the right-of-way line over freshly paved concrete or other obstructions on the sidewalk area at entrances to buildings or as directed by the engineer. The cost of bridging shall be included in the unit bid price for Concrete Sidewalk 5-Inch.
Once concrete sidewalks are poured, take necessary precautions to preserve the condition of the new concrete items. Any pavement or sidewalk that is damaged shall be replaced at the contractor's expense.

Maintain pedestrian facilities according to American with Disabilities Act Accessibility Guidelines (ADAAG) requirements at all times. Construct temporary pedestrian access accommodations (crosswalks, curb ramps, and pedestrian surfaces) as shown in the plans, or where necessary, as directed by the engineer.
Existing trees and utility poles are to remain in place during construction unless otherwise noted in the plan.
Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between features for the paving and grading equipment.

Maintain vehicular access to all business and commercial properties at all times except as noted in the traffic control plans and specifications.
Store drums, buckets and other containers related to construction operations in a secure area to prevent vandalism, spills, and unwanted dumping. If an abandoned container is discovered on the project site, notify the WDNR at (800) 943-0003.

\section*{Northern Long-eared Bat (Myotis septentrionalis)}

Northern long-eared bats (NLEB) have the potential to inhabit the project limits because they roost in trees, bridges and culverts. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work, and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).
Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

The department has contracted with others and will perform the following operations after October 31 and prior to April 1:
- Cutting down and removing trees.

Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3 -inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

\section*{B Contractor Coordination}

Coordinate the work according to standard spec 105.5.2.
Arrange and conduct weekly progress meetings. The contractor's superintendent or representative, designated materials representative, subcontractor's representatives for ongoing subcontract work or subcontract work expected to begin within the next three weeks shall attend. Provide and discuss the schedule and updates at the weekly progress meetings. Agenda items at the meeting shall include, but not be limited to, the following:
- Review of the contractor's and subcontractors' schedule. Indicate if the project is on, ahead or behind schedule. If behind indicate why, how much behind and how the project will get back on schedule.
- Utility conflicts and relocation schedule.
- Evaluation of progress to date.
- Outstanding Requests for Information (RFI's) or issues that may cause contract modifications.
- Shop drawing submittal status.
- Materials submittal status.
- Materials sampling and testing activities and results.
- Lane, road, and ramp closure schedules.
- Impacts to businesses and private properties.
- Impacts to bus routes, emergency services, postal services.
- Equipment status of orders and deliveries.

Obtain permission from the engineer a minimum of 48 hours prior to any construction schedule change.
The labor and materials required to restore concrete sidewalk, after saw cutting, will be deemed incidental to the bid item 690.250, Sawing Concrete.

\section*{C Work Restrictions}

\section*{C1 General}

Comply with all local ordinances which apply to work operations, including those pertaining to work during night-time hours. Furnish any and all ordinance variances issued by the municipality or required permits to the engineer in writing three working days before performing such work. Night-time and weekend work will not be allowed without written approval from the engineer and the City of Milwaukee at least three days in advance of the planned work during night-time and weekend hours.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval from the engineer. Park and store equipment and material only at work sites approved by the engineer.

Complete all contract work excluding signals, street lighting, all trees, shrubs, plants, and other landscaping in 2024. Complete the remaining work in 2025.

\section*{C2 Interim Completion and Liquidated Damages: December 20, 2024}

Complete all contract work excluding signals, street lighting, all trees, shrubs, plants, and other landscaping and open the roadway to through traffic by December 20, 2024.

If the contractor fails to complete the work necessary to reopen complete all contract work excluding signals, street lighting, all trees, shrubs, plants, and other landscaping and open the roadway to through traffic by December 20, 2024, the department will assess the contractor \(\$ 2185\) in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on December 21, 2024. 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.

\section*{C3 Winter Shutdown}

Winter shutdown will commence with the completion of all contract work excluding all trees, shrubs, plants, and other landscaping in the Fall of 2024. Do not resume work until April 1, 2025 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned recommencement of work in 2025. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date.

\section*{C4 2025 Work}

Complete signal and street lighting work between April 1, 2025 and May 31, 2025.
Complete the furnishing and planting of all trees, shrubs, and plants between May 1, 2025 and May 15, 2025. Perform care cycles according to standard spec 632.3.18.

\section*{4. Traffic.}

\section*{A General}

\section*{A1 Traffic Control}

Undertake traffic control according to standard spec 643 and/or as approved by the engineer, except as hereinafter modified.

Submit to the engineer for approval a detailed traffic control plan for any changes to the proposed traffic control detail as shown on the plans. Submit this plan ten days prior to the preconstruction conference.

Provide 24 hours-a-day availability of equipment and forces to expeditiously restore lights, signs, or other traffic control devices that are damaged or disturbed, in accord with standard spec 643.3.1(6). The cost to maintain and restore the above items shall be considered incidental to the item as bid and no additional payment will be made.

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to reroute traffic during the construction operations.

During all construction operations, maintain adequate turning provisions for vehicles, including buses and trucks, at the intersections that are to remain open.
Contractor to provide all posting of no parking restrictions, necessary to facilitate construction operations. Contact Cameron Potter at (414) 286-3276, three working days prior to the start of construction.

When an area of the roadway is temporarily closed to traffic, sign and delineate the portion of the roadway that is to remain open, according to Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD), and the WisDOT manual titled "Guidelines for Construction, Maintenance, \& Utility Operations".
Do not switch traffic to the next construction stage until all signing, pavement marking, traffic control devices for the stage are in place, conflicting pavement markings and signs are covered or removed, and as directed by the engineer.

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

\section*{A2 Traffic Control Signs PCMS}

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

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

\section*{A3 Railroad}

Do not place any items within 50 feet of railroad right-of-way, including items that could foul the same area. Do not place any items including but not limited to signing, equipment, or material. This includes at grade crossings and structures with railroad under or over. If this is not adhered to, Railroad Protective Liability Insurance will be required of the contractor and incidental to the project.
The railroad spec is associated with traffic control detour route.

\section*{A4 Signals and Lighting}

The project includes street lighting and traffic signals. Maintain existing traffic signals and functionality of the lighting system during the project with existing lighting or temporary lighting. Maintain existing traffic signals at each intersection until temporary traffic signals are in place and operating at that intersection.

Temporary signals shall include the relocation of street name signs at traffic signals to the temporary poles prior to removal of existing poles as directed by the engineer. The cost to relocate the street name signs at signalized intersections shall be considered incidental to item 643.5000, Traffic Control and no additional payment will be made.

\section*{B Construction Contact Information}

Designate an individual responsible for traffic control maintenance including access of local traffic, and 24 -hour emergency traffic control repair. Provide the name and telephone number of this individual to the engineer.
Provide City of Milwaukee Police Department with a 24 -hour emergency contact number for when traffic control maintenance is required.

In no case may any barricade, light, sign or other traffic control device be out of service for more than 2 hours. The cost to maintain and restore the above items is incidental to the bid item Traffic Control and no additional payment will be made.

\section*{Advance Notification}

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

\section*{C Vehicle Access}

All construction vehicles and equipment entering or leaving traffic lanes shall yield to through traffic.

\section*{C1 Emergency Vehicle Access}

Maintain emergency vehicular access at all times to roadways located within the project limits.
In the event where emergency vehicles and equipment which provide fire, police, and rescue service for the public need access to properties, the contractor shall cooperate to the fullest extent in accommodating emergency access in the shortest possible time.

\section*{C2 Driveway Construction/Access}

Local access to residences and businesses within the project area shall be maintained to the maximum extent possible. No residential or commercial drive approach shall be closed without sufficient notice given to the occupants of the premise to remove their vehicles prior to removal or closing of the drive approach access. Reasonable access to abutting business locations shall be maintained at all times.
On-street parking will not be allowed during construction.
Inform property owners at least 48 hours prior to removing a driveway approach that serves that property, including giving owners 48 -hours to remove their vehicles prior to driveway removal or closing of the driveway approach access.

Driveway approach removal and replacement should be scheduled, so that the time lapse between the removal and replacement is:
Seven days for normal strength concrete driveways.
Three days for HES concrete driveways.
Stage construction activities in order to maintain through vehicular access on East/West Howard Avenue according to the traffic control plans. The staging of work activities shall provide driveway access to local businesses at all times as specified below. Staging for driveway access shall include, but is not limited to the following four methods:

\section*{C3. HES Concrete Driveway}

Construct driveway with 7-inch high early strength concrete (HES) on Friday and open to vehicular traffic on Monday. Contact property owners to make arrangements to pour driveways on other days for business access.

\section*{C4. Concrete Pavement Gap}

In order to provide continuous access to the businesses, pavement gaps or adequate bridging to support businesses' vehicles shall be used. The access areas shall have ample width and length to accommodate turns from the businesses' vehicles. Temporary vehicle access to the businesses may be provided with base aggregate as directed by the engineer. Include the cost for the base aggregate in the unit bid price for Base Aggregate Dense \(11 / 4-\mathrm{inch}\). The pavement, curb and driveways at the pavement gaps shall be constructed as soon as cure time allows vehicular access of the paved portions.
The access provided shall be wide-enough for a semi-truck turning radius.

\section*{C5. Alternate Driveways}

Keep one driveway in place while the other is being constructed or open.

\section*{C6. Halves}

Construct driveway one half at a time:
\begin{tabular}{lll} 
ADDRESS & LOCATION & METHOD \\
\hline 108 W Howard Ave & \(25+58 \& 26+37 ;\) LT & C \\
3870 S Howell Ave & \(28+14 \& 29+22 ;\) LT & C \\
360 W Howard Ave & \(36+90 ;\) LT & D \\
3902 S Whitnall Ave & \(38+94 ;\) RT & A\&D \\
614 E Howard Ave & \(49+15 ;\) LT & A\&B\&D \\
1141 E Howard Ave & \(67+02 ;\) RT & A\&D \\
1200 E Howard Ave & \(68+20 \& 68+88 ;\) LT & C \\
1213 E Howard Ave & \(68+72 ;\) RT & \(C\)
\end{tabular}

\section*{D Definitions}

The following definitions shall apply to this contract:
Night-Time Periods
10:00 PM to 6:00 AM Monday, Tuesday, Wednesday, Thursday, and Friday
Weekend Periods
10:00 PM Friday to 6:00 AM Monday

\section*{E Traffic Control Description}

\section*{E1 Construction Staging}

Note on OSOW routing on West Howard Avenue: West Howard Ave, between 6th Street and Howell Avenue, is required by state statue to remain open for OSOW high route purposes.
Pre-Stage:
During this stage, the inside lane in the eastbound direction will be closed from S. \(6^{\text {th }}\) St. to S. \(3^{\text {rd }}\) St. and the inside lane in the westbound direction will be closed from S. \(5^{\text {th }} \mathrm{St}\). to S . Clement Ave. This configuration will allow for the removal of median noses and the addition of temporary pavement to accommodate the traffic configuration in Stage 1.
Stage 1:
During Stage 1, two-way traffic will be shifted to the north side of E/W Howard Ave. with one lane in each direction. Traffic will be separated by flexible tubular markers with left turn lanes at the major intersections. Pavement gaps will be provided at the locations listed below to maintain driveway access and garbage collection operations.

Pavement Gaps
\begin{tabular}{|c|c|}
\hline Location & Station \\
\hline S. 2 \({ }^{\text {nd }}\) St. & STA \(17+12\) to STA \(17+77\) \\
\hline S. Austin St. & STA \(31+92\) to STA \(32+48\) \\
\hline S. Griffin Ave. & STA 41+92 to STA 42+45 \\
\hline 611 E. Howard Ave. & STA 48+90 to STA 49+40 \\
\hline S. Logan Ave. & STA \(60+30\) to STA \(60+85\) \\
\hline
\end{tabular}

Stage 2:
During Stage 2, two-way traffic from S. \(6^{\text {th }}\) St. to \(S\). Howell Ave. will be one lane in each direction on the newly constructed EB lanes. One-way traffic in the eastbound direction will be provided on E. Howard Ave. from S. Whitnall Ave. to S. Clement Ave. on the newly constructed lanes. Pavement gaps will be provided at the locations listed below to maintain driveway access and garbage collection operations.

Pavement Gaps
\begin{tabular}{|c|c|}
\hline Location & Station \\
\hline S. \(2^{\text {nd }}\) St. & STA 17+12 to STA 17+77 \\
\hline
\end{tabular}

Stage 3:
During Stage 3, traffic on E/W Howard Ave. will be in its final configuration where single lane closures will be used to complete construction of median curbs.

\section*{E2 Intersection Staging:}

Intersection with I-43/94 Ramps:
In Stages 1A and 1B, both ramps from I-43/94 to W. Howard Ave. will be reduced to one lane to allow for staged construction one half at a time. In Stage 1C, the ramp from W. Howard Ave. to I-43/94 SB will be closed for a maximum of 72 hours for construction. In Stage 2, the ramp from W. Howard Ave. to l-43/94 NB will be closed for up to 72 hours for construction. Any ramp closure cannot occur during holiday periods as listed in the Special Provisions.

Intersection with S. Howell Ave.:
In Stages 1 and 2, the intersection of E. Howard Ave. and S. Howell Ave. will have staged construction to complete utility construction across E. Howard Ave. on the east and west sides of the intersection. In Stages 1A and 1B, the lanes on S. Howell Ave. will be shifted to allow for the construction in the southeast section and then the southwest section of the intersection. In Stage 1B, left turns will be prohibited from S. Howell Ave. NB to E. Howard Ave. WB. In stages 2A and 2B, lanes on S. Howell Ave. will be shifted to allow for the construction in the northwest section and then the northeast section of the intersection.
Intersection with S. Whitnall Ave.:
In Stage 1A, the southeast part of the intersection will be constructed, while two-way traffic is maintained on S. Whitnall Ave. In Stage 1B, the southwest part of the intersection constructed while maintaining oneway NB traffic on the east side of S. Whitnall Ave. In Stage 2A, the northeast part of the intersection will be constructed, while one-way SB traffic is maintained on S. Whitnall Ave. In Stage 2B, the northwest part of the intersection will be constructed, while two-way traffic is maintained on S . Whitnall Ave.
Intersection with S. Pine Ave.
In Stage 1A, southwest part of the intersection will be constructed while one-way northbound traffic on \(S\). Pine Ave. is maintained. In Stage 1B, the southeast Part of the intersection constructed while maintaining one-way NB traffic on S. Pine Ave. on the newly constructed lanes. In Stage 2A, the northeast part of the intersection will be constructed while one-way SB traffic is maintained on S. Pine Ave. In Stage 2B, the northwest part of the intersection will be constructed while one-way SB traffic is maintained on S . Pine Ave.

\section*{Intersection with S. Clement Ave.}

In Stage 1A, the southwest part of the intersection will be constructed while one-way northbound traffic is maintained on S. Clement Ave. In Stage 1B, S. Clement Ave. will be open to two-way traffic. In Stage 1C, the intersection will be open to one-way traffic while the southeast part of the intersection is being constructed. In Stage 2A, the intersection will remain open to two-way traffic. In Stage 2B, the intersection will remain open to one-way traffic while the northwest part of the intersection is being constructed. In Stage 2C, the intersection will remain open to one-way traffic on S. Clement Ave. while the northeast part of the intersection is being constructed.

\section*{E3 Bay View Montessori School Staging:}

\section*{South Roadway between S. Austin St. and S. Whitnall Ave.:}

During Stage 1, the southern roadway of E. Howard Ave. adjacent to Bay View Montessori School, 357 E. Howard Ave. shall remain open for drop-off and pickup of students until June 15, 2024. Complete all roadway and sidewalk construction work adjacent to Bay View Montessori School on or before September 3, 2024 to allow for the drop-off and pickup of students for the 2024-2025 school year.

In Stage 1A, the existing southern lanes of E. Howard Ave. from S. Austin St. to S. Whitnall Ave. will remain open for school drop off at Bay View Montessori while traffic is using the northern lanes. In Stage 1B, the resulting pavement gap on E. Howard Ave. from S. Austin St. to S. Whitnall Ave. will be completed.

\section*{E4 Sidewalk Construction}

The sidewalk adjacent to the roadway pavement work must either remain in place through the duration and be replaced after, or be removed and replaced prior to undertaking the adjacent roadway pavement work to ensure adequate pedestrian access while vehicular access to properties is restricted.

Removal and replacement of sidewalk should be scheduled, so that the time lapse between the removal and replacement is minimal. Provide temporary sidewalk, when deemed necessary, or when directed by the engineer.

The cost of bridging shall be included in the unit bid price for 602.0410 Concrete Sidewalk 5-Inch.
Except where noted, keep all intersections accessible at all times, except during placing of concrete pavement and curing operations. Include any costs associated with staging operations at intersections that are to remain accessible at all times in the unit bid prices for Concrete Pavement, 9-Inch. Staging concrete paving operations in intersections will not be considered a pavement gap.

During construction operations, ramp sawed joints at intersecting streets with asphaltic surface material between the existing pavement surface and the adjacent milled surface, as directed by the engineer, to permit the safe passing of vehicles. The cost of the materials, labor, and equipment necessary to install such ramps is to be paid under bid item 465.0105, Asphaltic Surface.

The contractor may make other arrangements with individual businesses prior to construction. The arrangement must be in writing, signed by the contractor and business owner, and approved by the construction engineer.

\section*{5. Holiday and Special Event Work Restrictions.}

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying E/W Howard Avenue 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 and special event periods:
- From noon Friday, May 24, 2024 to 6:00 AM Tuesday, May 28, 2024 for Memorial Day;
- From noon Wednesday July 3, 2024 to 6:00 AM Friday July 5, 2024 for Independence Day;
- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day.
stp-107-005 (20210113)

\section*{6. Utilities.}

This contract does not come under the provision of Administrative Rule Trans 220.
stp-107-066 (20080501)
The City of Milwaukee has notified the department that the following operations necessary for the construction of new facilities and/or adjustment of existing facilities will be coordinated with the contractor's construction operations by each representative utility unless otherwise noted. 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 by statutes. Use caution to ensure the integrity of underground facilities and maintain code ranges from overhead facilities at all times.

Note: Bidders are advised to contact each utility company listed in the plans prior to preparing their bid to obtain current information on the status of each utility company's work required in association with the project. Existing trees, street light poles, hydrants and utility poles are to remain in place during construction unless noted on plans. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between the trees, hydrants, poles, other utilities and any other physical structures and the construction equipment. During construction operations, keep all manholes accessible to utility companies for emergencies.

\section*{A. AT\&T Wisconsin}

AT\&T Wisconsin has underground communication facilities within the project limits.
AT\&T does not anticipate any relocations or placements of new facilities.
Adjustments of existing facilities are necessary during construction and to be coordinated with the road contractor.
- AT\&T forces will adjust one manhole at Station \(61+19\) \& 4' LT in coordination with paving operations.
- AT\&T forces will adjust their underground conduits facilities, that will be in conflict with proposed sewer lateral pipe work, in coordination with paving operations at the following locations:

Station 7+61 \& 56' L; Station 44+50 \& 5' LT; Station 50+80 \& 5' LT; Station 53+24 \& 5' LT.
- AT\&T forces will adjust their underground conduits facilities, that will be in conflict with proposed permanent street light poles basis work, in coordination with paving operations at the following locations:
Station \(31+76\) \& \(5^{\prime}\) LT; Station \(34+16\) \& 2' RT; Station \(35+71\) \& CL; Station \(40+59\) \& 2.9 ' LT; Station \(41+79\) \& \(5^{\prime}\) LT; Station \(52+73\) \& \(5^{\prime}\) LT; Station \(56+86\) \& \(5^{\prime}\) LT; Station \(58+91\) \& CL; Station \(60+15\) \& \(5^{\prime}\) LT; Station 62+27 \& CL; Station 63+53 \& \(5^{\prime}\) LT.
- AT\&T forces will adjust their underground conduits facilities, that will be in conflict with proposed temporary street light poles base work, in coordination with paving operations at the following location:

Station 36+98 \& 5' LT; Station 41+53 \& 5.3' LT; Station 53+23 \& 5' LT; Station 56+33 \& 5' LT; Station \(59+48\) \& 5.5' LT; Station 62+67 \& 5' LT;
- AT\&T forces will adjust their underground conduits facilities, that will be in conflict with proposed permanent monotube base work, in coordination with paving operations at the following location:
Station 37+26 \& 5' LT; Station 53+44 \& 5' LT.
Estimated construction and/or adjustment work by AT\&T - is 1 day for each manhole adjustment, 3 to 5 days for each conduit adjustment.

Anticipated start date is April 15, 2024.
Contact Mr. Nathan Gilbert of AT\&T at (262) 720-8235; ng952w@att.com with concerns or questions.

\section*{B. Charter Communications/Spectrum}

Spectrum operates overhead communications facilities located on WE-Energies poles within the project limits.
No conflict with Charter Communications/Spectrum is anticipated during construction.
Contact Mr. Beau Abuya of Charter Communications/Spectrum at (414) 758-9241; Beau.Abuya@charter.com with concerns or questions.

\section*{C. City of Milwaukee}

\section*{C. 1 Sewer}

The City of Milwaukee has sewer facilities within the limits of the project.
Adjust manholes to match the new finished pavement elevation. Perform this work in accordance with the requirements of Adjusting Sanitary Manholes.

Construct inlets, and adjust sewer manholes and catch basin inlet frames as shown in the plans and in the bid items for this project.

Contact Zafar Yousuf at (414) 286-2467 with any questions or concerns.

\section*{C. 2 Water Works}

The City of Milwaukee has underground water facilities within the limits of the project. No adjustments are planned for their water mains and water laterals.

Adjust water service boxes to match the new finished pavement elevation. Perform this work in accordance with the requirements of Adjust water service boxes.

Install water main protection as shown in the plans and in the bid items for this project.
Installations of water main protection at drainage structures located at the following stations and offsets:
- Station 26+50, 41' RT
- Station 34+70, 41' RT
- Station 37+36.5, 37' RT
- Station 57+87, 27' LT
- Station 61+18.5, 27' LT
- Station 63+42.6, 27'LT
- Station 66+75, 27' LT
- Station 68+95, 27' LT

Contact Mr. Dave Goldapp at (414) 286-6301 or (414) 708-2695 for coordination of the work.

\section*{E. Everstream}

Everstream has underground fiberoptic facilities from S Whitnall Avenue to S Clement Avenue.
The proposed City of Milwaukee (1) Underground Conduit (CUC) package will cross Everstream underground fiberoptic cable near Station 53+90 and 32.5' LT and (2) Traffic signal installation is located near Station 53+75 where Everstream underground fiberoptic is located around Station 53+50 and 44.5 LT.

Everstream personal will make adjustments of their facilities during paving operations to coordinate the CUC installations near Station 53+90 and 32.5’ LT by the paving contractor.

Contact Everstream two weeks prior to paving operations to have personnel on site during paving operations to coordinate the traffic signal placement with their fiberoptic cable located near Station 53+50 44.5' LT.

Estimated construction and/or adjustment work by Everstream forces is 6 working days.
Contact Shad Garcia at (414) 522-6685; sgarcia@everstream.net two weeks in advance to coordinate the work.

\section*{F. Lumen Technologies}

Lumen Technologies has underground communication facilities within the project limits. There are no anticipated conflicts, and no relocation of their facilities is required.

Contact Daniel Shea at 319-423-5242 or dshea@terratechllc.net with concerns or questions.

\section*{G. Midwest Fiber Networks (MWFN)}

Midwest Fiber Networks has underground communications facilities within the project limits.
MWFN will be adjusting their cable 2' east in the NE corner of Howell and Howard to accommodate the new additional signal pedestal. MWFN will be removing and replacing 9 sidewalk slabs to do this adjustment beginning approx. 40' north of the curb and ending 5' north of the curb. The landing and three slabs north will be asphalted as they are to be replaced per the project, the remainder will be concrete.

MWFN has (2) 1.25 " HDPE at approx. 24 " deep from curb to curb crossing Howard at Howell Ave at approximately Station \(27+79.4\) at the north ada ramp and approx. Station \(27+83.6\) at the south ada ramp. It is anticipated to be 12 " of clearance between MWFN and the proposed CUC concrete encasement.

MWFN will require 2 week notification for the proposed CUC work at approx. Station 27+81 LT 9'.

MWFN anticipates to start work on March 2024. That work will take 20 working days to complete.
Contact Cory Schmuki at (414) 349-2764 for coordination and with questions or concerns.

\section*{H. TDS Telecom}

TDS has underground communications facilities within the project limits. There are no anticipated conflicts, and no relocation of their facilities is required.

Contact Richard Trgovec at (541) 585-2965 or richard.trgovec@tdstelecom.com with concerns or questions.

\section*{I. Teleport Communications America, LLC (AT\&T LNS)}

TCA has underground communications facilities within WE-Energies Electric conduit at Station 63+97 and 6' RT.
There are no anticipated conflicts, and no relocation of their facilities is required.

\section*{K. Verizon Business (MCI)}

Verizon Business has underground facilities and one manhole located within the project limits. The manhole is located at Station 32+00.

Verizon Business forces will adjust the manhole at Station 32+00 in coordination with paving operations.
That work will take 1 day to complete during the construction.
Contact RJ Cicatello at (262) 232-1323 at least 7 days in advance of excavation or construction to coordinate manhole adjustment work by Verizon Business forces.

\section*{L. WE Energies - Electric}

WE Energies - Electric has underground facilities within the project limits.
WE Energies - Electric forces will replace and adjust 4 manhole frames, covers and chimney located at Station 25+32, 28' RT; Station 29+59, 13' RT; Station 63.97, 6' RT and Station 67+52, 6' RT in conjunction with paving operations.

Contact Pete Ostrowski at (262) 378-2005, 16 calendar days each in advance to coordinate relocation and/or adjustment work by WE Energies - Electric forces.

WE Energies - Electric forces require 10 working days to complete.
Contact Jacob Schoenung at (414) 416-3365 or Jacob.schoenung@we-energies.com with questions or concerns.

\section*{M. WE Energies - Gas}

WE Energies - Gas has underground facilities within the limits of the project.
Relocations and/or adjustments of We Energies facilities will be constructed by WE Energies staff during construction in coordination with the paving operations.

WE-Energies- Gas will install the gas mains at the following locations prior to the start of the paving operations. All proposed gas main will be installed 4' below existing grade under roadway and 3' below existing grade outside of roadway.
```

4" PE MAIN - (STA 04+56), 46' LT- (Station 09+50), 46' LT
4" PE MAIN - crossing W Howard Ave. at (Station 04+56) 46' LT- 50' RT
2" PE MAIN - (STA 14+43), 46' RT- (Station 14+75), 46' RT
2" PE MAIN - crossing W Howard Ave. at (Station 14+45) 46' LT- 46' RT
4" PE MAIN - (STA 14+75), 46' LT - (Station 24+13), 46' LT
4" PE MAIN - (STA 38+18), 45' RT - (Station 43+39), 45' RT
2" PE MAIN - crossing E Howard Ave. at (Station 41+91) 45' LT- 45' RT
2" PE MAIN - (STA 41+77), 45' LT - (Station 42+45), 45' LT
4" PE MAIN - (STA 43+39), 45' RT - (Station 49+87), 45' RT
4" PE MAIN - (STA 49+87), 45' RT - (Station 53+55), 45' RT
6" PE MAIN - (STA 54+40), 44' RT - (Station 56+35), 44' RT

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2" PE MAIN - crossing E Howard Ave. at (Station 54+64) 49' LT - 44' RT
2" PE MAIN - (STA 54+27), 49' LT - (Station 54+64), 49' LT
6" PE MAIN - (STA 56+35), 44' RT - (Station 57+02), 44' RT
\(6{ }^{\prime \prime}\) PE MAIN - (STA 57+54), 44' RT - (Station 62+82), 44' RT
2" PE MAIN - (STA 57+53), 48' LT - (Station 57+87), 48' LT
6" PE MAIN - (STA 62+82), 44' RT- (Station 69+30), 45' RT
2" PE MAIN - (STA 64+20), 46' LT - (Station 65+60), 46' LT
2" PE MAIN - (STA 69+09), 49' LT - (Station 69+72), 49' LT
We-Energies will connect proposed main into existing main on all side streets outside of project limits. All existing main depths are no less than \(3^{\prime}\) below existing grade.

Existing gas main in the area that was relocated will be discontinued and left in place. All main being discontinued will be identified with retirement symbol.

We-Energies will be sampling the wrap on all main exposed during relocation work. The 1950's vintage pipe could contain asbestos and will be known until exposed for construction and testing.

We-Energies will share the reports with the city as sample and test get completed. If there is discontinued pipe that contains hazardous wrap that conflicts with the project, we-energies will remove it at the time of construction.

Take extra caution to avoid unnecessary disturbance to the existing gas facilities. Call Digger's Hotline (811 or 1-800-242-8511) three business days before you dig to obtain locates and standby. If there is any unusual situation that requires assistance or relocation, please contact the 24 -hour Customer Service number, 1-800-450-7260. In the event of a gas emergency (e.g., damage to gas carrying facilities including nicks, dents, scratches, gas bowling, etc.), please contact the WPS 24-hour Emergency Gas number, 1-800-450-7280.

We Energies Gas work will take 90 days to complete.
Any facilities not explicitly identified as being relocated and/or adjusted have been deemed to be not in conflict and will remain in place as is. WE Energies has determined that the project is constructible with these facilities left within the work zone.

Exercise caution when excavating near any gas facilities. It is imperative that the highway contractor contact WE Energies before removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut, or drill an unmarked facility without explicit consent from WE Energies. Call WE Energies 24-hour Dispatch lines to arrange this verification.

WE Energies Gas Dispatch \# 1 (800) 261-5325
Contact Wesley Nunn at (414) 659-4933 or Bob Sweigart at (414) 935-4438 with questions or concerns.

\section*{7. Notice to Contractor-City of Milwaukee Coordination.}

\section*{A. City of Milwaukee, Forestry}

The City of Milwaukee has irrigation within the existing medians throughout the project. The city will relocate irrigation taps within the project limits prior to construction.
Contact James Kringer, (414) 708-2428, of City of Milwaukee at least 7 days in advance of excavation or construction to coordinate locations near the irrigation tap facilities.

\section*{B. City Communications}

The City of Milwaukee Communications operates communications underground facilities within the project limits. These facilities are to remain. Furnish and install fiber optic cable outdoor plant 72-CT within City of Milwaukee City Underground Conduit as shown in the plans and in the bid items for this project.

\section*{C. City Underground Conduit (CUC)}

The City of Milwaukee City Underground Conduit utility has communications fiber and copper cables in underground conduit located throughout the project limits.

Adjust manholes to match the new finished pavement elevation. Perform this work in accordance with the requirements of Adjusting CUC Manhole Covers.
Install new conduit as shown in the plans and in the bid items for this project.
Contact Karen Rogney at (414) 286-3243 with comments and concerns.

\section*{D. City of Milwaukee, Traffic Signals}

There are seven existing signalized intersections within the limits of the project at the following intersections with Howard Avenue:

South 6th Street
South 5th Street
South 3rd Street
South Howell Avenue
South Whitnall Avenue
South Pine Avenue
South Clement Avenue
Existing pullboxes and signal bases will be discontinued by the city for removal with the exception of South 5th Street, South 3rd Street, and South Howell Avenue where un-impacted signal materials will remain in use. Install temporary overhead and temporary traffic signals.
Temporary overhead and traffic signals shall be installed prior to any pavement saw-cutting or excavation. Furnish and install bases, PVC conduit, cabling, and polymer concrete pullboxes. All above ground signal work including installing traffic signal standards, monotube poles, monotube arms, traffic signals heads, signal cabinets, and any additional permanent traffic control equipment shall be furnished and installed by the contractor. Electrical service for all signals will be provided by the City of Milwaukee. The signal cabinet bases will be provided by the City of Milwaukee.

Traffic signal materials shall be installed on street lighting poles. Coordinate construction to ensure street lighting installation does not impede traffic signal installation.

Provide a 30-working day advance notice to Mr. Rudy Gutierrez of the City of Milwaukee's Traffic Signal
Field Operations at (414) 286-5941 office, or (414) 708-5148 mobile, to coordinate the installation of temporary traffic signal materials as well as any city traffic signal concerns.

Contact Scott Reinbacher at (414) 286-3232 or sreinb@milwaukee.gov with any questions or concerns regarding City of Milwaukee, Traffic Signals facilities.

\section*{E. City of Milwaukee, Street Lighting}

The City of Milwaukee has street lighting facilities within the limits of the project.
One existing street lighting enclosure will be relocated to the north side of Keefe Ave.
This project will have temporary overhead installed in order to keep the street light working. For area where it is not feasible to install temporary overhead, street lighting facilities shall be protected and adjusted as shown in the plans and in the bid items for this project.
Street Lighting anticipates this work will begin 35 days prior to the beginning of construction and will take 60 working days to complete.

Contact Neal Karweik, manager, at (414) 708-4245 to coordinate temporary street lighting work and for questions or concerns.
Contact Mark MacRae, manager, at (414) 708-0434 to coordinate permanent street lighting work and for questions or concerns.

Report any accidental damages to street lighting facilities, as soon as possible to Street Lighting Shop Dispatcher (414) 286-5944. The contractor will be held liable for those costs.

Contact Ms. Denis Kozelek of the City of Milwaukee at (414) 286-3252 with only design/engineering concerns or questions. If you have questions or concerns about field work or work scheduling, please contact the managers noted above.

\section*{Notice to Contractor-WisDOT Street Lighting Coordination}

WisDOT Street Lighting has underground communication facilities the construction limit. No conflict anticipated.
WisDOT communications has a fiber optic line running underneath Howard Ave between the North Bound I-43 on ramp and 3rd street. It should be 18 to 36 " below pavement so it shouldn't conflict with operations unless EBS is called for in that area. Mark it with the caution fiber optic symbol as it is currently shown in the plans without a caution symbol.

Contact John Mittelstadt at 608-205-7859 with concerns or questions.

\section*{8. Notice to Contractor - Tree and Planting Area Protection.}

\section*{1 Sidewalk Construction}

A The root system on the walk side of the tree shall be cut not deeper than 9 inches below the finished grade of the new walks, and not more than 5 inches from the edge of the new walk. Roots in the walk area shall be removed only to a depth of 9 inches below finished grade of the new walk.
B When replacing walks adjacent to the following trees, a slip or thin form must be used. Additionally, soil disturbance in the tree border should be limited to not more than \(1 / 4\) " beyond the edge of the new walk.
\begin{tabular}{lllll}
\(5+99 ~ N / S ~\) & \(9+31 \mathrm{~N} / \mathrm{S}\) & \(16+00 \mathrm{~S} / \mathrm{S}\) & \(16+37 \mathrm{~S} / \mathrm{S}\) & \(18+11 \mathrm{~S} / \mathrm{S}\) \\
\(18+72 \mathrm{~S} / \mathrm{S}\) & \(19+31 \mathrm{~S} / \mathrm{S}\) & \(19+64 \mathrm{~S} / \mathrm{S}\) & \(30+08 \mathrm{~N} / \mathrm{S}\) & \(31+09 \mathrm{~S} / \mathrm{S}\) \\
\(31+50 \mathrm{~S} / \mathrm{S}\) & \(39+58 \mathrm{~S} / \mathrm{S}\) & \(41+22 \mathrm{~S} / \mathrm{S}\) & \(43+06 \mathrm{~S} / \mathrm{S}\) & \(45+08 \mathrm{~N} / \mathrm{S}\) \\
\(48+31 \mathrm{~S} / \mathrm{S}\) & \(48+70 \mathrm{~S} / \mathrm{S}\) & \(49+11 \mathrm{~S} / \mathrm{S}\) & \(54+79 \mathrm{~S} / \mathrm{S}\) &
\end{tabular}

C Place arc on the new sidewalk adjacent to the following trees.
\begin{tabular}{llllll}
\(3+40 ~ S / S\) & \(5+35 \mathrm{~S} / \mathrm{S}\) & \(18+14 \mathrm{~N} / \mathrm{S}\) & \(18+58 \mathrm{~N} / \mathrm{S}\) & \(20+35 \mathrm{~N} / \mathrm{S}\) & \(21+65 \mathrm{~N} / \mathrm{S}\) \\
\(22+52 \mathrm{~S} / \mathrm{S}\) & \(22+59 \mathrm{~N} / \mathrm{S}\) & \(23+16 \mathrm{~S} / \mathrm{S}\) & \(33+37 \mathrm{~S} / \mathrm{S}\) & \(35+78 \mathrm{~N} / \mathrm{S}\) & \(38+74 \mathrm{~N} / \mathrm{S}\) \\
\(39+22 \mathrm{~N} / \mathrm{S}\) & \(39+82 \mathrm{~N} / \mathrm{S}\) & \(40+39 \mathrm{~S} / \mathrm{S}\) & \(41+00 \mathrm{~N} / \mathrm{S}\) & \(43+04 \mathrm{~S} / \mathrm{S}\) & \(43+62 \mathrm{~S} / \mathrm{S}\) \\
\(44+79 \mathrm{~N} / \mathrm{S}\) & \(45+79 \mathrm{~N} / \mathrm{S}\) & \(46+46 \mathrm{~N} / \mathrm{S}\) & \(46+95 \mathrm{~N} / \mathrm{S}\) & \(47+35 \mathrm{~N} / \mathrm{S}\) & \(48+83 \mathrm{~N} / \mathrm{S}\) \\
\(49+60 \mathrm{~N} / \mathrm{S}\) & \(52+00 \mathrm{~N} / \mathrm{S}\) & \(52+95 \mathrm{~N} / \mathrm{S}\) & & &
\end{tabular}

D Where sidewalks are to be narrowed, all old sidewalks should be removed prior to any root cutting. If necessary, the root system should be cut within Y." of the edge of the proposed new walk, and not more than 9 " below the finished grade of the new walk.

E Sidewalks are to be removed, and roots cut, by use of hand implements only.

\section*{2 Carriage Walk Construction}

A When constructing or replacing carriage walks, roots shall not be cut by means of mechanical root cutting machines. If root removal is essential to carriage walk replacement, roots shall be manually cut with hand implements. Roots shall be removed not deeper than 9 inches below the finished grade of the new carriage walk.
B Move the carriage walk to a position that does not interfere with the street tree at the following locations:
\(59+70\) S/S, move 6 ' west

\section*{3 Curb, Gutter, and Road Construction}

A The root system on the curb side shall be cut not more than 2 inches behind the back edge of the new curb, and not more than 18 inches in depth when constructing the new curb and gutter.

B The root system on the curb side shall be cut not more than a \(1 / 4^{\prime \prime}\) from the back edge of the new curb, and a \(1 / 4\) " slip or thin form, or slip form paver, shall be used for the following trees:
\begin{tabular}{llll}
\(4+16 \mathrm{~N} / \mathrm{S}\) & \(5+32 \mathrm{~N} / \mathrm{S}\) & \(53+39 \mathrm{~N} / \mathrm{S}\) & \(55+10 \mathrm{~N} / \mathrm{S}\) \\
\(56+60 \mathrm{~N} / \mathrm{S}\) & \(59+35 \mathrm{~N} / \mathrm{S}\) & \(61+90 \mathrm{~N} / \mathrm{S}\) & \(65+52 \mathrm{~N} / \mathrm{S}\)
\end{tabular}

C The root system on the curb side; shall not be cut; I) a \(\mathbf{0}\) " clearance slip or integral form paver can be used; or (2) gap and hand form using '!." steel plate for the following trees:
\begin{tabular}{lllll}
\(5+55 \mathrm{~N} / \mathrm{S}\) & \(5+64 \mathrm{~N} / \mathrm{S}\) & \(5+99 \mathrm{~N} / \mathrm{S}\) & \(16+44 \mathrm{~N} / \mathrm{S}\) & \(18+14 \mathrm{~N} / \mathrm{S}\) \\
\(20+33 \mathrm{~N} / \mathrm{S}\) & \(22+52 \mathrm{~S} / \mathrm{S}\) & \(22+59 \mathrm{~N} / \mathrm{S}\) & \(23+16 \mathrm{~S} / \mathrm{S}\) & \(38+74 \mathrm{~N} / \mathrm{S}\)
\end{tabular}

D Exposed tree roots shall be covered with mulch and watered from a period immediately following curb and gutter removal, until the area is backfilled following construction.

\section*{4 General}

All cutting for the removal of sod and soil in order to establish a finished grade within 4 feet of existing trees must be done manually if necessary.
No construction equipment, cars trucks, materials shall be parked or stored on any median or tree borders on this project or adjacent roadways.
Root foundations must remain adequate to withstand heavy windstorms.
Root systems of street trees shall not be cut for the installation of any type of cable by the contractor or city department. Contact the Forestry Division at (414) 708-2428 for directional boring specification.
Caution shall be used during the construction process to avoid damage to the roots, trunks, and branches of all street trees. Damage caused to any street tree or irrigation system will be repaired by the City of Milwaukee's Forestry Division and the costs of repair, rejuvenation, and/or value lost will be billed to the contractor or credited against the contract at the option of the city.
At locations where the contractor has not complied with the forestry special requirements stated in the special provisions above, and the maximum clearance was exceeded or a thin form was not used, a minimum credit to the city of \(\$ 50.00\) per location will be taken. The credit will increase in proportion to the excess distance beyond clearance allowed. The credit will be \(\$ 50.00\) for each 2 -inch increment or part thereof in excess of the initial clearance allowed. Any damage to the tree's structure totaling 15 percent of the trees value will be billed on a prorated basis. If, in the opinion of the City of Milwaukee's Forestry Division, the tree has been damaged to the point that it warrants removal, the credit that will be taken will be equal to \(\$ 100.00\) per inch diameter of the tree. A field measurement will be taken to determine the tree size.

\section*{9. Notice to Contractor - Work without a Construction Permit.}

All work including the removal and replacement of sidewalk and sod must be done within the right-of-way, unless a construction permit has been obtained to work on private property abutting the project.

\section*{10. Notice to Contractor - Restoration within Right-of-Way.}

Excavation and restoration for installation of sidewalk will be limited to 9 inches, beyond the back (high side) of the sidewalk, unless otherwise shown on the plans. This includes installation of sod lawn. Contractor must stay within right-of-way unless a construction permit has been obtained.

\section*{11. Notice to Contractor - Survey.}

Digital design file information/existing surface data, including design surface DTMs and/or coordinate system GPS information will not be available for this project.
All survey work necessary to stake out and construct all portions of this project will be measured and paid for under the staking bid items designated in this contract.

\section*{12. Notice to Contractor - Installing City Furnished Signs.}

Contact Mike Chaneske, Sign Shop Manager, (414) 286-5965, at least 10 business days in advance to coordinate pick-up of city furnished signs, poles, and mounting materials.

\section*{13. Notice to Contractor - Sod.}

Topsoil and sod are to be applied after sidewalk.
Fertilizer is to be applied to sod five days after sod is placed.

\section*{14. Notice to Contractor-Temporary Lighting Installation}

Do not remove permanent street lighting until temporary street lighting has been installed and is operational. Removal work may not commence until temporary street lighting has been installed and is operational. Contact Joe Mestnick at (414) 286-0447 office, or (414) 708-7015 cell, prior to commencing removal work.

\section*{15. Notice to Contractor - Signalized Intersections}

There are seven existing signalized intersections within the limits of the project at the following intersections with East/West Howard Avenue:
- South 6th Street
- South 5th Street
- South 3rd Street
- South Howell Avenue
- South Whitnall Avenue
- South Pine Avenue
- South Clement Avenue

Existing pullboxes and signal bases will be abandoned by the city for removal by contractor with the exception of South \(5^{\text {th }}\) Street, South \(3^{\text {rd }}\) Street, and South Howell Avenue where un-impacted signal materials will remain in use. The contractor shall install temporary overhead and temporary traffic signals. Temporary overhead and traffic signals shall be installed prior to any pavement saw-cutting or excavation. The contractor shall furnish and install bases, PVC conduit, cabling, and polymer concrete pullboxes. All above ground signal work including installing traffic signal standards, monotube poles, monotube arms, traffic signal heads, signal cabinets, and any additional permanent traffic control equipment shall be furnished and installed by the paving contractor. Electrical service for all signals will be provided by the City of Milwaukee. The signal cabinet bases will be provided by the City of Milwaukee and installed by the contractor.

Traffic signal materials shall be installed on street lighting poles. The main contractor shall coordinate construction to ensure street lighting installation does not impede traffic signal installation.

\section*{16. Notice to Contractor - Milwaukee County Transit System.}

The Milwaukee County Transit System (MCTS) operates the following bus routes within and/or directly adjacent to the construction limits: Route 80 (S. \(6^{\text {th }}\) Street), Green Line (S. Howell Avenue), and Route 20 (S Clement Avenue-E Howard Avenue).
Impacts to MCTS Routing
Invite MCTS to all coordination meetings between the contractor, the department, local officials and business stakeholders to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Notify MCTS at least 10 business days prior to beginning project work to provide advance notice of potential service impacts.
Impacts to MCTS Signs and Posts

Notify MCTS of work impacting MCTS signs and posts in advance 5 or more business days. MCTS signs include "Bus Stop" and turn disc signs. MCTS signs are mounted on MCTS posts; and on assets owned by others including streetlights, traffic regulators, crosswalk and street signposts. MCTS shall be responsible for MCTS sign and post removal and installation, with the contractor granting access to MCTS personnel to perform such work. Signs stating "No Parking Bus Stop" are the under the ownership and responsibility of City of Milwaukee.

Impacts to Bus Shelters
Contractor work may require bus shelter(s) to be temporarily removed. MCTS will be responsible for the removal and reinstallation of bus shelters, with the contractor granting access to MCTS personnel for the purposes of reinstallation before new pavement opens to vehicular traffic. Notify MCTS in advance ten (10) business days for each site-specific bus shelter location.

\section*{Non-detour Service Suspension at MCTS Bus Stops}

Occasions may arise when work requires neither a detour nor the physical alteration of MCTS bus stop assets, but out of passenger safety requires MCTS to temporarily suspend service at a bus stop location. Notify MCTS in advance 5 business days of site-specific occasion, and MCTS will sign appropriately to instruct passengers to board at a secondary location. Notify MCTS upon completion of work. MCTS will resume service to any suspended bus stop locations when it is safe to do so.

\section*{17. Public Convenience and Safety.}

Revise standard spec 107.8(6) as follows:
Check for and comply with all local ordinances governing the hours of operation, of construction equipment. Do not operate any motorized construction equipment from 9:00 PM until 7:00 AM, unless prior written approval is obtained from the engineer.

Motorized equipment shall be operated in compliance with all applicable local, state, and federals laws and regulations relating to noise levels. All motorized construction equipment will be required to have mufflers constructed according to manufacturer's specifications, and it will be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes.
Upon request the City of Milwaukee's Department of Neighborhood Services (DNS), may issue a construction noise variance, to work outside of the hours listed above.

Department of Neighborhood Services
4001 South \(6^{\text {th }}\) Street
(414) 286-2268

\section*{18. Archaeological Site.}

Woodlawn Cemetery (BMI-0052) and Adalbert's Catholic Cemetery (BMI-0181) sites are located approximately (Station \(0+00\) to Station \(0+55\) ); LT and (Station \(42+50\) to \(53+55\) ); LT within the limits shown on the plans.
Notify the Bureau of Technical Services - Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities beyond the existing right-of-way limits. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.
Do not use the site for borrow or waste disposal. Do not use the site area not currently capped by asphalt/concrete for the staging of personnel, equipment and/or supplies.
stp-107-220 (20180628)
19. Removing Traffic Signals W Howard Ave \& S 6th St, Item 204.9060.S.001;

Removing Traffic Signals W Howard Ave \& 3rd St, Item 204.9060.S.002;
Removing Traffic Signals W Howard Ave \& S Howell Ave, Item 204.9060.S.003;
Removing Traffic Signals W Howard Ave \& S Whitnall Ave, Item 204.9060.S.004:

Removing Traffic Signals W Howard Ave \& S Pine Ave, Item 204.9060.S.005:
Removing Traffic Signals W Howard Ave \& S Clement Ave, Item 204.9060.S.006.

\section*{A Description}

This special provision describes removing all existing traffic signal standards and signal heads from intersection conforming to standard spec 204.

\section*{B Materials}

Vacant.

\section*{C Construction}

Signal standards and signal heads are to be disposed of by the contractor. These heads and standards may be used as part of the temporary traffic signals.

\section*{D Measurement}

The department will measure Removing Traffic Signals in each (EACH) unit of measure, acceptably completed.

\section*{E Basis of Payment}

The Department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
\(204.9060 . S .001\) & Removing Traffic Signals; S 6th St & EACH \\
204.9060.S.002 & Removing Traffic Signals; S 3rd St & EACH \\
\(204.9060 . S .003\) & Removing Traffic Signals; S Howell Ave & EACH \\
\(204.9060 . S .004\) & Removing Traffic Signals; S Witnall Ave & EACH \\
\(204.9060 . S .005\) & Removing Traffic Signals; S Pine Ave & EACH \\
\(204.9060 . S .006\) & Removing Traffic Signals; S Clement Ave & EACH
\end{tabular}

Payment is full compensation for removing and reinstalling the signal standard and furnishing soil to fill the hole.

The department will pay separately for the disconnection and disposal of lighting units under the bid item Lamp, Ballast, LED, Switch Disposal by Contractor.

\section*{20. Removing City Installed Wood Poles, Item 204.9060.S.310.}

\section*{A Description}

This special provision describes removing existing wood poles and delivering them to the City of Milwaukee street lighting yard. Perform the work in accordance with standard spec 651.

\section*{B Materials}

Existing poles, including bracket arm(s), clamp(s), conduit, cabling, and any other equipment mounted to the poles.

\section*{C Construction}

Disconnect and strip all cables and wiring that are mounted on or inside the pole and carefully remove the bracket arm(s), and other non-street lighting materials from the pole. Then remove pole and backfill resulting hole in accordance with standard spec 206.2.

\section*{Salvaging Materials}

Materials for Salvage and Delivery to City of Milwaukee Street Lighting Shop Yard:
- Only the following Poles: Wood
- Bracket arm(s), Bracket Arm Clamp(s) and hardware.
- Breakaway transformer Pedestal(s)
- Side Pole Mounted Wiring Pedestal(s) (Green in Color)

Carefully remove materials designated for salvage to avoid damage. Place salvaged materials in neat piles outside construction limits but within the right-of-way, at locations the street lighting Field Supervisor
or Street Lighting Project Engineer approves. Stockpile materials designated for salvage without contaminating the material with dirt or foreign matter.
Contractor is responsible to protect and deliver the removed and salvaged street lighting equipment to 1540 West Canal Street, Milwaukee, Wisconsin. The contractor will need to coordinate for the delivery of all the materials that will be dropped off either all at one time or all on the same day between the hours of 8 a.m. and 2 p.m. and call three (3) working days in advance. Monday through Friday. Contractor must be out of the shop yard by 2pm NO LATER. Call Neal Karweik 414-286-5943 (office) 414-708-4245 (cell)

\section*{D Measurement}

The Department will measure Removing City Installed Wood Poles as each individual pole, or stub removed that includes the removal of mounted equipment on the pole, the backfilling of the hole, plus the delivery of salvaged pole with attached salvaged materials to the City of Milwaukee Yard

\section*{E Payment}

The Department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
204.9060. S. 310 & Removing City Installed Wood Poles & EACH
\end{tabular}

Payment is full compensation for disconnecting any necessary wiring, removing the poles and equipment mounted on the poles; temporarily storing the pole and any equipment attached to it; transportation, excavating, backfilling, and surplus materials.

\section*{21. Removing Poles, Item 204.9060.S.311.}

\section*{A Description}

This special provision describes removing existing concrete, aluminum, steel, and wood poles for the proper disposal of pole and miscellaneous materials. Perform the work in accordance with standard spec 651.

\section*{B Materials}

Existing poles, including bracket arm(s), clamp(s), conduit, cabling, and any other equipment mounted to the poles.

\section*{C Construction}

Disconnect and strip all cables and wiring that are mounted on or inside the pole and carefully remove the bracket arm(s), and other non-street lighting materials from the pole. Then remove pole and backfill resulting hole in accordance with standard spec 206.2.

\section*{Disposing of Materials}

Materials for Disposing of safely:
- Concrete, Aluminum, Steel, and Wood pole(s)
- Stone and brick
- Conduit and Cabling
- And other material not designated for salvage.

\section*{Salvaging Materials}

Materials for Salvage and Delivery to City of Milwaukee Street Lighting Shop Yard:
- All City Provided Temporary Overhead Ballasts (High Pressure Sodium \& LED "OV20")

Carefully remove materials designated for salvage to avoid damage. Place salvaged materials in neat piles outside construction limits but within the right-of-way, at locations the street lighting Field Supervisor or Street Lighting Project Engineer approves. Stockpile materials designated for salvage without contaminating the material with dirt or foreign matter.

Contractor is responsible to protect and deliver the removed and salvaged street lighting equipment to 1540 West Canal Street, Milwaukee, Wisconsin. The contractor will need to coordinate for the delivery of all the materials that will be dropped off either all at one time or all on the same day between the hours of

8 a.m. and 2 p.m. and call three (3) working days in advance. Monday through Friday. Contractor must be out of the shop yard by 2pm NO LATER. Call Neal Karweik 414-286-5943 (office) 414-708-4245 (cell)

\section*{D Measurement}

The department will measure Removing Poles as each individual pole, or stub removed that includes the removal of mounted equipment on the pole, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
ITEM NUMBER
204.9060.S.311.
DESCRIPTION
UNIT
Removing Poles
EACH

Payment is full compensation for disconnecting any necessary wiring, and removing the poles and equipment mounted on the poles.

\section*{22. Removing Aerial Cable, Item 204.9090.S.001.}

\section*{A Description}

The work under this item consists of removing temporary overhead service lines as shown on the plans; including all associated guy wires, anchors, and electrical wire; and removing materials from the site.
B (Vacant)

\section*{C Construction}

Contractor shall properly dispose of materials off site.

\section*{D Measurement}

The department will measure Removing Aerial Cable by linear foot pole to pole.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
\(204.9090 . S .001\) & Removing Aerial Cable & LF
\end{tabular}

Payment is full compensation for all work, for disposal of materials.

\section*{23. Notice to Contractor - Contamination Beyond Construction Limits.}

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following sites:
1. Station \(67+50\) to \(69+00\), beyond project limits left (Hometown (Marc's Service), 1200 E. Howard Ave., WDNR BRRTS No. 03-41-001651, Closed LUST Site).
The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.
The Hazardous Materials Report is available by contacting:
Andrew Malsom
WisDOT SE Region
141 NW Barstow St.
Waukesha, WI 53187
(262) 548-6705
andrew.malsom@dot.wi.gov
stp-107-100 (20230113)

\section*{24. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.}

\section*{A Description}

\section*{A. 1 General}

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a WDNR-approved bioremediation facility. The closest WDNR-approved bioremediation facilities are:
```

Waste Management Metro Landfill
10712 S. 124 'th St.
Franklin, WI 53051
(866) 909-4458
Green For Life (GFL) Emerald Park Landfill
W124S10629 South 1244}\mathrm{ Street
Muskego, WI 53132
(414) 529-1360

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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.

\section*{A. 2 Notice to the Contractor - Contaminated Soil Locations}

The department completed testing for soil contamination at locations within this project where excavation is required.
Testing indicated that petroleum-contaminated soil is present at the following locations as shown on the plans:

Intersection of W./E. Howard Ave. and S. Howell Ave.
- Station \(25+70\) to \(26+40\), from reference line to project limits left, from 1 to 6 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 0 CY (approximately 0 tons using a conversion factor of 1.7 tons per cubic yard).
- Station \(26+00\) to \(26+20\), from 35 feet right of reference line to project limits right, from 1 to 6 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 0 CY (approximately 0 tons using a conversion factor of 1.7 tons per cubic yard).
- Station \(26+50\) to \(27+25\), from reference line to project limits right, from 1 to 10 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 9.4 CY (approximately 16 tons using a conversion factor of 1.7 tons per cubic yard).
- Station \(28+35\) to \(29+25\), from reference line to project limits right, from 4 to \(8+\) feet below grade. The estimated volume of contaminated soil to be excavated at this location is 2.33 CY (approximately 3.96 tons using a conversion factor of 1.7 tons per cubic yard).
- Station \(29+25\) to \(30+00\), from project limits left to project limits right, from 1 to 6 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 0 CY (approximately0 tons using a conversion factor of 1.7 tons per cubic yard).
Intersection of E. Howard Ave. and S. Whitnall Ave.
- Station \(37+15\) to \(38+45\), from reference line to project limits left, from 4 to \(12+\) feet below grade. The estimated volume of contaminated soil to be excavated at this location is 20.08 CY (approximately 34.15 tons using a conversion factor of 1.7 tons per cubic yard).
- Station \(37+70\) to \(39+40\), from reference line to project limits right, from 1 to \(16+\) feet below grade. The estimated volume of contaminated soil to be excavated at this location is 10.49 CY (approximately 17.83 tons using a conversion factor of 1.7 tons per cubic yard).
Intersection of E. Howard Ave. and S. Clement Ave.
- Station \(66+90\) to \(67+50\), from reference line to project limits right, from 1 to \(16+\) feet below grade. The estimated volume of contaminated soil to be excavated at this location is 10.41 CY (approximately 17.70 tons using a conversion factor of 1.7 tons per cubic yard). Groundwater at this location is contaminated with petroleum.
Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed bioremediation facility.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.
No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify the engineer and protect them to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

\section*{A. 3 Excavation Management Plan}

The excavation management plan for this project has been designed to minimize the offsite disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigations, remediation activities and waste characterization within the project limits, contact:
```

Name: Andrew Malsom
Address: }141\mathrm{ NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798
Phone: (262) 548-6705
Fax: (262) 548-6891
e-mail: andrew.malsom@dot.wi.gov

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\section*{A. 4 Coordination}

Coordinate work under this contract with the environment consultant:
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Consultant: TRC Environmental Corporation
Address:6737 W. Washington St., Suite 2100, West Allis, WI }5321
Contact: Bryan Bergmann
Phone: (262) 901-2126 office / (262) 227-9210 cell
Fax: (262) 879-1220
E-mail: bbergmann@trccompanies.com

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The role of the environmental consultant will be limited to:
1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation 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 the contaminated area.
Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated area. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.
Identify the DNR approved bioremediation 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 facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

\section*{A. 5 Health and Safety Requirements}

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 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 sitespecific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

\section*{B (Vacant)}

\section*{C Construction}

\section*{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 bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.
Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

Contractor shall ensure continuous dewatering and excavation safety at all times. Provide, install, operate, maintain adequate pumping equipment, disassemble, and remove pumping equipment.
Costs associated with excavation and dewatering in the contaminated area are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from the construction project.

Limit excavation in the location described in A. 2 to minimize the handling of groundwater. Notify the engineer of any dewatering activities and obtain any permits necessary to discharge or dispose of contaminated water. Provide copies of such Permit to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

\section*{D Measurement}

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

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{ll} 
ITEM NUMBER \(\quad\) DESCRIPTION & UNIT \\
205.0501.S \(\quad\) Excavation, Hauling, and Disposal of Petroleum Contaminated Soil \\
Payment is full compensation for excavating, segregating, loading, hauling, and treatment via \\
bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating \\
licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to \\
transport, if necessary.
\end{tabular}

\section*{25. Erosion Control.}

The contractor shall prepare and submit an erosion control implementation plan (ECIP) for the project including borrow sites, material disposal sites, dust control, and dewatering according to Chapter TRANS 401 requirements. The erosion control implementation plan shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan will identify how the contractor intends to implement the project's erosion control plan.
Provide the ECIP 14 calendar days prior to the pre-construction conference. Provide 1 copy of the ECIP to WisDOT and 1 copy of the ECIP to the WDNR Liaison (Mr. Ryan Pappas; WDNR Southeast Region Headquarter; 1027 W. St. Paul Ave.; Milwaukee, WI 53233). Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-top soiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.
Re-topsoil graded areas, as designated by the engineer, immediately after grading is completed within those areas. Place sod, as designated by the engineer, within five calendar days after placement of topsoil.

When performing roadway cleaning operations, the contractor shall use equipment having vacuum or water spray mechanism to eliminate the dispersion of dust. If vacuum equipment is employed, it shall have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

\section*{26. Protection of Concrete.}

Supplement standard spec 415.3.14 as follows:
Provide for a minimum of one concrete finisher to remain on the project site after final finishing of all concrete surfaces until such time as the concrete has hardened sufficiently to resist surface scarring caused by footprints, handprints, or any other type of imprint, malicious or otherwise. Finisher must actively and continuously patrol on foot the newly placed concrete and repair any damage to the surface that might be sustained as described above.

Include the cost for providing the finisher(s), the necessary equipment, and materials in the contract unit price for each concrete item.

\section*{27. Concrete Aggregates.}

Modify standard spec 501 as follows:

\section*{Size Requirements}

Under standard spec 501.2.5.4.4, supplement standard spec (4) with the following:
Coarse aggregate for Concrete Grade A must consist entirely of size No. 1 when used in curb, curb and gutter, driveways, sidewalks or steps.

\section*{28. Concrete Identification Stamping.}

Stamp ends of all monolithic portland cement concrete surfaces with a stamp bearing the contractor's name and the year of construction. Make all letters 2-inches in height.

Include the cost of this work in the contract unit price for other Portland cement concrete items and no additional payment will be made.

\section*{29. Cover Plates Temporary, Item 611.8120.S.}

\section*{A Description}

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

\section*{B Materials}

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

\section*{C (Vacant)}

\section*{D Measurement}

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

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
\(611.8120 . S\) & Cover Plates Temporary & EACH
\end{tabular}

Payment is full compensation for furnishing, installing, and removing the cover plates.
The steel plates shall become the property of the contractor when no longer needed in the contract work.
stp-611-006 (20151210)

\section*{30. Landscape Planting Surveillance and Care Cycles.}

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of \(\$ 500\) to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.
stp-632-005 (20070510)
Provide for one growing season of plant establishment period according to standard spec 632.3.18.

\section*{31. Signs Type II Reflective SH, Item 637.2220; \\ Signs Type II Reflective F, Item 637.2230.}

\section*{A Description}

Furnish and install signs according to the plans and standard spec 637, except as follows:

\section*{B Materials}

According to the plans and standard spec 637, except as follows:
The contractor shall provide all necessary sign mounting hardware as shown in the detail drawings which includes but is not limited to \(5 / 16^{\prime \prime} \times 11 / 4\) " Stainless Steel Fender Washers, \(5 / 16 "-18 \times 3 / 4\) " Stainless Steel Hex Head Bolt, 201 Stainless Steel Banding \(3 /{ }^{\prime \prime \prime} \times 0.20\)., Stainless Steel Flared Leg Sign Mount Bracket for \(3 / 4 "\) banding, 201 Stainless Steel Wing Seal (buckle) for \(3 / 4 "\) banding and one- or two-sided sign mounting Z-brackets that fit \(23 / 8\) inch post or approved equal.

The contractor shall affix the installation date sticker on back of sign in lower right corner. Stickers will be provided at pre-construction meeting or by the Inspector.

\section*{C Construction}

According to the plans and standard spec 637, except as follows:
The contractor shall be responsible for recording the location, type, and installation date of the signage using the provided Sign Installation Log (L-101).

\section*{D Measurement}

The department will measure Signs Type II Reflective SH and Signs Type II Reflective F by the square foot unit of measure.

\section*{E Payment}

Payment includes furnishing Signs Type II Reflective SH and Signs Type II Reflective F.
The department will pay for measured quantities at the contract unit price under the following bid items:
ITEM NUMBER DESCRIPTION UNIT
637.2220 Signs Type II Reflective SH SF
637.2230 Signs Type II Reflective F SF

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

The Sign Installation Log (L-101) shall be complete and submitted for all signing locations prior to finalization of sign item payments.

\section*{32. Construction Staking Electrical Installations (Project), Item \(\mathbf{6 5 0 . 8 5 0 1}\)}

The work under this item shall be performed according to the requirements of standard spec 650, and as shown in the plans.

The street lighting poles and pull boxes / vaults are both stationed to the center with the conduit stationed at the ends. See drawing details for any additional information.

\section*{33. Lamp Ballast, LED, Switch Disposal by Contractor, Item 659.5000.S.}

\section*{A Description}

This special provision describes the detachment and packaging of lamps, ballasts, LEDs, and mercury containing switches (e.g., overhead roadway lighting, underdeck bridge, wall packs, pedestrian signals, traffic control stop lights and warning flashers, fluorescent bulbs, and thermostats) removed under this contract for disposal as hazardous materials.

For Lamp, Ballast, LED, Switch Disposal by Contractor, coordinate removal from the work site by the department's hazardous waste disposal vendor. Disposal will be billed to the department by the hazardous waste disposal vendor.

\section*{B Materials}

\section*{B. 1 Disposal by Contractor}

Items removed under this contract will be considered the property of the department for waste generator identification. The contractor is responsible for coordinating with the department's hazardous waste vendor for disposal:
https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/hazwaste-contacts.pdf

\section*{B. 2 Disposal by Department}

Items turned in to the department will be considered the property of the department for proper future disposal, and the contractor will have no further obligation for the disposal.

\section*{C Construction}

\section*{C. 1 Removal}

Arrange for the de-energizing of luminaires after receiving approval from the engineer that the existing luminaires can be removed. Do not remove luminaires that cannot be replaced with proposed LED units and operational within the same workday. The new LED units need to be operational prior to sunset of the same workday.

Detach and remove luminaires and lamps from the existing traffic signal poles or respective structure. Avoid breaking fixtures whenever possible.

Lamps, ballasts, LED, and switches will become property of the department, and will be disposed of in an environmentally sound manner.

\section*{C. 2 Packaging of Hazardous Materials}

Provide a secure, level location removed from the travelled way for storage of the material for disposal.
Pack intact fixtures in the packaging of the new lamps used to replace them, or packaging affording the equivalent protection. Place in full, closed stackable cartons.

Pile cartons no more than four high if palletized and secure cartons with shrink wrap to prevent shifting or falling of the loads. Clearly mark each pallet with the words "Universal Waste Lamps" or "Universal Waste Ballasts", the date, and the number of fixtures on each pallet.

Pack broken fixtures into (min.) 6 mil thick plastic bags and place inside sturdy cardboard boxes or the equivalent. Mark the outer packaging with the term "Broken Fixtures/Lamps", the date and the number of broken fixtures clearly marked on the box.

The hazardous waste vendor will not accept fixtures improperly packaged. The vendor will reject any fixtures not removed as part of a contract pay item or otherwise required under this contract.

Pack ballasts and mercury containing switches in appropriate containers.

\section*{C. 3 Disposal by Contractor}

Complete the lamp and ballast inventory (https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/dotlampballastinventory.dotx) and contact the hazardous waste vendor to coordinate pickup and disposal at a location specified by the contractor. Consolidate all pallets and boxes from one project at a single location. Contact the hazardous waste vendor to set up an appointment for pickup. The hazardous waste vendor requires a minimum of one week advance notice to schedule pickup.

\section*{D Measurement}

The department will measure Lamp, Ballast, LED, Switch Disposal by Contractor as each individual unit removed and received by the hazardous waste vendor, properly packaged and acceptably completed, matching the total number of units provided on the inventory form. The department will not measure broken fixtures that exceed a total of 10 percent of all fixtures to be disposed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
\(659.5000 . S\) & Lamp, Ballast, LED, Switch Disposal by Contractor & EACH
\end{tabular}

Payment for Lamp, Ballast, LED, Switch Disposal by Contractor is full compensation for detachment, handling, packaging, labeling and scheduling disposal with the hazardous waste vendor; and scrapping and disposal of all other materials.

Payment for Lamp, Ballast, LED, Switch Disposal by Department is full compensation for detachment, handling, packaging, labeling and delivering for disposal by the department; and scrapping and disposal of all other materials.
stp-659-500 (20220628)

\section*{34. Temporary Traffic Signals for Intersections (Location), Item 661.0201. \\ Modify standard spec 661.0201 with the following.}

\subsection*{661.2.1 General}

The City of Milwaukee will furnish control cabinet, signal controller, and NEMA monitor.
The City of Milwaukee will provide the temporary electrical service for temporary traffic signals.

The City of Milwaukee-Traffic Signals is the applicable electrical utility.
All installation of wood poles are paid for under the temporary street light item.

\section*{35. Adjusting Water Service Boxes, Item SPV.0060.001.}

\section*{A Description}

This special provision describes adjusting, protecting, and maintaining accessibility, for the duration of the paving project, to all City of Milwaukee water service boxes and water valve boxes located within the project limits.

\section*{B Materials}

All material for the adjustment of these facilities shall meet City of Milwaukee specifications and will be provided by the City of Milwaukee by contacting Syreeta Woodley, Milwaukee Water Works, at (414) 708-2753 (or Andray DeCordova, Milwaukee Water Works at (414) 286-6302).

If there is contractor damage, the materials must still be provided by the City of Milwaukee, however, in this case, the contractor will be charged for all materials. Materials furnished by the City of Milwaukee and not used on the project shall be delivered back to DPW Field Headquarters Infrastructure, Operations, Water Works at 3850 N. \(35^{\text {th }}\) St.

\section*{C Construction}

The contractor, or authorized project representative, shall contact Milwaukee Water Works prior to the start of construction. The city will locate, mark, inspect and repair all water service boxes and water valve boxes within the limits of the project prior to commencement of work on the project.
All water service boxes and water valve boxes within the project limits shall be adjusted to proposed elevations by the contractor using materials meeting city specifications.

Throughout the duration of the project, the contractor must ensure that all water service boxes, and water valve boxes are adequately located and identified by blue paint, and that at all times, all water appurtenances remain accessible for operation by city forces. Exercise caution working adjacent to water facilities to avoid damage and ensure accessibility.
Upon completion of the contract, the city will inspect all water facilities to ensure the water boxes are clean, properly aligned, and accessible. The contractor shall be responsible to make identified repairs and adjustments, and if any repairs or adjustments are made by the city, the cost will be charged to the contractor.

\section*{D Measurement}

The department will measure Adjusting Water Service Boxes as each individual unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.001 & Adjusting Water Service Boxes & EACH
\end{tabular}

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, water box adjustments, water box clean-out, and restoration of the work site.

\section*{36. Water Main Protection, Item SPV.0060.002.}

\section*{A Description}

This special provision describes protecting existing water mains from newly constructed storm drainage facilities. No structures will be allowed over the existing water main or hydrant branch with less than 18" of vertical out-to-out clearance. Alternate drainage structures shall be used to provide minimum sewer-water clearances required by Wisconsin DNR.

\section*{B Materials}

Contractor shall furnish and install materials as detailed on the construction plans and in the Construction section below.

\section*{C Construction}

Construct drainage structure, located above and across an existing water main, by utilizing materials and joints that are water tight. For all catch basins and inlets that have less than 24 " out-to-out of horizontal clearance, the following water main protections shall be made:

The catch basins and inlets shall be altered to provide 18 " of vertical clearance to the water mains or hydrant branches.
The catch basins and inlets shall be wrapped with 2 layers of 8 mil polyethylene around the base and extending 1 foot vertically on all sides of the drainage structure.

\section*{D Measurement}

The department will measure Water Main Protection as each individual water main protection, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.002 & Water Main Protection & EACH
\end{tabular}

Payment is full compensation for protecting existing water mains; and for all excavation, backfilling, disposal of surplus materials, and restoration of the work site.

\section*{37. Signature Beds, Item SPV.0060.015.}

\section*{A Description}

This special provision describes the requirements for constructing signature beds as shown in the plans

\section*{B Materials}

Plant materials shall be paid for under their respective items. Annuals will be provided and planted by the City of Milwaukee. Limestone Blocks \& Steel Border will be incidental to the Signature Beds item.

\section*{C Construction}

The signature beds shall be graded and shaped as shown in the plans with a shovel cut bed edge.

\section*{D Measurement}

The department will measure Signature Beds by each bed, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.015 & Signature Beds & EACH
\end{tabular}

Payment is full compensation for excavating and grading, shovel cutting, and providing and applying required topsoil and mulch; and for disposing of all excess and waste materials.

\section*{38. Utility Line Opening (ULO), Item SPV.0060.050.}

\section*{A Description}

This special provision describes excavating to uncover utilities for the purpose of determining elevation or location and potential conflicts as shown on the plans or as directed by the engineer.
B (Vacant)
C Construction

Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.
Perform the utility line openings (ULOs) as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Give the engineer a minimum of three working days once utility line opening information is received to review all relevant design information prior to proposed utility construction. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.
Approve and coordinate all utility line openings with the engineer. Notify the utility engineers or their agents of this work a minimum of 3 days prior to the work so they may be present when the work is completed.

Replace pavement over utility line opening trenches which are within the staged traffic area as directed by the engineer. Replace pavement and open to traffic within 24 hours of the excavation.

\section*{D Measurement}

The department will measure Utility Line Opening by each individual unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.050 & Utility Line Opening (ULO) & EACH
\end{tabular}

Payment is full compensation for the excavation required to expose the utility line; backfilling with existing material removed from the excavation; compacting the backfill; restoring the site; and for cleanup.
Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings are not considered part of or paid for under Utility Line Openings but are considered separate and measured and paid for separately as removal items. Pavement replacement material, concrete curb, gutter, and sidewalk items will also be considered separate from Utility Line Openings and will be measured and paid for separately.

\section*{39. Adjusting Sanitary Manholes; Item SPV. 0060.100.}

\section*{A Description}

This work includes adjusting sanitary manholes to an elevation as determined by the engineer as well as installing frame and cover, internal frame/chimney seal, according to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and amendments (SSSW).

Add or remove masonry adjusting rings as needed. This item applies to structures to be lowered less than 6 inches or raised less than 12 inches.

\section*{B Materials}

\section*{B. 1 Adjusting Rings}

Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C-478. Precast concrete rings shall have an inside diameter to match the manhole opening, be not less than 2 inches nor more than 6 inches high, and have a wall thickness of 6 inches unless otherwise specified. The rings shall contain a minimum of one No. 2 reinforcing rod centered within the ring. Do not use any cracked or broken rings. The top of precast manhole cones shall be set a maximum of 18 inches lower than established grade in unimproved areas, with the top of the manhole cover being ringed up flush with the existing ground. The minimum number of adjusting rings shall be one 2 -inch ring. The maximum height of adjusting rings shall be 8 inches in paved areas. All joints between the adjusting rings shall be filled with
grout or mortar, including between the cone and the adjusting ring and the adjusting ring and the frame. Rings shall be grooved to receive a step.

\section*{B. 2 Manhole}

Precast manholes and cones shall conform to ASTM Specifications, C478, latest revision.

\section*{B. 4 Manhole Seal}

Furnish new Cretex, NPC Flexrib, or approved equal internal frame/chimney Seal, as shown in the plans. The seal shall meet the material requirements of section 8.42.3 and the performance requirements of section 8.42 .4 of the SSSW.

\section*{C Construction}

\section*{C. 1 General}

The location of existing sanitary manholes to be adjusted is indicated on the plans. Adjust these items as shown in the plans. Reconstruct manholes as necessary so that the frames and cover when placed will be at the established required grade; remove the existing frame and cover. Any temporary adjustment (wood) shims shall be removed and backfilled with grout or mortar prior to installing the seal. Install seals according to the manufacturer's recommended installation procedures. Furnish and use Backfill Slurry in the manhole excavation area to existing surface or to appropriate depth for pavement restoration.
Salvage the existing frame and cover.

\section*{C. 2 Surface Preparation}

Remove manhole cover and power wire brush the lower 3 inches of the manhole frame to remove any loose rust or scale and repair any imperfections by either grinding smooth or filling with mortar. A smooth, clean sealing surface is required. Realign the casting if it is offset more than approximately 2 inches from the chimney. Remove all loose and protruding mortar and brick from the upper 7 -Inch chimney and clean surface by power wire brushing. Provide a 4 -Inch wide sealing surface starting 2 inches down from the bottom of the frame.

All sealing surfaces must be circular, reasonably smooth, clean and free of any loose material or excessive voids. If such a surface does not exist for the bottom of the sleeve to seal against, use onecomponent, quick-set, high strength, non-shrink, polymer modified patching mortar which has been formulated for vertical or overhead use. If the bottom of the sleeve is to seal against the top of an eccentric (straight side) cone and an inadequately high vertical surface does not exist, contact the manufacturer to obtain details to build the required vertical surface.
Use caulk to fill minor irregularities in the bottom sealing surface. The caulk shall be a butyl rubber caulk conforming to AASHTO M-198, Type B. Apply a single bead of the caulk to the center portion of the lower sealing surface of the sleeve.
Any flaws in the manhole frame, such as minor cracks, pits or protrusions, shall be repaired by either filling with mortar or grinding smooth.

\section*{D Measurement}

The department will measure Adjusting Sanitary Manhole as each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.100 & Adjusting Sanitary Manholes & EACH
\end{tabular}

Payment is full compensation for furnishing and installing all materials including adjusting rings, masonry, and internal frame/chimney seals; for excavating, backfilling, and compacting; for disposing of surplus materials; and for cleaning out and restoring the structure.
40. Inlet Covers Type MS 55, Item SPV.0060.101;

Inlet Covers Type MS 57, Item SPV.0060.102;
Manhole Covers Type MS 58-A, Item SPV.0060.103;
Storm Inlet Type 45A, Item SPV.0060.112.

\section*{A Description}

This special provision describes inlet covers, manhole covers, and inlets.
Perform work under these items according to the requirements of standard spec 611 and the details as shown on the plans.

\section*{B Materials}

Furnish materials under these items according to the requirements of standard spec 611 and the details as shown on the plans.

Structures with traps shall arrive at the site assembled. Trap assembly reinforced concrete shall be integral with the circumferential reinforced wall.

C (Vacant)

\section*{D Measurement}

The department will measure Inlet Covers Type MS 55; Inlet Covers Type MS 57; Manhole Covers Type MS 58-A; Storm Inlet Type 45A by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.101 & Inlet Covers Type MS 55 & EACH \\
SPV. 0060.102 & Inlet Covers Type MS 57 & EACH \\
SPV. 0060.103 & Manhole Covers Type MS 58-A & EACH \\
SPV. 0060.112 & Storm Inlet Type 45A & EACH
\end{tabular}

Payment is full compensation for furnishing and installing the manhole covers, inlet covers, and inlet.

\section*{41. Install City Precast Controller Base, Item SPV.0060.201.}

\section*{A Description}

This special provision describes the installation of precast controller bases furnished by the City of Milwaukee, for traffic signal control cabinets as shown on the plans.

\section*{B Materials}

The 36 "x21.25"x20" pre-cast concrete foundation for traffic signal cabinets P 1 and P 2 will be furnished by the City of Milwaukee. The contractor shall contact Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941-office, (414) 708-5148-mobile; or the Electrical Services Dispatcher at (414) 286-3687 to coordinate pickup of the concrete foundation at the City of Milwaukee Electrical Services headquarters located at 1540 West Canal Street Milwaukee, WI 53233.

\section*{C Construction}

Install concrete traffic cabinet bases according to the plans. Plan changes must be approved by a City of Milwaukee Electric Services Manager or Traffic Engineer. The primary contacts are Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941 office, (414) 708-5148 mobile.

D Measurement
The department will measure Install City Precast Controller Base as each individual unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.201 & Install City Precast Controller Base & EACH
\end{tabular}

Payment is full compensation for installing city furnished controller base; for excavation, backfilling and disposal of surplus material.
42. ATC Controller and Cabinet Installed, Item SPV.0060.205.

\section*{A Description}

Furnish and install an ATC Traffic Signal Controller and NEMA TS2 Type 1 Traffic Signal Control Cabinet.

\section*{B Materials}

Furnish equipment and assemble the cabinet conforming to the latest revision of NEMA Standards Publication TS 2-2003, Traffic Controller Assemblies with NTCIP requirements, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard.

The cabinet shall be designed for TS2 Type 1 operation and shall conform to the design shown in DWG TF5016TWIO2.

All equipment, materials, and cabinet features shall be the same type, make, and model on all cabinets delivered under any one order.

Furnish an Econolite Cobalt-C shelf mount controller with the latest ASC/3 software installed.
Furnish any equipment and materials not specifically described but required in order to perform the intended functions in the cabinet.

\section*{C Construction}

Conform all work to the Wisconsin State Electrical Code (WSEC). Conform all work to standard spec 651, as supplemented or modified in this specification.

\section*{C. 1 Definitions}

Vendor - the firm under contract with the City of Milwaukee for furnishing the fully equipped and operational traffic signal cabinet.
Construction contractor - the firm under contract with the City of Milwaukee or another agency to construct a roadway facility. The construction contractor will install the traffic signal cabinet or may designate a subcontractor, such as an electrical subcontractor, to represent them with regards to the signal cabinet installation.

Owner - City of Milwaukee
Manufacturer - the firm that builds or produces the traffic signal equipment other than the cabinet. For example, the "controller manufacturer".

\section*{C. 2 Terminal Facility}

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

Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silkscreening on the front and rear of the terminal facility to match drawing designations.
Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

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

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

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

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.
All field flash sequence programming at the field terminals shall be able to be accomplished with the use of only a screwdriver.

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).
Wire one RC network in parallel with each flash transfer relay coil.
Permanently label all logic-level, NEMA-controller and MMU input and output terminations on the terminal facility. Identity the function of each terminal position on the cabinet drawings.
Terminal blocks for DC signal interfacing shall have a number 6-32 \(\times 7 / 32\) inch screw as minimum.
Functions to be terminated shall be as specified in the listing of Input/Output Terminals in Section 5 of the NEMA TS2 Standard.

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

\section*{C. 3 Vehicle Detection Interface Panel}

Provide a 16-position interface panel. Interface panel shall allow for the connection of 16 independent field loops. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque. Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop lead-in cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet. The panel shall also include inputs for up to 4 preempts.
Provide a cable consisting of 20 AWG twisted pair wires to enable connection to and from the interface panel to a detector rack. The twisted pair wires shall be color-coded wires. Provide a cable of sufficient length to allow the detector rack to be placed on either shelf.

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

\section*{C. 4 Conductors and Cabling}

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

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

Provide the cabinet configuration with up to 6 SDLC RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15 -pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.
Pre-wire the terminal facility for a Type 16 MMU.
All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.
Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

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

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

\section*{C. 5 Cabinet Switches}

The above switches shall function as follows:

Signal: Signals On and operating as follows:
\begin{tabular}{ll} 
Auto & \(\underline{\text { Hand }}\) \\
Flash: Signals Flash & Signals Flash \\
Normal: Signals Normal & Signals Advance by use of hand control
\end{tabular}

Provide manual detector switches. Provide four pedestrian detector switches. The switches shall be spring loaded and automatically return to the center position. Wire the pedestrian switches to the T\&F BIU slot 1 . The switches shall operate as follows:
\begin{tabular}{ll} 
Position & Function \\
\cline { 1 - 1 } & \\
Up & Detector Disabled \\
Center & \\
Down & Detector Enabled \\
&
\end{tabular}

\section*{C. 6 Bus Bar}

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

\section*{C. 7 Circuit Breakers}

House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz circuit breakers, with the ON position being up:
- One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted. Breakers shall be thermal magnetic type, UL or NRTL listed, with a minimum of \(22,000 \mathrm{amp}\) interrupting capacity.
- One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater.
- One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.
- One \(20-\mathrm{amp}\) circuit breaker for future use.

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

\section*{C. 8 Radio Interference Suppressor}

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

\section*{C. 9 Bus Relay}

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

\section*{C. 10 Surge Protector}

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

\section*{C. 11 Power receptacles}

Mount a 120 VAC 20 amp , NEMA 5-20R GFCI convenience outlet at each of these two locations:
- On the interior right side wall above the power panel. The outlet shall be fully operational and fuse protected.
- Near the power panel where it will not interfere with power panel maintenance. This outlet is to be wired by field installation personnel.

\section*{C. 12 Suppressors and RC Network}

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

\section*{C. 13 Auxiliary Devices}

\section*{C.13.1 Load Switches}

Provide 16 solid state load switches conforming to the requirements of section 6.2 of the NEMA TS2 Standard.

\section*{C.13.2 Flashers}

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

\section*{C.13.3 Flash Transfer Relays}

Provide 4 flash transfer relays conforming to the requirements of section 6.4 of the NEMA TS2 Standard.

\section*{C.13.4 Inductive Loop Detector Units}

Provide 8 inductive loop detector units conforming to the requirements of section 6.5 of the NEMA TS2 Standard for 2-channel, rack mount detector units, type C.

\section*{C.13.5 Cabinet Power Supply}

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

\section*{C. 14 Bus Interface Units (BIU)}

Provide three BIUs conforming to the requirements of section 8 of the NEMA TS2 Standard.
Provide two BIUs with the main panel and one BIU with one of the detector racks.

\section*{C. 15 Malfunction Management Unit (MMU)}

Provide one shelf-mountable, 16 channel, solid-state MMU with Ethernet capability. The MMU shall meet the requirements of Section 4 of the NEMA TS2 Standard. The MMU shall be an Eberle Design Inc. Model MMU2-16LE or preapproved equal.
The MMU shall be capable of the following:
- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.
- Determining if the field signal input states detected as active or inactive by the MMU correspond with the data provided by the Controller Unit.
- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.
- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).
- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.
- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special programs cards.
- A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states
involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction.

The MMU shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

\section*{C. 16 Documentation}

\section*{C.16.1 Cabinet Intersection Wiring Diagrams}

For each individual cabinet ordered, within 10 calendar days after receipt of the procurement order, furnish to the City of Milwaukee's electrical lead electrician two sets of 22X34-inch detailed printed cabinet intersection wiring diagrams for information only.
At the time of the cabinet delivery, furnish to the City of Milwaukee's electrical lead electrician two sets of printed 22X34-inch cabinet intersection wiring diagrams and one set of .dgn CAD files per cabinet. Printing the 22X34-inch sheet in smaller sizes is not acceptable. Leave a third drawing in the signal cabinet. After cabinet acceptance is complete, if any cabinet wiring changes were made, revise the cabinet wiring diagrams, leave one drawing in the signal cabinet, and furnish to the City of Milwaukee's electrical lead electrician two sets of as-built printed cabinet wiring diagrams and one set of as-built .dgn CAD files per cabinet. If no changes were made from time of cabinet delivery, notify the City of Milwaukee's lead electrical technician in writing.

\section*{C.16.2 Manuals}

At the time of the cabinet delivery, furnish to the City of Milwaukee's electrical lead electrician one set of installation, operations, and maintenance manuals per cabinet including each type of equipment in the cabinet. The manuals shall as a minimum include the following information: a) table of contents, b) operating procedure, c) step-by-step maintenance and trouble-shooting information for the entire assembly, d) schematic diagrams, e) pictorial diagrams of parts locations, f) itemized parts lists with parts numbers, g ) theory of operation, and h ) maintenance checklists.
The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC, diodes, switches, relays, etc.) used. The list shall include cross-references to parts numbers of other manufacturers who make the same replacement parts.
For each of the traffic signal controller and MMU, in addition to the above manual requirements, furnish one reference manual for the processor and components proposed to perform the controller and MMU functions. Include a complete set of schematics for the controller, MMU, and any auxiliary circuit boards either in the reference manual or in a separate volume. In addition, furnish a written narrative describing the controller and MMU operation and front panel configuration, and a conceptual flow chart illustrating the control logic for comparison with these specifications. The narrative shall include a discussion of any limitation or exceptions to the performance described in these specifications, and a discussion of any control capabilities provided in addition to that required in these specifications.

\section*{C. 17 Cabinet Delivery}

The construction contractor will provide the traffic signal specifications and plans, including the sequence of operation, to the vendor. The vendor shall determine the required cabinet equipment and assembly requirements from the plans and specifications and provide the owner a list of procurement items. The contractor will order the procurement items. The City of Milwaukee will provide the signal timing to the vendor a minimum of two weeks before the scheduled cabinet delivery date.

For cabinets to be installed in the field by the construction contractor, provide the list of procurement items to the City of Milwaukee a minimum of 60 days before the cabinet is scheduled to be installed in the field. The vendor is responsible for coordinating with the project construction contractor to determine the scheduled cabinet installation date. Cabinets shall be completed, delivered, and accepted within 50 calendar days after the initiation of the procurement request. The City of Milwaukee reserves the right to require up to five cabinets per month to be completed, delivered, and accepted.

If the City of Milwaukee makes a modification to any cabinet order before the entire cabinet is completely built in the vendor's shop, the delivery time does not change. If the owner accepts a vendor requested cabinet order or other modification at any time, the delivery time does not change. All cabinet modifications will be made without additional cost to the owner, except if an additional equipment item is added that is under procurement contract, the established price in the procurement contract will be paid the vendor.

Deliver cabinets to City of Milwaukee Electrical Services headquarters located at 1540 West Canal Street Milwaukee, WI 53233. Final wiring/terminations in all cabinets that are to be city owned will be performed
by city forces. Coordinate final cabinet wiring with the City of Milwaukee's Traffic Signal Field Operations unit.

Delivery will be received by the owner. Schedule the delivery directly with the construction contractor. The vendor is responsible for arranging the unloading of the cabinet. Notify the electrical shop of the intent to deliver a minimum of two business days ahead of the desired delivery time. The owner will provide the vendor a list of names, phone numbers, and email addresses for contact information.

The vendor is notified that delivery times and schedules may be changed or delayed at any time for any reason. The vendor may be required to store completed cabinets at their facility for extended periods of time.

\section*{C. 18 Acceptance Testing}

Complete on-site traffic signal acceptance testing in the presence of the owner. The acceptance testing will occur after the signal cabinet is fully installed at the project intersection by the construction contractor and before the traffic signal is turned on. The construction contractor and the owner will determine the time for the acceptance testing. In addition to the cabinet as specified in this specification, add-on accessory items, traffic signal interconnect, system communication, and closed loop system operation are included in the acceptance testing.

Provide an IMSA certified Traffic Signal Bench Technician, Level II, or an IMSA certified Traffic Signal Field Technician, Level II, with a minimum of three years' experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. Alternatively, provide a technician or electrician with a minimum of three years' experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. The technician shall be on-site during the entire acceptance testing and shall be capable and equipped to make in-field revisions / repairs to the signal cabinet to conform to this specification.

Upon successful completion of the acceptance testing as determined by the Owner, a 30-day conditional acceptance of the signal cabinet will be provided to the vendor. Should the cabinet within the 30-day conditional acceptance period fail to perform in any way as determined by the Owner, the vendor shall repair the cabinet to bring it into conformance with this specification and the acceptance testing shall be repeated. Repair times shall conform to the warranty service response times in this specification. The acceptance testing shall be repeated. Upon successful completion of the retesting, a new 30-day conditional acceptance period shall begin. After the signal cabinet runs 30 days without failure, the cabinet will be fully accepted by the Owner.

The vendor will be allowed up to two 30-day conditional acceptance periods. If the cabinet fails during the second 30-day period, an entirely new cabinet shall be furnished and made operational in the field by the vendor at no cost to the owner and a new acceptance testing procedure shall begin. Cabinet replacement times shall conform to the warranty service response times in this specification. The original cabinet becomes the property of the vendor.

The owner reserves the right to perform its own tests on the traffic signal cabinet at any time using the owner's control equipment. Should an individual traffic signal cabinet be found to not meet the requirements of these specifications, the vendor shall pick up the traffic signal cabinet from the owner or from the field, perform at their shop repairs / revisions as necessary to bring the traffic signal cabinet into conformance with these specifications, and deliver the repaired / revised traffic signal cabinet back to the designated location, all at no additional cost to the City of Milwaukee.

\section*{C. 19 Certification}

Provide a written certification with the cabinet delivery that the equipment meets the requirements of the plans and specifications and will fully run the sequence of operation and the signal timing, including closed loop system operation if applicable. The certification shall be on the vendor's company letterhead, shall be addressed to both the City of Milwaukee and the construction contractor, and shall be signed by a company officer authorized to legally obligate the company.

\section*{C. 20 Warranty}

The warranty shall start upon delivery of the cabinet and all supplied equipment to the owner designated location. Provide a warranty and guarantee statement which stipulates that the cabinet and all supplied equipment, including add-on accessory items, to be, individually and as a cabinet system, free from defects in materials and workmanship for a period of at least one year from the date of final cabinet acceptance in the field, or in the case of a cabinet that is to be delivered to the owner for use by the owner, from the date of delivery of an accepted cabinet to the owner. All warranty beyond the one year construction bond needs to be from the manufacturer or vendor. Final cabinet acceptance in the field is
after a successful 30-day conditional acceptance period is completed. Delivery of a cabinet for testing does not constitute acceptance of the cabinet. Turn over to the City of Milwaukee warranties and guarantees that are offered by the manufacturer as a customary trade practice. Name the City of Milwaukee as the obligee on all manufacturers' warranties and guarantees. Shipping costs, both to the factory or an Authorized Repair Depot, and return, shall be paid by the vendor.

The warranty shall provide for full repair or replacement, as determined by the owner, of the failed item or cabinet system, including removal and making the item or system fully operational in the cabinet, at no cost to the owner. Vendor warranty service response times after notification by the owner:
- 4 hours to have qualified service personnel on site at the intersection
- 12 hours to have the signal safely operational, including all phases and enough detection to run the intersection phasing (minimum 8 detectors)
- 48 hours on business days to restore the signal to full original operations

If a malfunction in the controller unit, MMU, module, or any auxiliary equipment occurs during the warranty period, the vendor shall, within 24 hours after notification (excluding Saturday and Sunday), furnish and make fully operational in the cabinet, an identical, programmed, controller unit, MMU, module, or auxiliary equipment, for use while the warranted unit is being repaired or replaced. The isolation of any malfunction during the warranty period shall be the responsibility of the vendor.
The City of Milwaukee reserves the right to make repairs to malfunctioning cabinets and equipment that are under warranty, up to and including complete replacement of the cabinet, when in the owner's determination the safety of the traveling public is best served. Such repair work will not in any way void or limit the vendor's warranty and guarantee specified above. The owner will notify the vendor in writing of the repair.
The vendor shall within five business days after notification replace, at the electrical shop, all cabinets, equipment, and supplies used by the owner in making repairs, with new parts meeting the requirements of this specification.
If any cabinet has three or more equipment or cabinet system failures, resulting from poor workmanship, within the first six months of operation after owner acceptance, an entirely new cabinet exactly matching the existing cabinet shall be furnished and made fully operational by the vendor at no additional cost to the owner. Any traffic control, including but not limited to signing, channelizing devices, temporary signals, police control, and flaggers, that becomes necessary as determined by the owner in order to safely replace the cabinet is the full responsibility of the vendor. The original cabinet becomes the property of the vendor.

Provide, at no additional cost, firmware/software maintenance, problem resolution phone technical support, problem resolution technical support in the supplier's facility, firmware/software patches, and firmware/software upgrades for a minimum of three years. The lead for technical support and primary owner contact for support shall be a qualified person employed by the vendor's local office who is personally familiar with the owner's software and signal operations. Help desks and manufacturer's representatives may be utilized by the lead technical support person as resources but are not acceptable for lead technical support.
Maintain an inventory of the firmware/software version on each controller provided. Notify the City of Milwaukee's electrical shop supervisor or lead electrician in writing when a firmware/software patch or upgrade is available. The owner will direct the vendor when to load the patch or upgrade for each controller. Load the patch or upgrade and provide a usable copy of the patch or upgrade to the owner. Alternatively, when requested by the owner, provide the patch or upgrade to the owner for installation by the owner.

\section*{D Measurement}

The department will measure ATC Controller and Cabinet Installed by each controller, acceptably completed..

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.205 & ATC Controller and Cabinet Installed & EACH
\end{tabular}

Payment is full compensation for furnishing and installing the traffic signal controller and control cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors,
tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit and for clean-up and waste disposal.

\section*{43. Fiber Optic Patch Panel, Item SPV.0060.212.}

\section*{A Description}

Furnish and install a fiber optic patch panel according to the following standards.

\section*{B Materials}

Furnish a Fiber Optic Patch Panel with cable lengths as specified in the plans. The patch panel shall have 6 steps, 12 count single-mode OS2 fiber, ST connectors, and a pigtail end. The cable shall be for indoor or outdoor use and shall be riser cable. The body of the patch panel shall be black in color. No pull kit should be pre-installed.

\section*{C Construction}

Have a certified fiber optic technician perform work for fiber optic terminations, splicing and testing. Have a certified fiber optic technician supervise all fiber optic cable installation. Test the panel and demonstrate that all equipment is operational to the inspector. Ensure termination does not exceed attenuation limits specified in standard spec 678.3.4.

\section*{D Measurement}

The department will measure Fiber Optic Patch Panel by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.212 & Fiber Optic Patch Panel & EACH
\end{tabular}

Payment is full compensation for furnishing and installing fiber optic patch panel and for testing the equipment.

\section*{44. Ethernet Switch, Item SPV.0060.213.}

\section*{A Description}

Furnish and install an Ethernet switch according to the following standards.

\section*{B Materials}

Furnish an Ethernet Switch with a compatible power supply.
Environmental: This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.
Mounting: This equipment must be DIN Rail mountable.
Interfaces: This equipment must support a minimum of 12 Ethernet interfaces, with a minimum of three being shared or dedicated SFP interfaces for pluggable optical connections and support for PoE+ on four or more interfaces.

Management: This equipment must be a managed switch with the ability to support 802.1Q VLAN Tagging, 802.1D Spanning Tree Protocol, and 802.1p Quality of Service. Multicast, broadcast, and flooding storm control should be features.
LEDs: This equipment must have a power input status LED, a ring status LED, and LEDs showing the port link and speed status per port.

Memory: This equipment must have a minimum of 128 MB of DRAM, and a minimum of 16 MB of flash memory

\section*{C Construction}

Install Ethernet switch into field cabinet. Connect switch to the devices as directed by the engineer. Contact Scott Reinbacher at (414) 286-3232 for more information.

\section*{D Measurement}

The department will measure Ethernet Switch by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.213 & Ethernet Switch & EACH
\end{tabular}

Payment is full compensation for furnishing and installing ethernet switches and making necessary connections.

\section*{45. Electrical Service Pedestal, Item SPV.0060.215}

\section*{A Description}

Install meter breaker pedestal.

\section*{B Materials}

Furnish 120/240V meter breaker pedestal conforming to state standard spec 656.2.3., except do not supply service.

\section*{C Construction}

Install service pedestal at location shown in plans. Install grounding electrodes as required by local utility and install appropriate grounding conductors. Contact Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941 office, (414) 708-5148 mobile when pedestal will be ready for service with two working days notice.

\section*{D Measurement}

The department will measure Electrical Service Pedestal by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.215 & Electrical Service Pedestal & EACH
\end{tabular}

Payment is full compensation for furnishing and installing meter breaker pedestal.

\section*{46. EVP 1 Direction Detector, Item SPV.0060.218.}

\section*{A Description}

Furnish and install an Emergency Vehicle Preemption (EVP) 1 Channel 1 Direction Infrared Detector.

\section*{B Materials}

Furnish a 1 Channel 1 Direction Infrared Detector.

\section*{C Construction}

Install detector as shown in the plans and according to manufacturer's recommendations.

\section*{D Measurement}

The department will measure EVP 1 Direction Detector by each unit, acceptably completed.

\section*{E Payment}

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

Payment is full compensation for furnishing and installing the EVP detector.

\section*{47. EVP Phase Selector Card 4 Channel, Item SPV.0060.221.}

\section*{A Description}

Furnish and install an Emergency Vehicle Preemption (EVP) Phase Selector Card 4 Channel.

\section*{B Materials}

Furnish a 4 channel phase selector card. The selector card shall be capable of functioning with a GPS radio unit as well as infrared system detectors simultaneously.

\section*{C Construction}

Install phase selector card into the appropriate slot in the controller cabinet and make all necessary wiring connections to EVP detectors.

\section*{D Measurement}

The department will measure EVP Phase Selector Card 4 Channel by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
ITEM NUMBER
DESCRIPTION
UNIT
SPV.0060.221
EVP Phase Selector Card 4 Channel
EACH

Payment is full compensation for furnishing and installing the phase selector card; and making necessary connections.

\section*{48. EVP Confirmation Light, Item SPV.0060.223.}

\section*{A Description}

Furnish and install an Emergency Vehicle Preemption (EVP) Confirmation Light Assembly.

\section*{B Materials}

Furnish a typical confirmation light assembly and LED flood light.

\section*{C Construction}

Install confirmation lights as described in the plans.
D Measurement
The department will measure EVP Confirmation Light by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.223 & EVP Confirmation Light & EACH
\end{tabular}

Payment is full compensation for furnishing and installing the EVP confirmation light assembly.

\section*{49. Vehicular Video Detection System-2 Cameras, Item SPV.0060.225.}

\section*{A Description}

This specification describes furnishing and installing a system that detects vehicles on a roadway using only video images of vehicle traffic. This item includes all materials and labor necessary to install a completely functional vehicle detection system as shown in the plans, including but not limited to cameras, processors, video monitor, mounting hardware, and power cable.

\section*{B Materials}

This specification sets forth the requirements for a system that detects vehicles on a roadway and provides detection outputs to a traffic signal controller. The materials shall also include all brackets, risers, mounting hardware, cable, terminations, interface panels, and all other incidentals for the installation of the equipment. This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.

The video detection system shall include two video detectors with a high definition camera of at least 720p resolution with a 10x optical zoom with real time iris and shutter speed control by the integrated processor. The faceplate shall be glass with a hydrophilic coating on the exterior and with an indium tin oxide heater applied to the inner surface.
All communications to the video sensor shall be broadband-over-power via three conductor cable. No coaxial cable shall be used.

The video detection system shall include an interface panel that manages communication between sensors, remote access to the sensors, and the cabinet itself. The interface panel shall provide connection points for four video sensors. Each sensor connection shall have a power switch and a resettable fuse. All communications to the detection system shall be to a single IP address. The interface panel shall weigh less than 3 pounds.

All incidental mountings required for pole or mast arm mounted units to install the detector are included in this item.

\section*{C Construction}

The video detection system shall be installed by supplier factory-certified installers and as recommended by the supplier and documented in installation materials provided by the supplier.

In the event, at installation or turn on date, a noticeable obstruction is present in line with the detection zone(s), the contractor shall be obligated to advise the engineer before setting the zone.

All cables associated with the video detection system shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. Provide 6 feet of cable slack.
The video detection system, as shown in the traffic signal plans, shall be complete, in place, tested, and in full operation.

\section*{D Measurement}

The department will measure this item by Vehiclular Video Detection System-2 Cameras by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.225 & Vehicular Video Detection System-2 Cameras & EACH
\end{tabular}

Payment is full compensation for furnishing and installing video detection system; making necessary connections; and testing video detection.

\section*{50. Vehicular Video Detection System-4 Cameras, Item SPV.0060.227.}

\section*{A Description}

This specification describes furnishing and installing a system that detects vehicles on a roadway using only video images of vehicle traffic. This item includes all materials and labor necessary to install a completely functional vehicle detection system as shown in the plans, including but not limited to cameras, processors, video monitor, mounting hardware, and power cable.

\section*{B Materials}

This specification sets forth the requirements for a system that detects vehicles on a roadway and provides detection outputs to a traffic signal controller. The materials shall also include all brackets, risers,
mounting hardware, cable, terminations, interface panels, and all other incidentals for the installation of the equipment. This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.
The video detection system shall include four video detectors with a high definition camera of at least 720p resolution with a \(10 x\) optical zoom with real time iris and shutter speed control by the integrated processor. The faceplate shall be glass with a hydrophilic coating on the exterior and with an indium tin oxide heater applied to the inner surface.

All communications to the video sensor shall be broadband-over-power via three conductor cable. No coaxial cable shall be used.

The video detection system shall include an interface panel that manages communication between sensors, remote access to the sensors, and the cabinet itself. The interface panel shall provide connection points for four video sensors. Each sensor connection shall have a power switch and a resettable fuse. All communications to the detection system shall be to a single IP address. The interface panel shall weigh less than 3 pounds.
All incidental mountings required for pole or mast arm mounted units to install the detector are included in this item.

\section*{C Construction}

The video detection system shall be installed by supplier factory-certified installers and as recommended by the supplier and documented in installation materials provided by the supplier.
In the event, at installation or turn on date, a noticeable obstruction is present in line with the detection zone(s), the contractor shall be obligated to advise the engineer before setting the zone.
All cables associated with the video detection system shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. Provide 6 feet of cable slack.

The video detection system, as shown in the traffic signal plans, shall be complete, in place, tested, and in full operation.

\section*{D Measurement}

The department will measure Vehicular Video Detection System by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.227 & Vehicular Video Detection System-4 Cameras & EACH
\end{tabular}

Payment is full compensation for furnishing and installing video detection system; making necessary connections; and testing video detection.

\section*{51. Electrical Riser, Item SPV.0060.228.}

\section*{A Description}

Fabricate and install an electrical riser.

\section*{B Materials}

Furnish C-condulets, reducer bushings, banding, 1 " aluminum conduit, \(1 / 2^{\prime \prime}\) aluminum conduit, 1 " terminal adaptor, weather head, and sealant as shown in electrical riser detail.

\section*{C Construction}

Install materials as shown in electrical riser detail.

\section*{D Measurement}

The department will measure Electrical Riser by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.228 & Electrical Riser & EACH
\end{tabular}

Payment is full compensation for fabricating and installing an electrical riser.

\section*{52. Pedestrian Countdown Signal Face 12-Inch, Item SPV.0060.267.}

\section*{A Description}

Furnish and install Pedestrian Countdown Signal Face 12-Inch according to the following standards.

\section*{B Materials}

Furnish a 12-Inch Light Emitting Diode (LED) Pedestrian Countdown Module that meets ITE PTCSI-STD Part 2 from March 2004 or current Institute of Transportation Engineer (ITE) standards. The countdown digits shall be displayed with an LED color/type of Portland Orange. The unit shall be able to operate when exposed to temperatures between -40 to 165 degrees Fahrenheit. The operating voltage shall be between 80 to 135 VAC , and the wattage drawn shall be 7 W .

\section*{C Construction}

Install Pedestrian Countdown Signal Face 12-Inch as shown in the plans and in accordance with standard spec 658.3. The Pedestrian Countdown Signal Face 12-Inch shall be installed in the same housing and immediately below the Pedestrian Signal Face 12-Inch.

\section*{D Measurement}

The department will measure Pedestrian Countdown Signal Face 12-Inch by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.267 & Pedestrian Countdown Signal Face 12-Inch & EACH
\end{tabular}

Payment is full compensation for furnishing and installing pedestrian countdown signal face 12-inch.

\section*{53. Voice Instruction Audible Pushbutton, Item SPV.0060.268.}

\section*{A Description}

Furnish and install a Voice Instruction Audible Pushbutton.

\section*{B Materials}

The Voice Instruction Audible Pushbutton shall be a 2-wire pushbutton that meets ADA requirements. The pushbutton shall be capable of providing audio cues with sound emanating from both the front and back of the unit. Sound shall be synchronized between units and automatically adjust to ambient sound levels. Changing settings and firmware updates shall be done wirelessly over Bluetooth. The switch operating life shall be greater than 20 million operations. The pushbutton station shall have an MUTCD compliant sign on its faceplate.

\section*{C Construction}

Install a Voice Instruction Audible Pushbutton as shown on plans. Follow requirements outlined in MUTCD Section 4E. 9 through 4E.12. Pushbutton plates and related signage should provide the direction of travel with a single or double arrow as required and shall be properly focused upon installation.

\section*{D Measurement}

The department will measure Voice Instruction Audible Pushbutton by each unit, acceptably completed.

\section*{E Payment}

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

Payment is full compensation for furnishing and installing voice instruction audible pushbutton; focusing arrows.
54. Voice Instruction Audible Control Unit, Item SPV.0060.269.

\section*{A Description}

Furnish and install a Voice Instruction Audible Control Unit.

\section*{B Materials}

The Voice Instruction Audible Control Unit shall be a rack mount card able to be used in a 300 series cabinet. An interconnect panel shall provide enough connection for 16 or more pushbuttons. The panel shall have a separate power supply connection. No polarity requirement shall be needed for the pushbuttons. The control unit shall have LCD display showing status information. Setup shall be performable via Ethernet or Wi-Fi using a PC or by using an app. Any connection option should allow access to setup and configuration of the control unit and any attached voice instruction audible pushbutton.

\section*{C Construction}

Install a Voice Instruction Audible Control Unit into the controller cabinet's detector rack. Mount the panel to the side of the cabinet in the side panel access. Terminate all pushbutton connections to the panel. Complete setup of the system and demonstrate the pushbuttons are correctly wired and configured.

\section*{D Measurement}

The department will measure Voice Instruction Audible Control Unt by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.269 & Voice Instruction Audible Control Unit & EACH
\end{tabular}

Payment is full compensation for furnishing and installing voice instruction audible control unit; making necessary connections; and configuring the system.

\section*{55. Round Aluminum Sign Post System in Soft Surface 7-Foot, Item SPV.0060.280.}

\section*{A Description}

Work under this item consists of furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

\section*{B Materials}

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 7 feet, a V-loc Soft-Soil 30" with cleanout bar post anchor for \(23 / 8\) " round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), \(5 / 16^{\prime \prime} \times 11 / 4 "\) Stainless Steel Fender Washers and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal, as shown in plans.

\section*{C Construction}

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

\section*{D Measurement}

The department will measure the Round Aluminum Sign Post System in Soft Surface by each unit, acceptably completed.

\section*{E Payment}

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

Payment is full compensation for furnishing and placing the Round Aluminum Sign Post System in Soft Surface 7-Foot.

\section*{56. Round Aluminum Sign Post System in Soft Surface 10-Foot, Item SPV.0060.281.}

\section*{A Description}

Work under this item consists of furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

\section*{B Materials}

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 10 feet, a Vloc Soft-Soil 30" with cleanout bar post anchor for \(23 / 8\) " round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), \(5 / 16 " \times 11 / 4\) " Stainless Steel Fender Washers and one- or two-sided sign mounting Zbrackets that fit \(23 / 8\) inch post or approved equal, as shown in plans.

\section*{C Construction}

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

\section*{D Measurement}

The department will measure the Round Aluminum Sign Post System in Soft Surface by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid items:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.281 & Round Aluminum Sign Post System in Soft Surface 10-Foot & EACH
\end{tabular}

Payment is full compensation for furnishing and placing the Round Aluminum Sign Post System in Soft Surface 10-Foot.

\section*{57. Round Aluminum Sign Post System in Soft Surface 12-Foot, Item SPV.0060.283.}

\section*{A Description}

Work under this item consists of furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

\section*{B Materials}

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 12 feet, a Vloc Soft-Soil 30" with cleanout bar post anchor for \(23 / 8\) " round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), \(5 / 16 " \times 11 / 4\) " Stainless Steel Fender Washers and one- or two-sided sign mounting Zbrackets that fit \(23 / 8\) inch post or approved equal, as shown in plans.

\section*{C Construction}

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

\section*{D Measurement}

The department will measure the Round Aluminum Sign Post System in Soft Surface by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid items:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.283 & Round Aluminum Sign Post System in Soft Surface 12-Foot & EACH
\end{tabular}

Payment is full compensation for furnishing and placing the Round Aluminum Sign Post System in Soft Surface 12-Foot.

\section*{58. Round Aluminum Sign Post System in Concrete Surface 10-Foot, Item SPV.0060.285.}

\section*{A Description}

Work under this item consists of furnishing and installing sign post, post anchor, anchoring cement and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans:

\section*{B Materials}

Furnish a round aluminum 2-inch Schedule 40 6061-T6 Extruded Aluminum post with a length of 10 feet, a V-loc Concrete 8 -inch post anchor for \(23 / 8\)-inch round post (TAPCO SKU 037-00012B, Traffic Safety Supply Company SKU DP00241, Custom Products Corporation Item RPORZVR12382OR or approved equal), \(5 / 16\)-inch x \(11 / 4\)-inch Stainless Steel Fender Washers, one- or two-sided sign mounting Z-brackets that fit \(23 / 8\)-inch post and pourable hydraulic cement for setting of concrete post anchor, as shown in plans.

\section*{C Construction}

Install Round Aluminum Sign Post System in Concrete Surface as shown in plans.

\section*{D Measurement}

The department will measure the Round Aluminum Sign Post System in Concrete Surface by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.285 & Round Aluminum Sign Post System in Concrete Surface 10-Foot & EACH
\end{tabular}

Payment is full compensation for furnishing and placing the Round Aluminum Sign Post System in Concrete Surface 10-Foot.

\section*{59. Street Name Sign Mounting Hardware on Mast Arm, Item SPV.0060.291.}

\section*{A Description}

Work under this item consists of furnishing and installing Mounting Hardware on Mast Arm with current City of Milwaukee practices.

\section*{B Materials}

201 Stainless Steel Banding \(3 / 4 " \times 0.20\)., Stainless Steel Flared Leg Sign Mount Bracket for \(3 / 4\) " banding, 201 Stainless Steel Wing Seal (buckle) for \(3 / 4 "\) banding, \(5 / 16 " \times 1-1 / 4 "\) Stainless Steel Fender Washers, 5/16"-18 x 3/4" Stainless Steel Hex Head Bolt.

\section*{C Construction}

Install and orient Mounting Hardware on Mast Arm as shown on the plans.

\section*{D Measurement}

The department will measure the Installing Street Name Sign Mounting Hardware on Mast Arm by each unit, acceptably completed.

\section*{E Payment}

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

Payment is full compensation for furnishing and installing the hardware.
60. 24"X 24" Blankout Sign "No Turn on Red", Item SPV.0060.292.

\section*{A Description}

Furnish and install a Blankout Sign "No Turn on Red"

\section*{B Materials}

Furnish an electronic sign, 24 inches by 24 inches in size, with the ability to display one or more messages compliant with the Manual on Uniform Traffic Control Devices, as indicated on the plans, to be controlled by the traffic signal controller or other approved controllers. The electronic sign shall also have the ability to be dark, in which no message is seen.

\section*{C Construction}

Install blank out sign as shown in plans.

\section*{D Measurement}

The department will measure 24 " X 24 " Blankout Sign "No Turn On Red" by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.292 & \(24 " \times 24 "\) Blankout Sign "No Turn on Red" & EACH
\end{tabular}

Payment is full compensation for furnishing and installing Blankout Sign "No Turn on Red".

\section*{61. Removing Sign Post Assembly and Type II Signage, Item SPV.0060.293.}

\section*{A Description}

Work under this item consists of removing \(23 / 8^{\prime \prime}\) round post, sign post anchor and Type II signage according to the plans.

\section*{B (Vacant)}

\section*{C Construction}

Remove \(23 / 8\) " sign post, sign post anchor and signage as shown on the plans. Signage should remain fixed to poles and delivered to City of Milwaukee Sign Shop at 1540 West Canal Street Milwaukee, Wi.

\section*{D Measurement}

The department will measure Removing Sign Post Assembly and Type II Signage as each individual sign post assembly, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid items:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.293 & Removing Sign Post Assembly and Type II Signage & EACH
\end{tabular}

Payment is full compensation for furnishing labor, equipment, coordination, and all materials and incidentals necessary to complete the work.
62. Pull Boxes 13-Inch x 24-Inch x 24-Inch; Item SPV.0060.302.

A Description

This special provision describes providing and installing Pull Boxes which are a fiberglass/polymer concrete at the locations shown on the plans according to standard spec 653.

\section*{B Materials}

Pull Box (Fiberglass/polymer concrete) of rectangular composite enclosure with Tier 15 Rating ( \(15,000 \mathrm{lb}\). Design Load) \& ( \(22,500 \mathrm{lb}\). Test Load), and nominal 13 " wide \(\times 24\) " long and 24 " total depth, flared wall. Cover shall be Tier 15 Rating ( \(15,000 \mathrm{lb}\). Design Load) \& ( \(22,500 \mathrm{lb}\). Test Load), bolted cover with logo "Street Lighting" and use Penta bolts to secure cover. The pull box listed and labeled by (UL) or other Nationally Recognized Testing Laboratory.

\section*{C Construction}

Conform to standard spec 673.3 and City of Milwaukee standards. The pull box installation covers the excavation, 12 -inches of crushed stone, end bell connectors for conduit connection, backfilling and for disposing of surplus material. Rigid nonmetallic PVC bell end connectors are to be use when connecting conduit to the pull box.

\section*{D Measurement}

The department will measure Pull Boxes 13-Inch x \(24-\operatorname{lnch} \times 24-\operatorname{lnch}\) as each individual pull box, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.302 & Pull Boxes 13 -Inch \(\times 24\)-Inch \(\times 24\)-Inch & EACH
\end{tabular}

Payment is full compensation for providing and installing the Pull boxes 13 -Inch \(\times 24\)-Inch \(\times 24\)-Inch (fiberglass/polymer concrete) for labor, tools, equipment, transporting, coordination and all materials and incidentals necessary to complete the work, such as end bells, crushed aggregate, excavation, backfilling, and for disposing of surplus material.

\section*{63. Pull Boxes 17-Inch x 30-Inch x 24-Inch; Item SPV.0060.303.}

\section*{A Description}

This special provision describes providing and installing Pull Boxes which are a fiberglass/polymer concrete at the locations shown on the plans according to standard spec 653.

\section*{B Materials}

Pull Box (Fiberglass/polymer concrete) of rectangular composite enclosure with Tier 15 Rating ( \(15,000 \mathrm{lb}\). Design Load) \& ( \(22,500 \mathrm{lb}\). Test Load), and nominal 17 " wide \(\times 30^{\prime \prime}\) long and 24 " total depth, flared wall. Cover shall be Tier 15 Rating ( \(15,000 \mathrm{lb}\). Design Load) \& ( \(22,500 \mathrm{lb}\). Test Load), bolted cover with logo "Street Lighting" and use Penta bolts to secure cover. The pull box listed and labeled by (UL) or other Nationally Recognized Testing Laboratory.

\section*{C Construction}

Conform to standard spec 673.3 and City of Milwaukee standards. The pull box installation covers the excavation, 12 -inches of crushed stone, end bell connectors for conduit connection, backfilling and for disposing of surplus material. Rigid nonmetallic PVC bell end connectors are to be use when connecting conduit to the pull box.

\section*{D Measurement}

The department will measure Pull Boxes \(17-\operatorname{lnch} \times 30-\operatorname{lnch} \times 24-\operatorname{lnch}\) as each individual pull box, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.303 & Pull Boxes \(17-\) Inch \(\times 30\)-Inch \(\times 24\)-Inch & EACH
\end{tabular}

Payment is full compensation for providing and installing the Pull boxes 17 -Inch \(\times 30\)-Inch \(\times 24\)-Inch (fiberglass/polymer concrete) for labor, tools, equipment, transporting, coordination and all materials and
incidentals necessary to complete the work, such as end bells, crushed aggregate, excavation, backfilling, and for disposing of surplus material.

\section*{64. Poles Type 22-AL, Item SPV.0060.00.315.}

\section*{A Description}

The minimum requirements for a 22 ft . direct bury aluminum street lighting pole assembly. All parts not specifically mentioned, which are necessary or which are regularly furnished in order to provide this pole, shall be furnished, and shall conform in strength, quality of material and workmanship to that usually provided by the engineering practice indicated in this specification. All work shall be according to standard spec 651.
The aluminum street lighting pole assembly to be furnished under this specification is to be round and tapered. The pole assembly shall be complete with shaft, pole cap, hardware, and base coating. All screws and fasteners shall be stainless steel or other approved materials.

The direct bury 22 ft . aluminum street lighting pole assembly shall be according to this specification and City of Milwaukee (DPW-Infrastructure Services Division) Drawing \#B-86-31

A revised date 03-13-12.
Minor deviations on the rest of the pole assembly that will not affect the strength, appearance, vertical and horizontal stability of the pole will be permitted, but all such deviations shall be approved by the City of Milwaukee Street Lighting Engineering.
The work under this item is for furnishing and installation of the following material as shown in plans and according to the following.

\section*{B Materials}

\section*{B.1.1 Pole}

The 22 ft . aluminum pole shaft shall be tapered from the top of the pole to the ground line. Horizontal and vertical stability shall be obtained by welding a 4 " channel across the bottom of the shaft in line with the cable entrance holes. The channel is to extend 1 " past the shaft wall. Dimensions from the pole top to the bracket mounting plate and the ground line to the top of the pole shall be rigidly adhered to.
Cable entrance holes shall be provided on both sides of the pole and shall be 2 " diameter (minimum) shall be located 12 " below ground line and shall have grommets installed to prevent damage to the cable. They shall be 90 degrees from the mounting brackets.

The pole cap may be either cast, stamped, spun, etc., and have provisions to affix the cap firmly to the shaft.
The base coating shall be painted, sprayed or dipped. Both the inside and outside of the shaft shall be coated from the bottom of the shaft to a point \(2 " \pm\) above the ground line. The base coating shall be a Polyamide Epoxy Pittsburgh Aquapon or equal, applied un-thinned and shall be applied before installing the grommets in the cable entrance holes. The channel welded to the bottom of the shaft must be coated with the same material as above.
The hand hole shall be 4 " x 6 " nominal. A \(1 / 4\) " 20 tapped hole and \(1 / 4 "-20\) NC by \(3 / 4\) " long \(18-8\) stainless steel button head Torx T27H tamper proof screw shall be provided in the shaft opposite the hand hole for grounding purposes. Hand hole cover shall be secured to the pole using \(1 / 4-20\) NC by \(3 / 4\) " long \(18-8\) stainless steel button head Torx T27H tamper proof screws. The hand hole is to be 90 degrees from the bracket arms and in the same plane with the cable entrance holes.
The 22 ft . aluminum pole assembly furnished under this specification shall support a fifty-pound fixture of an EPA of 3 on each arm when equipped with a pair of 6 ' upsweep arms. The pole design shall meet the latest revision of the AASHTO specifications for this pole as defined in the STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. The manufacturer shall submit engineering calculations for lighting poles to show that maximum stress and deflections do not exceed specified performance requirements under full design loading, as well as other certified reports and data which indicate that the poles meet all load requirements.
Engineering calculations shall be prepared and sealed by an engineer licensed in the State of Wisconsin. The entire horizontal and vertical "wind sail" area of the pole assembly subject to wind load including arm
and luminaire shall be designed to withstand the AASHTO standard specifications, from above, for wind load requirements for a 90 MPH wind load with gust factor computed per section 3.8.5.and height and exposure factors from table 3-5.
All Welding shall be according to the latest applicable A.S.M.E. Standards.
The manufacturer warrants that the pole supplied will be of merchantable quality will conform to applicable specifications, drawings, designs, samples, or descriptions, will be free from defects in materials and workmanship and will be fit for the particular purpose intended.
A plaque with the pole number as shown on the plans shall be affixed onto the pole shaft.

\section*{B. 2 Pea Gravel}

Passing No. 8 sieve \(0 \%\) to \(5 \%\)
Each unit will require approximately 0.25 cubic yard of pea gravel.
The pea gravel must consist of particles from natural gravel deposits and shall be composed of clean, hard, tough, durable pebbles free from adherent coatings, soft, flat, or elongated particles, and organic or other deteriorative matter. The following limits apply to deteriorative substances in the pea gravel.
\begin{tabular}{ll} 
Chert & not over \(4 \%\) by weight \\
Coal & not over \(1 / 2 \%\) by weight \\
Clay lump and friable particles & not over \(1 / 2 \%\) by weight \\
Soft fragments & not over \(1 \%\) by weight \\
Any combination of the above & not over \(4 \%\) by weight \\
Flat, elongated or laminated pcs. & Not over \(10 \%\) by weight \\
\begin{tabular}{l} 
(Flat and elongated particles are \\
those having a length more than \\
five times the average thickness)
\end{tabular} \\
\hline Grading requirements of the pea gravel are as follows:
\end{tabular}
\begin{tabular}{ll} 
Passing \(3 / 8\)-inch sieve & \(95 \%\) to \(100 \%\) \\
Passing No. 4 sieve & \(25 \%\) to \(50 \%\)
\end{tabular}

\section*{B. 3 Riser Cable}

Pole is to be wired as shown on the plans. A separate riser cable will be required to be installed inside of pole for each lighting fixture on the pole. The riser cable shall be 30 feet in length and cut from copper \(2 \# 12\) UF with ground cable. One wire shall be black, the other shall be white, and the ground can be either bare or green. All splicing is to be done inside the metal housing. The ground wires shall be spliced inside the metal housing and grounded to the housing and each fixture. The cable shall conform to NEC Article 340. The riser cable shall be continuous without splices. The electrical system in use utilizes a full system ground. The neutral is not to be grounded at any point.

\section*{C Construction}

The direct bury pole is to be set as illustrated in the plans. The holes are to be 12 or 14 inches in diameter and to a depth of 5 feet. The holes can be bored, hydrovac, or hand dug but all shall be cylindrical. If any part of the hole is within 3 feet of a buried utility, the holes must be hand dug or hydrovac. No other method of setting poles is acceptable. The poles should be parallel and perpendicular to the horizon once set.
In some cases, the poles are to be installed in areas of concrete walk. Prior to concrete removal, the concrete should be saw cut to allow adequate room for pole and cable installation. Saw cutting for removal should be square or rectangular in shape. The contractor shall be responsible for disposing all debris from excavation and removed from site.
There is to be a minimum 6 -inch bed of tamped pea gravel for the pole to set on. Then pea gravel is to be backfill around the pole and be tamped every 12 inches and filled to within 3 inches of finished grade.
In areas where concrete walk was removed, felt paper is to be installed around the base of pole and 3 inches of concrete installed. Concrete shall be the standard 5 bag mix, and the finished surface should

Grass areas that were disturbed during construction shall be filled with 3 inches of topsoil and sod to match the adjacent finished grade. Addresses are to be stenciled to the pole as shown on the plan.

\section*{D Measurement}

The department will measure Poles Type 22-AL by each unit, acceptably completed.

\section*{E Payment}

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

SPV.0060.00.315 Poles Type 22-AL
EACH
Payment is full compensation for the pole, riser cables, pea gravel, and all connections.

\section*{65. Poles Type 26-AL, Item SPV.0060.316.}

\section*{A Description}

The minimum requirements for a 26 ft . direct bury aluminum street lighting pole assembly. All parts not specifically mentioned, which are necessary, or which are regularly furnished in order to provide this pole, shall be furnished, and shall conform in strength, quality of material and workmanship to that usually provided by the engineering practice indicated in this specification. All work shall be according to standard spec 651.
The aluminum street lighting pole assembly to be furnished under this specification is to be round and tapered. The pole assembly shall be complete with shaft, pole cap, hardware, and base coating. All screws and fasteners shall be stainless steel or other approved materials.

The direct bury 26 ft . aluminum street lighting pole assembly shall be according to this specification and City of Milwaukee (DPW-Infrastructure Services Division) Drawing \#B-86-32 dated 10-27-86

Minor deviations on the rest of the pole assembly that will not affect the strength, appearance, vertical and horizontal stability of the pole will be permitted, but all such deviations shall be approved by the City of Milwaukee Street Lighting Engineering.

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following.

\section*{B Materials}

\section*{B. 1 Pole}

The 26 ft . aluminum pole shaft shall be tapered from the top of the pole to the ground line. Horizontal and vertical stability shall be obtained by welding a 4 " channel across the bottom of the shaft in line with the cable entrance holes. The channel is to extend 1 " past the shaft wall. Dimensions from the pole top to the bracket mounting plate and the ground line to the top of the pole shall be rigidly adhered to.
Cable entrance holes shall be provided on both sides of the pole and shall be 2" diameter (minimum) shall be located 12 " below ground line and shall have grommets installed to prevent damage to the cable. They shall be 90 degrees from the mounting brackets.

The pole cap may be either cast, stamped, spun, etc., and have provisions to affix the cap firmly to the shaft.

The base coating shall be painted, sprayed or dipped. Both the inside and outside of the shaft shall be coated from the bottom of the shaft to a point 2 " \(\pm\) above the ground line.
The base coating shall be a Polyamide Epoxy Pittsburgh Aquapon or equal, applied un-thinned and shall be applied before installing the grommets in the cable entrance holes. The channel welded to the bottom of the shaft must be coated with the same material as above.

The hand hole shall be 4 " x 6 " nominal. A \(1 / 4 "-20\) tapped hole and \(1 / 4 "-20\) NC by \(3 / 4\) " long \(18-8\) stainless steel button head Torx T27H tamper proof screw shall be provided in the shaft opposite the hand hole for grounding purposes. Hand hole cover shall be secured to the pole using \(1 / 4-20\) NC by \(3 / 4\) " long 18-8 stainless steel button head Torx T27H tamper proof screws. The hand hole is to be 90 degrees from the bracket arms and in the same plane with the cable entrance holes.

The 26 ft . aluminum pole assembly furnished under this specification shall support a fifty-pound fixture of an EPA of 3 on each arm when equipped with a pair of 6 ' upsweep arms. The pole design shall
meet the latest revision of the AASHTO specifications for this pole as defined in the STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. The manufacturer shall submit engineering calculations for lighting poles to show that maximum stress and deflections do not exceed specified performance requirements under full design loading, as well as other certified reports and data which indicate that the poles meet all load requirements.

Engineering calculations shall be prepared and sealed by an engineer licensed in the State of Wisconsin. The entire horizontal and vertical "wind sail" area of the pole assembly subject to wind load including arm and luminaire shall be designed to withstand the AASHTO standard specifications, from above, for wind load requirements for a 90 MPH wind load with gust factor computed per section 3.8.5.and height and exposure factors from table 3-5.

All Welding shall be according to the latest applicable A.S.M.E. Standards.
The manufacturer warrants that the pole supplied will be of merchantable quality will conform to applicable specifications, drawings, designs, samples, or descriptions, will be free from defects in materials and workmanship and will be fit for the particular purpose intended.
A plaque with the pole number as shown on the plans shall be affixed onto the pole shaft.

\section*{B. 2 Pea Gravel}

The pea gravel must consist of particles from natural gravel deposits and shall be composed of clean, hard, tough, durable pebbles free from adherent coatings, soft, flat, or elongated particles, and organic or other deteriorative matter. The following limits apply to deteriorative substances in the pea gravel.
\begin{tabular}{|c|c|}
\hline Chert & not over \(4 \%\) by weight \\
\hline Coal & not over \(1 / 2 \%\) by weight \\
\hline Clay lump and friable particles & not over \(1 / 2 \%\) by weight \\
\hline Soft fragments & not over \(1 \%\) by weight \\
\hline Any combination of the above & not over \(4 \%\) by weight \\
\hline Flat, elongated or laminated pcs. & Not over 10\% by weight \\
\hline (Flat and elongated particles are those having a length more than five times the average thickness) & \\
\hline \multicolumn{2}{|l|}{Grading requirements of the pea gravel are as follows:} \\
\hline Passing \(3 / 8\)-inch sieve & 95\% to 100\% \\
\hline Passing No. 4 sieve & 25\% to 50\% \\
\hline Passing No. 8 sieve & 0\% to 5\% \\
\hline \multicolumn{2}{|l|}{Each unit will require approximately 0.25 cubic yard of pea graver} \\
\hline
\end{tabular}

\section*{B. 3 Riser Cable}

Pole is to be wired as shown on the plans. A separate riser cable will be required to be installed inside of pole for each lighting fixture on the pole. The riser cable shall be 35 feet in length and cut from copper \(2 \# 12\) UF with ground cable. One wire shall be black, the other shall be white, and the ground can be either bare or green. All splicing is to be done inside the metal housing. The ground wires shall be spliced inside the metal housing and grounded to the housing and each fixture. The cable shall conform to NEC Article 340. The riser cable shall be continuous without splices. The electrical system in use utilizes a full system ground. The neutral is not to be grounded at any point.

\section*{C Construction}

The direct bury pole is to be set as illustrated in the plans. The holes are to be 12 or 14 inches in diameter and to a depth of 5 feet 6 inches. The holes can be bored, hydrovac, or hand dug but all shall be cylindrical. If any part of the hole is within three feet of a buried utility, the holes must be hand dug or hydrovac. No other method of setting poles is acceptable. The poles should be parallel and perpendicular to the horizon once set.

In some cases, the poles are to be installed in areas of concrete walk. Prior to concrete removal, the concrete should be saw cut to allow adequate room for pole and cable installation. Saw cutting for
removal should be square or rectangular in shape. The contractor shall be responsible for disposing all debris from excavation and removed from site.

There is to be a minimum 6-inch bed of tamped pea gravel for the pole to set on. Then pea gravel is to be backfill around the pole and be tamped every 12 inches and filled to within 3 inches of finished grade.

In areas where concrete walk was removed, felt paper is to be installed around the base of pole and 3 inches of concrete installed. Concrete shall be the standard 5 bag mix, and the finished surface should match adjacent grades.

Grass areas that were disturbed during construction shall be filled with 3 inches of topsoil and sod to match the adjacent finished grade. Addresses are to be stenciled to the pole as shown on the plan.

\section*{D Measurement}

The department will measure Poles Type 26-AL by the each (EACH) unit of measure.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.316 & Poles Type 26-AL & EACH
\end{tabular}

Payment is full compensation for the pole, riser cables, pea gravel, and all connections.

\section*{66. Poles Type 25-AL-BD, Item SPV.0060.320.}

\section*{A Description}

The minimum requirements for a \(25^{\prime}-0\) " bolt down aluminum street lighting pole assembly. All parts not specifically mentioned, which are necessary or which are regularly furnished in order to provide this pole, shall be furnished, and shall conform in strength, quality of material and workmanship to that usually provided by the engineering practice indicated in this specification. All work shall be according to standard spec 651.

The aluminum street lighting pole assembly to be furnished under this specification is to be round and tapered. The pole assembly shall be complete with shaft, pole cap, hardware, and base coating. All screws and fasteners shall be stainless steel or other approved materials.

The bolt down 25'-0" aluminum street lighting pole assembly shall be according to this specification and City of Milwaukee (DPW-Infrastructure Services Division) Drawing \#B-14-13.
Minor deviations on the rest of the pole assembly that will not affect the strength, appearance, vertical and horizontal stability of the pole will be permitted, but all such deviations shall be approved by the City

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following.

\section*{B Materials}

\section*{B. 1 Pole}

The \(25^{\prime}-0\) " aluminum pole shaft shall be tapered from the top of the pole to the mounting plate. Dimensions from the pole top to the bracket mounting plate and from the base plate to the top of the pole, as shown on the drawing, shall be rigidly adhered to.

The base plate shall be cast from either type 319 or 356 T6 aluminum. The four elongated mounting holes shall be on 90 -degree centers on an 11 " bolt circle. The mounting slots shall be sized for 1 -inch mounting bolts. The base shall be welded to the shaft so the arms bisect the angle between mounting holes at 45 degrees.

The poles shall be built as a double bracket unit and supplied with one cover plate per pole.
The pole cap is to be cast aluminum and be secured to the pole by three equally spaced \(1 / 4 "-20\) hex head stainless steel screws.

\section*{B. 2 Hand Hole \& Grounding}

The hand hole shall be 4 " \(\times 6\) " nominal. A \(1 / 4 "-20\) NC taped hole and bolt shall be provided in the shaft opposite the hand hole for grounding purposes. The hand hole cover shall be secured to the pole using \(1 / 4\) "-20 NC by \(3 / 4\) " long \(18-8\) stainless steel button head Torx T27H tamper proof screws. The hand hole is
to be 90 degrees from the arms. The center line of the hand hole shall be 14 inches above the mounting plate.

\section*{B. 3 Loading and Stability}

The \(25^{\prime}-0^{\prime \prime}\) assembly furnished under this specification shall support a fifty-pound fixture of an EPA of 3 on each arm when equipped with a pair of \(6^{\prime}\) upsweep arms. All pole designs shall meet the latest revision of the AASHTO specifications for these poles as defined in their STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. The manufacturer shall submit engineering calculations for lighting poles to show that maximum stress and deflections do not exceed specified performance requirements under full design loading, as well as other certified reports and data which indicate that the poles meet all load requirements, within 30 days of the bid award. Engineering calculations shall be prepared and sealed by an engineer licensed in the State of Wisconsin.

The entire horizontal and vertical "wind sail" area of the pole assembly subject to wind load including arm and luminaire shall be designed to withstand the AASHTO standard specifications, from above, for wind load requirements for a 90 MPH wind load with gust factor computed per section 3.8.5.and height and exposure factors from table 3-5.

All Welding shall be according to the latest applicable A.S.M.E. Standards.
The manufacturer warrants that the pole supplied will be of merchantable quality will conform to applicable specifications, drawings, designs, samples, or descriptions, will be free from defects in materials and workmanship and will be fit for the particular purpose intended.
A plaque with the pole number as shown on the plans shall be affixed onto the pole shaft using high intensity reflective 2 " silver numerals on black background.

\section*{B. 4 Riser Cable}

Pole is to be wired as noted on the plans. A separate riser cable will be required to be installed inside of pole for each lighting fixture on the pole. The riser cable(s) shall be 35 feet in length and cut from copper 2\#12 UF with ground cable. One wire shall be black, the other shall be white, and the ground to be green. The cable shall conform to NEC Article 340. The riser cable shall be continuous without splices.

\section*{C Construction}

Install the bolt down pole as specified in the plan and details. After razing the pole use normal pole shaft raking techniques to ensure the centerline of shaft appears vertical to the horizon.

\section*{D Measurement}

The department will measure Poles Type 25-AL-BD by each unit, acceptably completed.

\section*{E Payment}

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

SPV.0060.320
Poles Type 25-AL-BD
EACH
Payment is full compensation for the pole, riser cable(s), and all connections.

\section*{67. Poles Type 30-AL-BD, Item SPV.0060.321.}

\section*{A Description}

The minimum requirements for a \(30^{\prime}-0^{\prime \prime}\) bolt down aluminum street lighting pole assembly. All parts not specifically mentioned, which are necessary or which are regularly furnished in order to provide this pole, shall be furnished, and shall conform in strength, quality of material and workmanship to that usually provided by the engineering practice indicated in this specification. All work shall be according to standard spec 651.
The aluminum street lighting pole assembly to be furnished under this specification is to be round and tapered. The pole assembly shall be complete with shaft, pole cap, hardware, and base coating. All screws and fasteners shall be stainless steel or other approved materials.

The bolt down \(30^{\prime}\) '0" aluminum street lighting pole assembly shall be according to this specification and City of Milwaukee (DPW-Infrastructure Services Division) Drawing \#B-14-14.
Minor deviations on the rest of the pole assembly that will not affect the strength, appearance, vertical and horizontal stability of the pole will be permitted, but all such deviations shall be approved by the City of Milwaukee Street Lighting Engineering.

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following.

\section*{B Materials}

\section*{B. 1 Pole}

The \(30^{\prime}-0\) " aluminum pole shaft shall be tapered from the top of the pole to the mounting plate. Dimensions from the pole top to the bracket mounting plate and from the base plate to the top of the pole, as shown on the drawing, shall be rigidly adhered to.

The base plate shall be cast from either type 319 or 356 T 6 aluminum. The four elongated mounting holes shall be on 90 -degree centers on an 11 " bolt circle. The mounting slots shall be sized for 1 -inch mounting bolts. The base shall be welded to the shaft so the arms bisect the angle between mounting holes at 45 degrees.

The poles shall be built as a double bracket unit and supplied with one cover plate per pole.
The pole cap is to be cast aluminum and be secured to the pole by three equally spaced \(1 / 4 "-20\) hex head stainless steel screws.

\section*{B. 2 Hand Hole \& Grounding}

The hand hole shall be \(4^{\prime \prime} \times 6\) " nominal. A \(1 / 4^{"}-20\) NC taped hole and bolt shall be provided in the shaft opposite the hand hole for grounding purposes. The hand hole cover shall be secured to the pole using \(1 / 4\) "-20 NC by \(3 / 4\) " long 18-8 stainless steel button head Torx T27H tamper proof screws. The hand hole is to be 90 degrees from the arms. The center line of the hand hole shall be 14 inches above the mounting plate.

\section*{B3 Loading and Stability}

The \(30^{\prime}-0\) " assembly furnished under this specification shall support a fifty-pound fixture of an EPA of 3 on each arm when equipped with a pair of 6 ' upsweep arms. All pole designs shall meet the latest revision of the AASHTO specifications for these poles as defined in their STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. The manufacturer shall submit engineering calculations for lighting poles to show that maximum stress and deflections do not exceed specified performance requirements under full design loading, as well as other certified reports and data which indicate that the poles meet all load requirements, within 30 days of the bid award. Engineering calculations shall be prepared and sealed by an engineer licensed in the State of Wisconsin.

The entire horizontal and vertical "wind sail" area of the pole assembly subject to wind load including arm and luminaire shall be designed to withstand the AASHTO standard specifications, from above, for wind load requirements for a 90 MPH wind load with gust factor computed per section 3.8.5.and height and exposure factors from table 3-5.
All Welding shall be according to the latest applicable A.S.M.E. Standards.
The manufacturer warrants that the pole supplied will be of merchantable quality will conform to applicable specifications, drawings, designs, samples, or descriptions, will be free from defects in materials and workmanship and will be fit for the particular purpose intended.
A plaque with the pole number as shown on the plans shall be affixed onto the pole shaft using high intensity reflective 2 " silver numerals on black background.

\section*{B. 4 Riser Cable}

Pole is to be wired as shown on the plans. A separate riser cable will be required to be installed inside of pole for each lighting fixture on the pole. The riser cable(s) shall be 35 feet in length and cut from copper 2\#12 UF with ground cable. One wire shall be black, the other shall be white, and the ground to be green. All splicing is to be done inside the metal housing. The ground wires shall be spliced inside the metal housing and grounded to the housing and each fixture. The cable shall conform to NEC Article 340. The riser cable shall be continuous without splices. The electrical system in use utilizes a full system ground. The neutral is not to be grounded at any point.

\section*{C Construction}

Install the bolt down pole as specified in the plan and details. After razing the pole use normal pole shaft raking techniques to ensure the centerline of shaft appears vertical to the horizon.

\section*{D Measurement}

The department will measure this Poles Type 30-AL-BD by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.321 & Poles Type 30-AL-BD & EACH
\end{tabular}

Payment is full compensation for the pole, riser cable(s), and all connections.

\section*{68. 35-FT. Wood Pole, Item SPV.0060.323.}

\section*{A Description}

This work shall consist of furnishing and installing wood poles for temporary lighting at the locations shown on the plans and according to requirements of the plans, specifications and contract, and all necessary miscellaneous hardware needed to complete the installation of the poles. The poles will be utilizing to provide temporary lighting in the respective area. All work shall be according to standard spec 651.

\section*{B Materials}

\section*{B. 1 Wood Pole}

The poles shall be Western Red Cedar poles which comply in every detail with the American Standards Association's Specifications 05.2-1979 "Specifications for Dimensions for Wood Poles", or the latest version thereof.

\section*{B.1.1 Shaving}

All poles shall be machine shaved the entire length.

\section*{B.1.2.Gaining and Drilling}

Poles shall be slab gained from the top of the pole to a point 48 " below the top of the pole. 1st and 2nd gains are to be drilled with a 11/16 "diameter drill. 1st gain 8 " from the top of the pole and 2 nd gain 24 " below 1st gain.

\section*{B.1.3 Incising}

All poles shall be incised throughout that portion of the pole surface terminating one foot above and two feet below the standard ground line per A.W.P.A. Specifications \#C8-73.

\section*{B.1.4 Treatment}

All poles shall be butt treated by the thermal process per A.W.P.A. specifications \#C7-73. The treatment shall be water borne preservative, CHROMATED COPPER ARSENATE "CCA" Type "C" per A.W.P.A. specifications \#P5-83. Only Oxide formulated chemicals can be used.

\section*{B.1.5 Inspection and Acceptance}

An independent inspection agency shall inspect the poles per A.W.P.A. Specifications \#M2-83. A certified copy of the test report must be delivered with each load shipped.

\section*{B.1.6 A.W.P.A. Designations}

Reference to A.W.P.A. designation shall mean the latest revision of the particular A.W.P.A. specification and/or test procedure in effect at time this bid is let for the item/product described herein.

\section*{B. 2 Pea Gravel}

The pea gravel must consist of particles from natural gravel deposits and shall be composed of clean, hard, tough, durable pebbles free from adherent coatings, soft, flat, or elongated particles, and organic or other deteriorative matter. The following limits apply to deteriorative substances in the pea gravel.
\begin{tabular}{|c|c|}
\hline Chert & not over 4\% by weight \\
\hline Coal & not over ½\% by weight \\
\hline \multicolumn{2}{|l|}{Clay lump and friable particles not over \(1 / 2 \%\) by weight} \\
\hline Soft fragments & not over \(1 \%\) by weight \\
\hline Any combination of the above & not over 4\% by weight \\
\hline Flat, elongated or laminated pcs. & . Not over \(10 \%\) by weight \\
\hline (Flat and elongated particles are those having a length more than five times the average thickness) & \\
\hline \multicolumn{2}{|l|}{Grading requirements of the pea gravel are as follows:} \\
\hline Passing 3/8-inch sieve & 95\% to 100\% \\
\hline Passing No. 4 sieve & 25\% to 50\% \\
\hline Passing No. 8 sieve & 0\% to 5\% \\
\hline Each unit will require approximat & tely 0.25 cubic yard of pea graver \\
\hline
\end{tabular}

\section*{B. 3 Grounding Electrode and Conductor}

Furnish and install an approved 5/8-Inch diameter x 8-foot-long copper clad grounding electrode per NEC, WSEC, and local utility codes. Run a single unbroken length of stranded bare \#6 copper wire from the grounding electrode to the top of wood pole leaving a 2-foot coil. Make the electrical connection between the grounding electrode conductor and grounding electrode by the exothermic weld method.

\section*{C Construction}

Wood Poles shall be installed to an embedment depth of 6 foot for a 35 ft . pole, 6 foot 6 inches for a 40 ft . pole, 7 foot for a 45 ft . pole, and according to plan details. The holes can be bored, hydrovac, or hand dug but all shall be cylindrical. If any part of the hole is within three feet of a buried utility, the holes must be hand dug or hydrovac. No other method of setting poles is acceptable. The poles should be blocked and or raked as noted on the construction drawings.

In some cases, the poles are to be installed in areas of concrete walk. Prior to concrete removal, the concrete is to be saw cut to such size to allow for adequate room for pole and cable installation. Saw cutting for removal should be rectangular in shape. The contractor will be responsible for disposing all debris from excavation and sidewalk removal. The spoils are not to be used as backfill.

There is to be a minimum of a 6 inch bed of tamped pea gravel as a base for the pole. The area around the pole is to be backfilled with pea gravel and be tamped every 12 inches and filled to finished grade.

\section*{D Measurement}

The department will measure Wood Poles by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.323 & 35 FT. Wood Pole & EACH
\end{tabular}

Payment is full compensation for shipping to the site, excavating for base, and placement of pole.
69. City Furnished High Pressure Sodium Ballasts 1HSX - Single Coil, Item SPV.0060.337; City Furnished High Pressure Sodium Ballasts 11HSX - Double Coil, Item SPV.0060.338.

\section*{A Description}

The work under this item is for installing two (2) 100watt ballasts types, one being a 1 HSX single coil ballast for one lamp and a 11HSX double coil ballast for two lamps. All work shall be according to standard spec 651.

\section*{B Materials}

The city furnished ballasts 1HSX Single Coil and 11HSX Double Coil shall be for the high-pressure sodium vapor lamps, which are made to the "American Standard Physical and Electrical Characteristics of Electric Discharge Lamps" as listed.
100-watt (55 volt) C78.1354-90

Type: The series high pressure sodium ballast shall be of 60 Hz , single phase design, suitable for thermovacuum impregnation.

General Requirements: The ballast shall consist of a primary winding, a secondary winding and core; suitable for use on 6.6 ampere constant current circuit where the normal operating primary voltage will not exceed 4,000 volts. The secondary winding shall deliver the necessary voltage and current to start the lamps at \(-20^{\circ} \mathrm{F}\).

Power Factor: When operating on a 60 -cycle sine wave alternating current of normal effective value with the normal effective value with the normal secondary load, the power factor shall be within limits specified in the schedule, Paragraph "F", for each respective size of transformers.

Secondary Voltage: The secondary voltage, switch normal primary current of 6.6 amperes, shall be of such values as to assure proper starting and normal operation of the lamps. The open circuit secondary voltages shall not exceed the values listed in paragraph " \(F\) ".

Core Construction: The core is laminated and held together by means of bolts, clamps, or other industry devices.

Leads and Terminations: The primary winding is extended 8 " beyond the coil, with the final five inches of each lead tinned. The secondary winding is terminated with leads, consisting of one black and one white \#12 A.W.G., 7 strand, 600 volt insulation wires, which are suitable for wet locations, and be 18" in length. The white wire is connected to the start of the secondary winding (closest to the core) and is connected to the core assembly. The black wire is connected to end of the secondary winding. These leads are permanently fixed to the secondary windings in a manner to eliminate flexing of the secondary winding wire.

Windings: The primary and secondary windings are wound with properly sized copper wire with approved insulation.

Insulation: The insulation used between the core and primary winding, core and secondary winding, and primary to secondary windings is moisture-proof, non-deteriorating from normal operating heat, poured compound, or epoxy resins. The core and coil assembly is wax free. The insulation is capable of withstanding all test voltages.

Rated Circuit Voltage: The series ballast is designed to operate with its primary winding at the rated circuit voltage; this being the maximum output voltage of a 20 KW 6.6 ampere secondary street lighting regulator. The rated voltage of the ballast is 10.5 kilovolts.
Corona Level: The ballasts furnished is corona free at 4 KV .
Ballast Regulation: With primary current at designed value ( 6.6 amps ) the ballast will have a load characteristic (voltage-wattage curve) such that the characteristic curve passes through the diagram of the lamp operating limits (trapezoidal) as given on the relevant data sheet of the lamp standards in the ANSI C78.1300 series. The ballast curve within its designated range of primary current shall intersect both of the lamp-voltage limit lines between the wattage limits lines throughout the full range of lamp voltage.

Lamp Dropout: At constant primary current, a ballast will have a load characteristic (voltage-wattage curve) such that the point of lamp dropout shall not be at a lamp voltage less than the maximum voltage line of the diagram of the lamp operating limits (trapezoidal) as given in the applicable lamp standards in the ANSI C78.1300 series.
\[
\begin{aligned}
& \text { Primary Schedule } \\
& 100 \text { W - Lamp Size } \\
& 27.5 \text { - Nominal Volts } \\
& 6.6 \text { - Amps } \\
& 145 \text { - Nominal Watts } \\
& 80 \% \text { - Nominal P.F. }
\end{aligned}
\]

\section*{Secondary Schedule}

55 - Nominal Volts (Min. 42), (Max. 63)
3.2 - Starting Amps (Max.)
2.1 - Operating Amps (Lamp Current RMS)

Open Circuit Voltage (Min. 110), Max. 400)

\section*{Voltage and Current are RMS}

These values are measured when the lamp is operated with rated primary voltage impressed on the circuit and at an ambient temperature of \(25^{\circ} \mathrm{C}\)., 30 minutes after the circuit is energized.

Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four working days before with the exact number of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.
The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.
Street Lighting Shop Yard Contact Person:
Neal Karweik - (414) 286-5943 office / (414) 708-4245 cell
All the materials must be picked up all at one time.
The Street Lighting Shop Yard hours for picking up materials is from 8:00 AM to 2:00 PM Monday through Friday.
Contractor must be out of the shop yard by 2:00 PM

\section*{C Construction}

The ballasts shall be attached to the pole using the appropriate banding and hardware. Perform all splices and water proof connections required for the ignitor and ballasts to fire and energize the luminaire.

\section*{D Measurement}

The department will measure City Furnished High Pressure Sodium Ballasts (type) by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.337 & City Furnished High Pressure Sodium Ballasts 1HSX - Single Coil & EACH \\
SPV.0060.338 & City Furnished High Pressure Sodium Ballasts 11HSX - Double Coil & EACH
\end{tabular}

Payment is full compensation for installing City Furnished High Pressure Sodium Ballasts 1HSX Single Coil and 11HSX Double Coil; for attaching and securing to poles, making all water proof connections; and for all testing..

\section*{70. Submersible Multitap 3-Port Pre-Insulated Connector, Item SPV.0060.342; Submersible Multitap 4-Port Pre-Insulated Connector, Item SPV.0060.343.}

\section*{A Description}

The work under this item is for furnishing and installation of the submersible pre-insulated connector for 2/0— 14AWG wire, as shown in plans and special details.

\section*{B Materials}

The connector shall be fabricated from high strength 6060-T6 aluminum alloy and encapsulated in rubber with \(\geq 125\) mils with high dielectric strength.

The connector shall be abrasion, chemical and UV resistant and not combustible.
The connector shall be submersible to 6 ' of damp/wet location.
The connector shall meet UL486D and ANSI C119.4 Class A specification.
The connector shall be AL9CU dual rated for aluminum and copper cables, operating at 600 V at temperature between \(-45^{\circ} \mathrm{C}\) and \(90^{\circ} \mathrm{C}\).

The connector color shall be in black.
The connector shall be \(3.65^{\prime \prime}(\mathrm{L}) \times 2.65^{\prime \prime}(\mathrm{W}) \times 2.1^{\prime \prime}(\mathrm{H})\) for 4 ports, \(2.79^{\prime \prime}(\mathrm{L}) \times 2.65^{\prime \prime}(\mathrm{W}) \times 2.1^{\prime \prime}(\mathrm{H})\) for 3 ports. Variation in dimension will be considered.

\section*{C Construction}

Install Submersible Multitap Pre-Insulated Connector as shown within the pull box according to current City of Milwaukee standards and manufacturer's installation instruction for wire splicing and waterproofing. The connector shall be kept on top of the wire coils within the pull box.

\section*{D Measurement}

The department will measure Submersible (number) Multitap Pre-Insulated Connector by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.342 & Submersible Multitap 3-Port Pre-insulated Connector & EACH \\
SPV.0060.343 & Submersible Multitap 4-Port Pre-insulated Connector & EACH
\end{tabular}

Payment is full compensation for furnishing and installing.

\section*{71. Luminaire Arms Single Member 6-Ft. (Special) Item SPV.0060.345.}

\section*{A Description}

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651.

\section*{B Materials}

City of Milwaukee per City Spec. and drawing C-87-76. Bracket arm material is Aluminum Alloy, with a satin finish.
- Bracket arm is 2" schedule 80 (2.375" O.D. x .218" wall) Aluminum pipe arm (6061-T6 Alloy).
- Bracket arm has a 7'-3" radius bend, with a 9-inch straight piece at the end of the arm for mounting the luminaire.
- Mounting plate is \(1 / 2^{\prime \prime}\) thick Aluminum (6061-T6 Alloy).
- \(3 / 4\) "I.D. rubber grommet inserted in 1 1/16" Diameter hole located 8 inches from mounting plate.
- 1-inch I.D. rubber grommet for use in pole shaft.

\section*{C Construction}

The bracket shall be attached to the pole with two \(1 / 2\) " \(\times 13\) NC \(\times 11 / 2^{\prime \prime}\) long stainless-steel hex bolts, two \(11 / 4\) " O.D. stainless steel flat washers and two \(1 / 2^{\prime \prime}\) stainless steel lock washers. Anti-seize needs to be applied to the threads of the bolts before assembly.

\section*{D Measurement}

The department will measure Luminaire Arms Single Member 6-Ft. (Special), by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.345 & Luminaire Arms Single Member 6-Ft. (Special) & EACH
\end{tabular}
SPV.0060.345 Luminaire Arms Single Member 6-Ft. (Special) EACH

Payment is full compensation for the bracket arm, and all connections. This bid price also includes for furnishing labor, equipment, coordination and all materials and incidentals necessary to complete the work.

\section*{72. Luminaire Arms Single Member 6-Ft (WP Mount); Item SPV.0060.346.}

A Description

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651.

\section*{B Materials}

6 ft . Aluminum Upsweep Wood Pole Mounting Bracket - The aluminum bracket shall be fabricated from 2 " schedule 40 aluminum pipe. It shall have a minimum 27 " rise, and a minimum of 9 " straight end section that is suited for use with a slip-fit luminaire. The wire shall be copper \(2 \# 12\) UF with ground wire. One wire shall be black, the other shall be white. The ground wire shall be grounded to fixture. The cable shall conform to NEC Article 339.

\section*{C Construction}

Mounting height-The height to light center shall be 26 ' unless otherwise specified on the drawing or indicated in the field by the engineer. The bracket shall be attached to the wood pole with two \(3 / 8\) "x 3 " long) galvanized wood lag bolts, and one \(5 / 8\) "x ( 10 " to 12 " long) galvanized through bolt with galvanized washers and nut.

\section*{D Measurement}

The department will measure Luminaires Arms Single Member 6-Ft (WP Mount) by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.346 & Luminaire Arms Single Member 6-Ft (WP Mount) & EACH
\end{tabular}

Payment is full compensation for the bracket arm, and all connections.

\section*{73. Luminaire Arms Single Member 8-Ft. (Special), Item SPV.0060.347.}

\section*{A Description}

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651 .

\section*{B Materials}

Fabricated for the City of Milwaukee per City Spec. see plan set for detail drawing sheet 5 of 5 .
Bracket Arm Base Coat - Hot Dip Galvanized to ASTM A123
Bracket arm is 2 " schedule 80 ( \(2.375^{\prime \prime}\) O.D. tubing ( \(0.218^{\prime \prime}\) wall)
A501, A513, A618 ASTM Designation, 36 Min. yield (KSI)
Length of arm shaft \(=8^{\prime}-5.19^{\prime \prime}\) and curved to City Spec's.
Mounting plate is Simplex plate, A36 ASTM Designation, 36 Min. yield (KSI)

\section*{C Construction}

The bracket shall be attached to the pole with two \(1 / 2^{\prime \prime} \times 13\) NC \(\times 1 \frac{1}{1 / 2}\) " long stainless steel hex bolts with two \(11 / 4\) " O.D. stainless steel flat washers, two \(1 / 2^{\prime \prime}\) stainless steel split lock washers. Anti-seize needs to be applied to the threads of the bolts before assembly.
Apply a thin layer of dielectric grease to the back of the mounting plate of the bracket arm and to the mounting hardware to repel moisture and protects connections against corrosion.

\section*{D Measurement}

The department will measure this item Luminaire Arms Single Member 8-Ft. by each unit, acceptably completed.

\section*{E Payment}

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

SPV.0060.347
Luminaire Arms Single Member 8-Ft. (Special)
EACH

Payment is full compensation for the bracket arm, and all connections.

\section*{74. Luminaire Arms Single Member 8-Ft (WP Mount); Item SPV.0060.348.}

\section*{A Description}

The work under this item is for furnishing and installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651.

\section*{B Materials}

8 ft. Aluminum Upsweep Wood Pole Mounting Bracket - The aluminum bracket shall be fabricated from 2 " schedule 40 aluminum pipe. It shall have a minimum 27 " rise, and a minimum of 9 " straight end section that is suited for use with a slip-fit luminaire. The wire shall be copper \(2 \# 12\) UF with ground wire. One wire shall be black, the other shall be white. The ground wire shall be grounded to fixture. The cable shall conform to NEC Article 339.

\section*{C Construction}

Mounting height-The height to light center shall be 26 ' unless otherwise specified on the drawing or indicated in the field by the engineer. The bracket shall be attached to the wood pole with two \(3 / 8\) "x 3 " long) galvanized wood lag bolts, and one \(5 / 8 " x(10 "\) to \(12 "\) long) galvanized through bolt with galvanized washers and nut.

\section*{D Measurement}

The department will measure Luminaire Arms Single Member 8-Ft (WP Mount) by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.348 & Luminaire Arms Single Member 8-Ft (WP Mount) & EACH
\end{tabular}

Payment is full compensation for the bracket arm, and all connections.

\section*{75. City Furnished High Pressure Sodium Ballasts 2HSX - Single Coil, Item SPV.0060.360; City Furnished High Pressure Sodium Ballasts 22HSX - Double Coil, Item SPV.0060.361}

\section*{A Description}

The work under this item is for installing two 150 watt ballasts types, one being a 2 HSX single coil ballast for one lamp and a 22HSX double coil ballast for two lamps. All work shall be according to standard spec 651.

\section*{B Materials}

The city furnished ballasts 2HSX Single Coil and 22HSX Double Coil shall be for the high-pressure sodium vapor lamps, which are made to the "American Standard Physical and Electrical Characteristics of Electric Discharge Lamps" as listed.
150-watt (55 volt) C78.1355-89

Type: The series high pressure sodium ballast shall be of 60 Hz , single phase design, suitable for thermovacuum impregnation.

General Requirements: The ballast shall consist of a primary winding, a secondary winding and core; suitable for use on 6.6 ampere constant current circuit where the normal operating primary voltage will not exceed 4,000 volts. The secondary winding shall deliver the necessary voltage and current to start the lamps at \(-20^{\circ} \mathrm{F}\).

Power Factor: When operating on a 60-cycle sine wave alternating current of normal effective value with the normal effective value with the normal secondary load, the power factor shall be within limits specified in the schedule, Paragraph "F", for each respective size of transformers.

Secondary Voltage: The secondary voltage, switch normal primary current of 6.6 amperes, shall be of such values as to assure proper starting and normal operation of the lamps. The open circuit secondary voltages shall not exceed the values listed in paragraph "F".
Core Construction: The core is laminated and held together by means of bolts, clamps, or other industry devices.

Leads and Terminations: The primary winding is extended 8" beyond the coil, with the final five inches of each lead tinned. The secondary winding is terminated with leads, consisting of one black and one white \#12 A.W.G., 7 strand, 600 volt insulation wires, which are suitable for wet locations, and be 18 " in length. The white wire is connected to the start of the secondary winding (closest to the core) and is connected to the core assembly. The black wire is connected to end of the secondary winding. These leads are permanently fixed to the secondary windings in a manner to eliminate flexing of the secondary winding wire.

Windings: The primary and secondary windings are wound with properly sized copper wire with approved insulation.
Insulation: The insulation used between the core and primary winding, core and secondary winding, and primary to secondary windings is moisture-proof, non-deteriorating from normal operating heat, poured compound, or epoxy resins. The core and coil assembly is wax free. The insulation is capable of withstanding all test voltages.

Rated Circuit Voltage: The series ballast is designed to operate with its primary winding at the rated circuit voltage; this being the maximum output voltage of a 20 KW 6.6 ampere secondary street lighting regulator. The rated voltage of the ballast is 10.5 kilovolts.
Corona Level: The ballasts furnished is corona free at 4 KV .
Ballast Regulation: With primary current at designed value ( 6.6 amps ) the ballast will have a load characteristic (voltage-wattage curve) such that the characteristic curve passes through the diagram of the lamp operating limits (trapezoidal) as given on the relevant data sheet of the lamp standards in the ANSI C78.1300 series. The ballast curve within its designated range of primary current shall intersect both of the lamp-voltage limit lines between the wattage limits lines throughout the full range of lamp voltage.
Lamp Dropout: At constant primary current, a ballast will have a load characteristic (voltage-wattage curve) such that the point of lamp dropout shall not be at a lamp voltage less than the maximum voltage line of the diagram of the lamp operating limits (trapezoidal) as given in the applicable lamp standards in the ANSI C78.1300 series.

\section*{Primary Schedule}

150 W - Lamp Size
36 - Nominal Volts
6.6 - Amps

195 - Nominal Watts
82 \% - Nominal P.F.

\section*{Secondary Schedule}

55 - Nominal Volts (Min. 452), (Max. 64)
4.8 - Starting Amps (Max.)
3.2 - Operating Amps (Lamp Current RMS)

Open Circuit Voltage (Min. 110), Max. 400)

\section*{Voltage and Current are RMS}

These values are measured when the lamp is operated with rated primary voltage impressed on the circuit and at an ambient temperature of \(25^{\circ} \mathrm{C}\)., 30 minutes after the circuit is energized.
Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four working days before with the exact number of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.
The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.

Street Lighting Shop Yard Contact Person:
Neal Karweik - (414) 286-5943 office / (414) 708-4245 cell
All the materials must be picked up all at one time.

The Street Lighting Shop Yard hours for picking up materials is from 8:00 AM to 2:00 PM Monday through Friday.
Contractor must be out of the shop yard by 2:00 PM NO LATER.

\section*{C Construction}

The ballasts shall be attached to the pole using the appropriate banding and hardware. Perform all splices and water proof connections required for the ignitor and ballasts to fire and energize the luminaire.

\section*{D Measurement}

The department will measure City Furnished High Pressure Sodium Ballasts (type) by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.360 & City Furnished High Pressure Sodium Ballasts 2HSX - Single Coil & EACH \\
SPV.0060.361 & City Furnished High Pressure Sodium Ballasts 22HSX - Double Coil & EACH
\end{tabular}

Payment is full compensation for installing City Furnished High Pressure Sodium Ballasts 2HSX Single Coil and 22HSX Double Coil; for attaching and securing to poles, making all water proof connections; and for all testing.

\section*{76. City Furnished Luminaire Utility HPS 2 Multiple, Item SPV.0060.366;}

City Furnished Luminaire Utility HPS 3 Multiple, Item SPV.0060.367.

\section*{A Description}

The work under this item is for installing possibly two different wattages of High-Pressure Sodium (HPS) luminaires with type 2 light distribution. All work shall be according to standard spec 651.

\section*{B Materials}

Descriptions of the installing City-Furnished Luminaire Utility HPS types 2S2, 3S2
Luminaire Utility HPS 2 Multiple
2 - 150watt
S - High Pressure Sodium Lamp
2 - Type 2 refractor

Luminaire Utility HPS 3 Multiple
3 - 250watt
S- High Pressure Sodium Lamp
2 - Type 2 refractor
Casting. Rugged die-cast aluminum that is powder-coated for durability and corrosion resistance. All casting shall be free from pits, blowholes, or other irregularities.

Paint. Fixture shall be cleaned prior to application of primer coat and standard gray paint
Mounting. Require four-bolt mast arm mounting.
Fasteners. All hardware (screws, hinge pins, springs, and etc.) shall be stainless steel
Terminal block. 3 wire operation.
Wattage/Source. 150 \& 250-watt, High Pressure Sodium
Voltage. 240 volt
Ballast. Reactor High Power Factor

\section*{Starter. Encapsulated Plug-in}

Lamp. 150 \& 250-watt clear high-pressure sodium with E39 mogul base.
Reflectors. Anodized aluminum with drop glass prismatic refractor
Refractor. Roadway Type II
Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four (4) working days before with the exact number of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.

The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.
Street Lighting Shop Yard Contact Person:
Neal Karweik - (414) 286-5943 office / (414) 708-4245 cell
All the materials must be picked up all at one time.
The Street Lighting Shop Yard hours for picking up materials is from 8:00 AM to 2:00 PM Monday through Friday.
Contractor must be out of the shop yard by 2:00 PM NO LATER.

\section*{C Construction}

The luminaire shall be attached to the luminaire arm using the supplied hardware. Perform all splices and connections required for the operation of luminaire.

Use Anti-Seize Lubricant on all the bolt threads.

\section*{D Measurement}

The department will measure City Furnished Luminaire Utility HPS (type) Multiple by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0060.366 & City Furnished Luminaire Utility HPS 2 Multiple & EACH \\
SPV. 0060.367 & City Furnished Luminaire Utility HPS 3 Multiple & EACH
\end{tabular}

Payment is full compensation for installing City Furnished Luminaires Utility HPS 2 \& 3; for making all connections; and for all testing.

\section*{77. City Furnished Luminaire Utility HPS 2 Series, Item SPV.0060.368;} City Furnished Luminaire Utility HPS 3 Series, Item SPV.0060.369.

\section*{A Description}

The work under this item is for installing possibly two (2) different wattages of High-Pressure Sodium (HPS) luminaires with type 2 light distribution. All work shall be according to standard spec 651.

\section*{B Materials}

Descriptions of the installing City-Furnished Luminaire Utility HPS types 2S2, 3S2
Luminaire Utility HPS 2 Series
2 - 150watt
S - High Pressure Sodium Lamp
2 - Type 2 refractor

Luminaire Utility HPS 3 Series
3-250watt
S - High Pressure Sodium Lamp
2 - Type 2 refractor
Casting. Rugged die-cast aluminum that is powder-coated for durability and corrosion resistance. All casting shall be free from pits, blowholes, or other irregularities.
Paint. Fixture shall be cleaned prior to application of primer coat and standard gray paint
Mounting. Require four-bolt mast arm mounting.
Fasteners. All hardware (screws, hinge pins, springs, and etc.) shall be stainless steel
Terminal block. 3 wire operation.
Wattage/Source. 150 \& 250-watt, High Pressure Sodium
Voltage.
Ballast. None
Starter. None
Capacitor None
Ignitor - \(\mathbf{5 5}\)-volt for 150 watt, and \(\mathbf{1 0 0 - v o l t ~ f o r ~ 2 5 0 w a t t ~}\)
Lamp. 150 \& 250-watt clear high-pressure sodium with E39 mogul base.
Reflectors. Anodized aluminum with drop glass prismatic refractor
Refractor. Roadway Type II
Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four working days before with the exact number of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.
The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.
Street Lighting Shop Yard Contact Person:
Neal Karweik - 414-286-5943 (office) 414-708-4245 (Cell)
All the materials must be picked up all at one time.
The Street Lighting Shop Yard hours for picking up materials is from 8am to 2pm Monday through Friday.
Contractor must be out of the shop yard by 2pm NO LATER.

\section*{C Construction}

The luminaire shall be attached to the luminaire arm using the supplied hardware. Perform all splices and connections required for the operation of luminaire.
Use Anti-Seize Lubricant on all the bolt threads.

\section*{D Measurement}

The department will measure City Furnished Luminaire Utility HPS (type) Series by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.368 & City Furnished Luminaire Utility HPS 2 Series & EACH \\
SPV.0060.369 & City Furnished Luminaire Utility HPS 3 Series & EACH
\end{tabular}

Payment is full compensation for installing City Furnished Luminaires; for making all connections; and for all testing..

\section*{78. City Furnished High Pressure Sodium Ballasts 3HSX - Single Coil, Item SPV.0060.370; City Furnished High Pressure Sodium Ballasts 33HSX - Double Coil, Item SPV.0060.371.}

\section*{A Description}

The work under this item is for installing two 250watt ballasts types, one being a 3HSX single coil ballast for one lamp and a 33HSX double coil ballast for two lamps. All work shall be according to standard spec 651.

\section*{B Materials}

The city furnished ballasts 3HSX Single Coil and 33HSX Double Coil shall be for the high-pressure sodium vapor lamps, which are made to the "American Standard Physical and Electrical Characteristics of Electric Discharge Lamps" as listed.
250-watt (100 volt) C78.1351-90

Type: The series high pressure sodium ballast shall be of 60 Hz , single phase design, suitable for thermovacuum impregnation.

General Requirements: The ballast shall consist of a primary winding, a secondary winding and core; suitable for use on 6.6 ampere constant current circuit where the normal operating primary voltage will not exceed 4,000 volts. The secondary winding shall deliver the necessary voltage and current to start the lamps at \(-20^{\circ} \mathrm{F}\).
Power Factor: When operating on a 60 -cycle sine wave alternating current of normal effective value with the normal effective value with the normal secondary load, the power factor shall be within limits specified in the schedule, Paragraph " \(F\) ", for each respective size of transformers.

Secondary Voltage: The secondary voltage, switch normal primary current of 6.6 amperes, shall be of such values as to assure proper starting and normal operation of the lamps. The open circuit secondary voltages shall not exceed the values listed in paragraph "F".
Core Construction: The core is laminated and held together by means of bolts, clamps, or other industry devices.

Leads and Terminations: The primary winding is extended 8 " beyond the coil, with the final 5 inches of each lead tinned. The secondary winding is terminated with leads, consisting of one black and one white \#12 A.W.G., 7 strand, 600 volt insulation wires, which are suitable for wet locations, and be 18 " in length. The white wire is connected to the start of the secondary winding (closest to the core) and is connected to the core assembly. The black wire is connected to end of the secondary winding. These leads are permanently fixed to the secondary windings in a manner to eliminate flexing of the secondary winding wire.

Windings: The primary and secondary windings are wound with properly sized copper wire with approved insulation.

Insulation: The insulation used between the core and primary winding, core and secondary winding, and primary to secondary windings is moisture-proof, non-deteriorating from normal operating heat, poured compound, or epoxy resins. The core and coil assembly is wax free. The insulation is capable of withstanding all test voltages.

Rated Circuit Voltage: The series ballast is designed to operate with its primary winding at the rated circuit voltage; this being the maximum output voltage of a 20 KW 6.6 ampere secondary street lighting regulator. The rated voltage of the ballast is 10.5 kilovolts.
Corona Level: The ballasts furnished is corona free at 4 KV .
Ballast Regulation: With primary current at designed value ( 6.6 amps ) the ballast will have a load characteristic (voltage-wattage curve) such that the characteristic curve passes through the diagram of the lamp operating limits (trapezoidal) as given on the relevant data sheet of the lamp standards in the ANSI C78.1300 series. The ballast curve within its designated range of primary current shall intersect both of the lamp-voltage limit lines between the wattage limits lines throughout the full range of lamp voltage.
Lamp Dropout: At constant primary current, a ballast will have a load characteristic (voltage-wattage curve) such that the point of lamp dropout shall not be at a lamp voltage less than the maximum voltage line of the diagram of the lamp operating limits (trapezoidal) as given in the applicable lamp standards in the ANSI C78.1300 series.

\section*{Primary Schedule}

\section*{Secondary Schedule}

250 W - Lamp Size

60 - Nominal Volts 4.5 - Starting Amps (Max.)
6.6 - Amps \(\quad 3.0\) - Operating Amps (Lamp Current RMS)

315 - Nominal Watts
Open Circuit Voltage (Min. 195), Max. 400)
80 \% - Nominal P.F.

Voltage and Current are RMS

These values are measured when the lamp is operated with rated primary voltage impressed on the circuit and at an ambient temperature of \(25^{\circ} \mathrm{C}\)., 30 minutes after the circuit is energized.
Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four (4) working days before with the exact number of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.

The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.

Street Lighting Shop Yard Contact Person:
Neal Karweik - 414-286-5943 (office) 414-708-4245 (Cell)
All the materials must be picked up all at one time.
The Street Lighting Shop Yard hours for picking up materials is from 8am to 2pm Monday through Friday.
Contractor must be out of the shop yard by 2pm NO LATER.

\section*{C Construction}

The ballasts shall be attached to the pole using the appropriate banding and hardware. Perform all splices and water proof connections required for the ignitor and ballasts to fire and energize the luminaire.

\section*{D Measurement}

The department will measure City Furnished High Pressure Sodium Ballasts (type) Coil y each unit, acceptably completed

\section*{E Payment}

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

SPV.0060.370
City Furnished High Pressure Sodium Ballasts 3HSX - Single Coil
EACH
SPV.0060.371 City Furnished High Pressure Sodium Ballasts 33HSX - Double Coil EACH
Payment is full compensation for installing City Furnished High Pressure Sodium Ballasts 3HSX Single Coil and 33HSX Double Coil; for attaching and securing to poles, making all water proof connections; and for all testing
79. Luminaire Utility 1LED2, Item SPV.0060.374;

Luminaire Utility 2LED2, Item SPV.0060.375;
Luminaire Utility 3LED2, Item SPV.0060.376;
Luminaire Utility 2LED3, Item SPV.0060.377;
Luminaire Utility 3LED3, Item SPV.0060.379.

\section*{A Description}

Furnish and install street lighting fixture according to current City of Milwaukee Electrical methods as shown in Typical Installation section and National Electrical Code standards. All work shall be according to standard spec 651 and latest City of Milwaukee specifications.

\section*{B Materials}

\section*{Table 1A Luminaire Utility Specification}
\begin{tabular}{|c|c|c|c|c|}
\hline & Luminaire 1LED (Type II and Type V light distribution) & Luminaire 90W LED (Type II, III distribution) & Luminaire 135W LED (Type II and III light distribution) & Luminaire 90W LED (Type V distribution) \\
\hline \begin{tabular}{l}
Factory set input power \\
(Watt)
\end{tabular} & \(50 \pm 1 \%\) & \(90 \pm 1 \%\) & \(135 \pm 1 \%\) & \(90 \pm 1 \%\) \\
\hline \# of LED & \(\geq 32\) & \(\geq 40\) & \(\geq 40\) & \(\geq 40\) \\
\hline NEMA Label & 1LED2(for Type II) 1LED5 (for Type V) & 2LED2 (for Type II) 2LED3 (for Type III) & 3LED2 (for Type II) 3LED3 (for Type III) & 2LED5 (Type V) \\
\hline \begin{tabular}{l}
Max. \\
Dimension
\end{tabular} & \[
\begin{gathered}
22.75 "(\mathrm{~W}) \text { * } 4.38 \text { " (H) } \\
\text { *8.38"(D) }
\end{gathered}
\] & \[
\begin{gathered}
23.25 "(\mathrm{D}) * 4.38 "(\mathrm{H}) \\
* 11 "(\mathrm{~W})
\end{gathered}
\] & \[
\begin{gathered}
23.25 "(\mathrm{D}) * 4.38 "(\mathrm{H}) \\
* 11^{\prime \prime}(\mathrm{D})
\end{gathered}
\] & \[
\begin{gathered}
23.25^{\prime \prime}(\mathrm{D})^{*} 4.38 "(\mathrm{H}) \\
* 11 \text { "(D) }
\end{gathered}
\] \\
\hline EPA (sq. ft.) & \(\leq 0.52\) & \(\leq 0.53\) & \(\leq 0.53\) & \(\leq 0.53\) \\
\hline Weight & \(\leq 9.4 \mathrm{lbs}\) & \(\leq 12.2 \mathrm{lbs}\) & \(\leq 12.2 \mathrm{lbs}\) & \(\leq 12.2 \mathrm{lbs}\) \\
\hline BUG Rating & B2-U0-G2 & B3-U0-G3 & B3-U0-G3 & B4-U0-G2 \\
\hline Min. Efficacy (lumen/Watt) & 121 & 117 & 112 & 134 \\
\hline Min. Delivered Lumens & 6,178 & 10,618 & 14,250 & 10,370 \\
\hline
\end{tabular}
- Technical Specifications: All features below shall be incorporated into the equipment and all items shall be furnished and installed into a complete unit ready for operation.
- Type: The luminaires shall be designed so it can efficiently produce uniform illumination according to I.E.S. Type II, III and V light distribution according to the lighting plan and Table 1A.
- Housing: The housing and door shall be rugged, high quality, cast aluminum for maximum strength, durability and lasting beauty. All castings shall be free from pits, blowholes, or other irregularities. All edges are to be free from burrs. The housing shall have an integral leveling pad or other suitable means for quick, easy and proper positioning of the luminaire.
- Door: The door shall be hinged and easily opened for routine maintenance. All component parts shall be easily accessible with the lower housing opened. Tool-less entry is required.
- Leveling: A Bubble level is to be located inside the electrical compartment for easy leveling at installation.
- Hinges: Hinges shall be so constructed and designed to accurately position the door and assure a positive locking with the housing. The hinges shall be provided with a safety catch to prevent the accidental disengagement of the door during servicing.
- Finish: The entire housing shall be polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process shall yield a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).
- Color: The luminaire shall be grey in color unless otherwise specified.
- Label: There shall be a NEMA label (see Table 1A) clearly visible at 30 feet height attached to the door of the luminaire. In addition, the luminaire complete model number and manufacturing date shall be indicated inside the housing.
- Smart Inventory and Maintenance Each luminaire should be uniquely identifiable by having a QR Code on each luminaire for app scanning to access the luminaire specification and configuration, in addition to the geographical location at point of installation. The app should be free of charge to purchaser for the lifetime of the luminaire.
- Sensor Ready The luminaire is to be equipped with D4i driver and Zhaga socket in protective cap for future sensor installation.

\section*{A. LED/OPTICAL ASSEMBLY:}

The LED module is to be enclosed and sealed with a borosilicate Prismatic Glass optical assembly. The combination shall be NEMA IP66 rated for dust and water resistant. The L70, per IES TM-21, must be greater or equal to 60,000 hours of operation time at \(25^{\circ} \mathrm{C}\). The color temperature is to be \(3,000 \mathrm{~K}\) CCT.
B. POWER SUPPLY:
- The Electronic driver must have an expected life of 60,000 hours at a \(25^{\circ} \mathrm{C}\) ambient. It is to be rated at 240 volts, 60 Hz . A driver with multiple input voltages can be supplied as long as it can operate at 240 volts.
- The luminaire is to be equipped with a field adjustable output wattage selector and dimmable driver for output dimming. The field adjustable wattage chart shall be attached on the inside of the door opening
- ENERGY EFFICIENCY: The luminaire is to be DLC certified for energy efficiency.

\section*{C. SURGE PROTECTION}

A surge protector which provides a minimum of \(20 \mathrm{kV} / 10 \mathrm{kA}\) protection as per IEEE/ANSI C62.41 Category \(C\) is to be included. There shall be a visual indicator showing the surge protector is operational.
D. TERMINAL BLOCK: A heavy duty terminal block shall be provided which will accept wire sizes up to \#6 A.W.G. The terminal block shall be compatible with either aluminum or copper wire.
E. MOUNTING: Mast arm mount is adjustable for arms from \(1-1 / 4\) " to 2 " ( \(1-5 / 8^{\prime \prime}\) to \(2-3 / 8\) " O.D.) diameter. Provide 2 bolts clamping mechanism with 3G vibration rating per ANSI C136.
F. HARDWARE: All nuts, bolts, latches, etc. furnished with the luminaire shall be fabricated from stainless steel or non-ferrous materials.
G. PHOTOCONTROL: Luminaire shall be supplied with 7-pin NEMA socket and shorting cap.

WARRANTY: The contractor and/or the manufacturer warrants that goods sold hereunder will be merchantable quality, will conform to applicable specifications, drawings designs, samples or descriptions, will be free from defects in material and workmanship and will be fit for the particular purpose intended by City of Milwaukee.
i. This warranty will remain in effect for 10 years from date of acceptance.
ii. Under this provision, the manufacturer agrees to repair or replace within a reasonable time, any part, feature or product found to be defective during the warranty period at no cost to the city.

\section*{C Construction}

Install lighting fixture on the six-foot or eight-foot mounting bracket on the pole according to current City of Milwaukee standards. The lighting fixture is to be installed at 0 degree to the horizon. Contractor is responsible to scan the QR code of each fixture with mobile cellphone with the Signify app at point of installation. Details will be provided by Street Lighting field office.

\section*{D Measurement}

The department will measure Luminaire Utility (type) by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid items:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.374 & Luminaire Utility 1LED2 & EACH \\
SPV. 0060.375 & Luminaire Utility 2LED2 & EACH \\
SPV. 0060.376 & Luminaire Utility 3LED2 & EACH \\
SPV. 0060.377 & Luminaire Utility 2LED3 & EACH \\
SPV. 0060.379 & Luminaire Utility 3LED3 & EACH
\end{tabular}

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

\section*{80. Remove Luminaire; Item SPV.0060.387.}

\section*{A Description}

This work shall consist of the removal of existing street lighting luminaire complete as shown in the plans.

\section*{B (Vacant)}

\section*{C Construction}

The contractor is responsible to disconnect all cables and wiring that is mounted on or in the poles and carefully remove luminaire complete from street light pole.
Contractor is responsible to protect and deliver the removed street lighting equipment to 1540 West Canal Street, Milwaukee, Wisconsin. The contractor will need to coordinate with the Street Lighting Shop Yard contact person for the delivery of this material.

Street Lighting Shop Yard Contact Person:
Neal Karweik - (414) 286-5943 office / (414) 708-4245 cell
All the materials must be dropped off at one time.
The Street Lighting Shop Yard hours for dropping off materials is from 8:00 AM to 2:00 PM Monday through Friday.
Contractor must be out of the shop yard by 2:00 PM NO LATER.

\section*{D Measurement}

The department will measure the Remove Luminaire per pole as each individual, acceptably completed unit.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.387 & Remove Luminaire & EACH
\end{tabular}

Payment is full compensation for removal and delivery of luminaires.

\section*{81. Adjusting CUC Manhole Cover, Item SPV.0060.400.}

\section*{A Description}

This special provision describes adjusting the existing chimney of the block, precast, or brick round manholes; furnishing, installing and removing protection of the cables in the manhole during adjustment
operations. Perform work according to the standard specifications, the provisions of the article Adjusting Manhole Covers, as shown on the plans, and as hereinafter specified.

\section*{B Materials}

Furnish and install materials that conform to the requirements of standard spec 519. Salvage and reinstall existing covers on the manholes. The city will supply covers designated for replacement. Contractor shall contact Karen Rogney at (414) 286-3242 to obtain the "Castings Requisitions Form" required to obtain the covers. Contractor shall contact Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frames and lids from the DPW Field Headquarters at 3850 N. \(35^{\text {th }}\) St. Contractor must have the "Castings Requisitions Form" in hand in order to obtain the castings.

\section*{C Construction}

Report any pre-existing problems to Mr. Curt Campagna, CUC Manhole Maintenance Manager at (414) 286-5967 three working days in advance of any construction on manholes.

Before removing the pavement around the manhole, the contractor shall place a \(3 / 4\)-inch plywood cover or equal over existing active Street Lighting, Traffic Control, Communications or private vendor electrical cables. This cover shall be properly supported to/at the manhole floor.
Break out and remove pavement around manhole. Remove existing covers and store and secure them properly. Any damaged, lost, or stolen covers shall be the responsibility of the contractor and shall be replaced at contractor's expense.
Remove existing chimney to surface of concrete roof slab. If manhole does not have an existing concrete roof slab, remove sufficient chimney as to provide adequate corbel to fit new cast iron frame and cover.
Adjust manhole cover to proposed grade using bricks or concrete rings as necessary. Completely underpin entire flange area of manhole frame with mortar, bricks and/or concrete rings. Remove wedges/shims. Fill voids with grout. Do not back plaster inside walls.
After completion of paving, remove the temporary \(3 / 4\)-inch plywood cover or equal which is over the existing electrical cables in the manhole as mentioned above.
Notify Mr. Campagna three working days in advance of completion of each manhole adjustment, for inspection and acceptance of work performed. The contractor will receive no payment until the above work is approved by City Underground Conduits.

\section*{D Measurement}

The department will measure Adjusting CUC Manhole Cover by each unit, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
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ITEM NUMBER
SPV.0060.400.

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DESCRIPTION
Adjusting CUC Manhole Cover

UNIT
EACH

Payment is full compensation for furnishing all required materials, exclusive of frames, grates, or lids available and designated for adjusting; for removing, reinstalling, and adjusting the covers. Covers to be adjusted and which are rendered unfit for use by the contractor through the contractor's operations will be replaced by the contractor in kind at the contractor's own cost and expense.

\section*{82. 4' Diameter Manhole Type CUC, Item SPV.0060.401.}

\section*{A Description}

The work under this special provision consists of a 4'-0" round precast concrete manhole for the City of Milwaukee Underground Conduit Section at locations shown in the plans, according to standard spec 301, 611 and 501, and as hereinafter provided.

\section*{B Materials}

Concrete and steel reinforcement shall conform to ASTM specification: C478 (latest edition), except that the single cage circumferential reinforcement in all vertical walls shall consist of lines of \#6 steel wire spaced 3 " horizontally and lines of \#10 steel wire spaced 8 " vertically located in the center of the wall.

Two lifting inserts for 1-1/2" diameter lifting eyes in the wall of the base and all other riser sections except the top cap section.
Up to four 7/8" diameter galvanized steel 1-11/16" pulling-in eyes in the wall of the base section directly across from each duct entrance.

Four \(5 / 8\) " diameter plastic threaded cable rack bolt inserts in the wall of the riser section.
A continuous circumferential Butyl Rubber gasket on the wall joint of the base and riser section when manhole is being assembled at job site.

The number of pulling-in eyes and/or cable rack bolt inserts may vary. Additionally, the size, location, shape and number of duct entrances and/or knock-out area may vary. Unit price of manhole shall not vary for number of openings, pulling-in eyes and/or rack bolt inserts.

The city will supply a frame and lid for the manhole. Contractor shall contact Mr. Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frame and lid from the DPW Headquarters at 3850 N. \(35^{\text {th }}\) St. Contractor must have the "Casting Requisition Form" which shall be supplied by the city.
To obtain the "Casting Requisition Form" and/or for any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

4' Diameter Manholes Type CUC shall be installed according to standard spec 611.3.
Install the top of the roof deck at a standard depth of 18 " below finished grade where possible. A minimum depth of 12 " from finished grade to the top of the roof deck must be maintained.

\section*{D Measurement}

The department will measure 4' Diameter Manhole Type CUC by each individual manhole, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.401. & 4 ' Diameter Manhole Type CUC & EACH
\end{tabular}

Payment is full compensation for all excavation work and disposal of material; for, furnishing and installing all materials, including bricks, and coarse aggregate, bedding and backfilling, concrete forms, concrete placement, appurtenances, and backfilling.

\section*{83. 5' Diameter "Doghouse" Manhole Type CUC, Installed over Conduit, Item SPV.0060.413.}

\section*{A Description}

The work under this item consists of a 5'-0" diameter precast concrete "doghouse" manhole for the City of Milwaukee Underground Conduit Section at locations shown in the plans, according to standard spec 301, 611 and 501, and as hereinafter provided. This work includes providing and placing PVC pipe and associated fittings, cement encasement, and other appurtenances to extend existing conduit as required to provide a complete and fully functional communications manhole unit.

\section*{B Materials}

\section*{B. 1 Manhole}

Furnish and install a 5' diameter precast concrete "doghouse" manhole. Concrete and steel reinforcement shall conform to ASTM specification: C478 (latest edition), except that the two cages of circumferential reinforcement in all vertical walls shall consist of lines of \#6 steel wire spaced 3" horizontally and lines of \#10 steel wire spaced 8 " vertically both located in the center of the wall, and \#6 hoop rebar centered in the wall 3 " above the window knock-outs.

Two lifting inserts for 1-1/2" diameter lifting eyes shall be cast in the wall of the base and all other riser sections except the top cap section.

Up to four 7/8" diameter galvanized steel 1-11/16" pulling-in eyes shall be cast in the wall of the base section directly across from each duct entrance.

Four 5/8" diameter plastic threaded cable rack bolt inserts shall be cast in the wall of the riser section.
A continuous circumferential Butyl Rubber gasket shall be supplied, to be laid on the wall joint of the base and riser section when manhole is being assembled at job site.
The number of pulling-in eyes and/or cable rack bolt inserts may vary. Additionally, the size, location, shape and number of duct entrances and/or knock-out area may vary. Unit price of manhole shall not vary for number of openings, pulling-in eyes and/or rack bolt inserts.

Field verify window depth and locations prior to ordering manhole.
The city will supply a frame and lid for the manhole. Contractor shall contact Mr. Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frame and lid from the DPW Headquarters at 3850 N. \(35^{\text {th }}\) St. Contractor must have the "Casting Requisition Form" which shall be supplied by the city.

\section*{B. 2 Conduit}

Furnish and install DB_60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.
Manufacturers of PVC Conduit DB-60 shall request evaluation and approval of their products by filing with the department's Research Supervisor, Bureau of Highway Construction, a certificate setting forth the name or brand of pipe to be furnished, the specified type, category, grade and PVC plastic cell classifications. The certificate shall have attached a certified test report from an approved independent testing laboratory showing specific results of tests performed on each diameter conduit to be furnished conforming to all requirements of these specifications. The conduit tested shall be randomly selected for test by the independent testing laboratory as being representative of that manufacturer's conduit. The manufacturer of the conduit shall also submit with the certification, a guarantee that all conduit furnished be of the same quality and composition and conform to the specification requirements as tested by the independent laboratory, as long as the manufacturer continues to furnish materials for WISDOT projects.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

\section*{B. 3 Concrete}

The type of concrete mix to be used to encase the ducts will be:
\begin{tabular}{ll} 
Type I Cement & 280 lbs \\
Fly Ash & 100 lbs \\
Sharp Torpedo Sand & 3100 lbs \\
Water & 35 gals \\
Chryso Air 260 or approved equal & 2.0 ozs \\
Chryso Plast 209 or approved equal & 7.0 ozs \\
Air & \(5 \%\)
\end{tabular}

Mix the materials to provide an approximate 3 inch slump

\section*{B. 4 Slurry Backfill}

Aggregate slurry backfill consists of No. 1 concrete aggregate Class ' \(C\) ' concrete mix with the cement deleted.

Fly Ash (Class C)
Concrete Sand (Damp)
No. 1 Concrete Aggregate

75 lbs.
1830 lbs.
1830 lbs.

Mix with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix directly from a concrete transit mix truck.

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

\section*{C. 1 Conduit Alterations}

Excavate to expose existing conduit. Break back by hand sections of cement encased conduit to facilitate excavation for the new proposed structure. Hand chip concrete away for the existing pipes. Carefully remove pipes from around the cables. Hand chip enough concrete away from the pipes to allow for the coupling of split ducts on to the ends of the pipes. Protect exposed pipe ends and existing cables from damage.

\section*{C. 2 Manhole}

Install the bottom section of the manhole shall be installed while avoiding damage to the live active cables. The excavation may need to be widened to slide the bottom under the existing cables. After the bottom section of the manhole has been set, the existing cables need to be placed within the window openings, splice cases and/or coils placed back into the manhole.

Exercise extreme care in the handling of working cables within the excavation. When cables need to be moved, particularly lead sheathed cables, move cables slowly and gradually. Avoid sharp kinks that may damage the inner core of the cables and the sheath.
Complete the "doghouse" manhole installation without any damage or service disruption to the existing cables.

Install 5' Diameter "Doghouse" Manholes Type CUC Installed over Conduit according to standard spec 611.3.

Install the top of the roof deck at a standard depth of 18 " below finished grade where possible. A minimum depth of 12 " from finished grade to the top of the roof deck must be maintained.

Install manhole cover to proposed grade using concrete rings and/or bricks. Completely underpin entire
flange area of manhole frame with mortar, bricks and/or concrete rings. Remove wedges/shims. Fill voids with grout. Do not back plaster inside walls.

\section*{C. 3 Placing Duct}

All ducts shall be inspected before placing to see that the bores are clean and free from mud, sand, etc. Only ducts with a smooth bore, free from burrs, rough projections etc. shall be used. Where burrs or other rough areas likely to damage cable are found in the duct, they shall be smoothed off by rasping or scraping.
All existing ducts shall be extended into the new manhole structure unless otherwise noted on the plan. Split PVC duct should be used on ducts containing cables. The split duct shall be installed per manufactures recommendations using tape and reinforced with plastic straps to produce a rigid, stable unit.

All ducts shall terminate on the inside wall of the manhole. A standard end bell fitting shall be installed on all duct access points into the manhole.

Where trace wires are present, reconnect and extend trace with \#10 copper wire extended 2 feet past the inside wall of the manhole.

\section*{C. 4 Concreting}

Begin concreting after conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, the concrete shall be puddled with a splicing bar or similar tool so that complete duct encasement is accomplished. Wood braces used to keep the conduit from floating shall be removed before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

\section*{C. 5 Slurry Backfill}

Commence backfilling immediately after the duct has been inspected, approved, and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill all concrete encased conduit. The trench shall be slurry backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

\section*{D Measurement}

The department will measure 5' Diameter "Doghouse" Manholes Type CUC Installed over Conduit by each individual manhole, acceptably completed.

Notify Ms. Rogney three working days in advance of completion of each manhole, for inspection and acceptance of work performed. The contractor will receive no payment until the above work is approved by City Underground Conduit.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.413. & 5' Diameter "Doghouse" Manholes Type CUC Installed over Conduit & EACH
\end{tabular}

Payment is full compensation for all excavation work and disposal of material; for adjusting manhole frame to final grade, for furnishing and installing all materials, including precast manhole, conduit, conduit fittings, end bells, bricks, and coarse aggregate, bedding, concrete forms, concrete placement, appurtenances, and backfilling.

\section*{84. Installing Conduit Into Existing Manhole, Item SPV.0060.425.}

\section*{A Description}

This special provision describes providing locating existing conduit system manholes and installing new conduit into those manholes at the locations shown on the plans. The contractor shall verify existing conduit manhole locations with the City of Milwaukee, and shall maintain any existing conductors, fibers, and conduit paths without interruption or damage. Repair and restoration of all disturbed areas resulting from the work shall be according to the pertinent provisions of the standard specifications, and as hereinafter provided.

\section*{B Materials}

Furnish conduit, as provided and paid for under other items in this contract. All materials shall conform to the pertinent provisions of the standard specifications unless otherwise noted.

\section*{C Construction}

Carefully expose the outside of the existing structure without disturbing any existing conduits or cabling.
Drill the appropriate sized hole in a concrete structure or saw and remove full sections of block or bricks from the existing structure for the entering of conduit at a location within the structure that will not disturb the existing cabling and will not hinder the installation of new cabling within the installed conduit. This work may include the removal of the existing abandoned conduit from the structure to allow for the installation of the new conduits as indicated on the plans.

Fill any void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure.

Carefully tamp backfill into place.
All disturbed areas shall be repaired and restored in kind.

\section*{D Measurement}

The department will measure Installing Conduit Into Existing Item by the unit, acceptably installed. Up to six conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of six, or conduits entering at significantly different entry points into the existing manhole will constitute multiple units.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.425. & Installing Conduit Into Existing Manhole & EACH
\end{tabular}

Payment is full compensation for drilling holes; removing blocks: removing bricks: removing abandoned conduit; furnishing and installing all materials, including bricks, and coarse aggregate; for excavation, bedding and backfilling, including any sand or other required materials; furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for disposal of surplus materials; for making inspection.

\section*{85. Sawing Concrete Encased Duct Package, Item SPV.0060.426.}

\section*{A Description}

The work under this provision consists of full depth sawing of cement encased multiple duct conduit below grade; preparing sawed conduit ends to accept adaptor couplings needed to allow transition of new PVC conduit from existing clay, fiber or PVC conduit (See Item SPV.0090.402).

\section*{B (Vacant)}

\section*{C Construction}

\section*{C. 1 Equipment}

Use ring saw or concrete cutting chainsaw for all full-depth cuts. Use diamond blades. The contractor may use a high speed 16 " construction saw on duct systems with less than 4 -ducts when approved by the engineer.

\section*{C. 2 Sawing Encasement}

Carefully expose the outside of the existing cement encasement. The contractor is to verify that the conduit lines are free of all cabling. Saw a full depth transverse cut through the encasement. Saw straight cuts with the surface remaining vertical over its full depth. Hand chip concrete away from sawed conduit duct ends to allow transition fittings to be placed over the ends. The exposed conduit will be protected from damage. Any damaged conduit ends will be the responsibility of the contractor and will require a resaw at the contractor's expense.

\section*{D Measurement}

The department will measure Sawing Concrete-Encased Duct Package by each unit, acceptably completed. Up to 6 conduits per cement encasement will be considered a single unit.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0060.426. & Sawing Concrete Encased Duct Package & EACH
\end{tabular}

Payment is full compensation for sawing concrete encased duct packages full depth.

\section*{86. Sawing and Removal of Concrete Encased Duct Package, Item SPV.0060.427.}

\section*{A Description}

The work under this provision consists of full depth sawing and removal of cement encased multiple duct conduit below grade and plugging each conduit with a PVC plugs. (See Item SPV.0090.422).

\section*{B (Vacant)}

\section*{C Construction}
1. Equipment

Use ring saw or concrete cutting chainsaw for all full-depth cuts. Use diamond blades. If the contractor requests, the engineer (City of Milwaukee) may approve the use of a high speed 16" construction saw on conduit systems with less than 4-ducts.
2. Sawing Encasement

Carefully expose the outside of the existing cement encasement. The contractor is to verify that the conduit lines are free of all cabling. Saw a full depth transverse cut through the encasement. Saw straight cuts with the surface remaining vertical over its full depth.
3. Conduit Removal

Remove a minimum of 2 feet of the abandoned conduit from the saw cut back to create a gap.
4. Plug Duct Ends

Use PVC plugs to plug the end of each duct.
D Measurement

The department will measure Sawing and Removal of Concrete-Encased Duct Package by each unit, acceptably completed. Up to 4 conduits per cement encasement will be considered a single unit.
Encasements in excess of 4 conduits will constitute multiple units.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item: ITEM NUMBER DESCRIPTION UNIT SPV.0060.427

Sawing and Removing Concrete Encased Duct Package
Payment is full compensation for sawing full depth, removal and plugging of concrete encased duct packages.

\section*{87. Concrete Curb \& Gutter Integral 19-Inch, Item SPV.0090.001.}

\section*{A Description}

Construct Integral Curb \& Gutter 19-Inch according to the requirements in standard spec 415, 601, 716 and standard spec 415.3.15 and 501.3.1 and as shown in the plans.

\section*{B (Vacant)}

\section*{C Construction}

Construct Integral Curb \& Gutter 19-Inch according to the requirements in standard spec 601.3, and as shown on the plans.

All curb and gutter shall have a flange thickness of 8.0 inches.

\section*{D Measurement}

The department will measure Concrete Curb \& Gutter Integral 19-Inch by the linear foot of curb and gutter, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.002 & Concrete Curb \& Gutter Integral 19-Inch & LF
\end{tabular}

Payment is full compensation for providing Concrete Curb \& Gutter Integral 19-Inch.

\section*{88. Electrical Cable Type 3 \#4/ 1\#8 XLP, Item SPV.0090.240.}

\section*{A Description}

This special provision describes furnishing and installing XLP electrical service cable.

\section*{B Materials}

The furnished cable shall comply with manufacture and test requirements for ICEA Specification N . S-61-402, NEMA WC5, latest revision. The conductors shall be of soft round annealed uncoated stranded copper per ASTM B-3, ASTM B-8 Class B, and UL Standard UL-44.

The insulation shall be XLPE thermosetting crosslinked polyethylene insulation according to industry standard ICEA Pub. No S-95-658/Nema WC-70 (2009), with a nominal thickness of 60mils; at no point should the thickness be less than \(90 \%\) of the thickness specified in the schedule. The insulation shall be rated for 600 volts. The insulation compound shall be color coded, the individual cables shall be black, white and red for the \#4 conductors, and green for the \#8 conductor.

Identification for each conductor must be provided with colors according to IMSA standards. The outer insulation shall be marked with the following at minimum: conductor size (AWG), 600V, XLPE, USE-2, manufacturer name, date of manufacture. All markings must be a minimum of \(1 / 8^{\prime \prime}\) in height. Marking shall be at 2 foot intervals. A sequential footage marking must be located on the opposite side of the jacket. All markings must be legible and in permanent ink.

Each length of the individual conductors shall comply with all requirements of ICEA Standards S-61-402, with sampling and testing according to Part 6. A certified report of the tests made on the cable to show
compliance with this specification may be required prior to shipment. If requested, a sample of the cable shall also be submitted.

\section*{C Construction}

The cable shall be installed in conduit as indicated on plans. Splices are not allowed in conduit or directly underground. Do not leave wire or cable ends uncovered or submerged in water. The cable length can be rejected by an engineer if it is observed to have exposed or submerged ends. Cover tape with a liberal coating of varnish or sealant providing protection from oil, moisture, and corrosion. Identify cable in each pullbox at the line side with a fade resistant tag.

\section*{D Measurement}

The department will measure Electrical Cable Type 3 \#4/ 1\#8 XLP by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.240 & Electrical Cable Type \(3 \# 4 / 1 \# 8\) XLP & LF
\end{tabular}

Payment is full compensation for furnishing and installing Electrical Cable 3 \#4/ 1\#8 XLP.

\section*{89. City Furnished Electrical Cable Type 1\#8 AWG 5kV Concentric, Item SPV.0090.300.}

\section*{A Description}

The work under this item is for installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651.

\section*{B Materials}

Supplied by the City of Milwaukee per City Spec.
Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four working days before with the exact number or linear footage of materials needed. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.

The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.

Street Lighting Shop Yard Contact Person:
Neal Karweik - (414) 286-5943 office / (414) 708-4245 cell
All the materials must be picked up all at one time.
The Street Lighting Shop Yard hours for picking up materials is from 8:00 AM to 2:00 PM Monday through Friday.
Contractor must be out of the shop yard by 2:00 PM NO LATER.

\section*{C Construction}

Installation of \(1 \# 8\) Concentric cable for \(2200 V\) constant current circuit in buried conduit.
Termination of cable by City of Milwaukee Street Lighting.

\section*{D Measurement}

The department will measure City Furnished Electrical Cable Type 1\#8 AWG 5kV Concentric by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV. 0090.300 & City Furnished Electrical Cable Type \(1 \# 8\) AWG 5 kV Concentric & EACH
\end{tabular}

Payment is full compensation for installation.

\section*{90. City Furnished Electrical Cable Type 1\#6 AWG 5kV; Item SPV.0090.301.}

\section*{A Description}

This special provision describes installing and connecting city furnished electrical cable type 1\#6 AWG 5 kV (1\#6 Prim.) overhead series primary cable complete with all splicing, identifications, and terminations, and conforming to standard spec 651.

\section*{B Materials}

Electrical Cable Type \(1 \# 6\) AWG 5 kV - overhead series primary cable shall conform to the City of Milwaukee specifications. The cable provided will be a high voltage \#6 solid, WP, Copper and Poly, Black overhead cable.
Pick up the electrical cable type 1 \#6 AWG 5kV (1\#6 Prim.) overhead series primary cable from the City of Milwaukee yard located at 1540 W. Canal Street. Contact person is Neal Karweik at our street lighting shop (414) 286-5943 office or (414) 708-4245 cell, to coordinate pick up. Call during normal business hours and this will require a minimum four working days' notice to gather materials.

\section*{C Construction}

Install the city furnished electrical cable 1\#6 AWG 5 kV overhead series primary cable as shown on street lighting design plan. The overhead installation shall conform to standard spec 661.2.1.4 when attaching to wood poles.

Contractor to provide all necessary cable connector hardware, clevis, insulators, and splicing materials required to make water tight connections.
Temporary overhead cable and facilities as shown on temporary lighting plans will remain in place until after the permanent underground conduit, pull boxes, and cable have been installed and all circuitry has been inspected and energized and finally accepted by the City of Milwaukee Street Lighting Construction Supervisor.

\section*{D Measurement}

The department will measure Installing City Furnished Electrical Cable Type 1\#6 AWG 5kV by the linear foot, acceptably completed. Measurement will be made in a straight line between changes in direction and to the centers of poles. Sag of the aerial cable or vertical cable will not be measured for payment. The rewiring to facilitate relocation of the cable due to staging or other construction requirements will not be measured for payment.

\section*{E Payment}

The department will pay for the measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRUIPTION & UNIT \\
SPV.0090.301 & City Furnished Electrical Cable Type 1\#6 AWG 5 kV & LF
\end{tabular}

Payment is full compensation for labor, tools, equipment, transporting, coordination and all materials and incidentals necessary to complete the work including for making connections and testing installed cable system; and for disposing of surplus material.

\section*{91. Electrical Cable Type 3\#6 AL, Item SPV.0090.302}

\section*{A Description}

Furnish and install service cable according to current City of Milwaukee Electrical methods and National Electrical Code standards. All work shall be according to standard spec 651, 655, and 659.

\section*{B Materials}
\#6 Triplex ASCR (Aluminum conductor steel reinforced)
\#6 stranded aluminum wires with \(3 / 64\) polyethylene insulation 7 strands
1 \#6 bare neutral, 6 strands of Aluminum conductors around a steel messenger, ASCR 6/1
Voltage of 600 volts phase-to-phase or less and at conductor temperatures not to exceed \(75^{\circ} \mathrm{C}\) for polyethylene insulated conductors or \(90^{\circ} \mathrm{C}\) for crosslinked polyethylene (XLP) insulated conductors.

Service drop cable meets or exceeds the following ASTM specifications:
- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-232 Aluminum Conductors, Concentric-Lay-Stranded, Coated Steel Reinforced (ACSR).
- B-399 Stranded 6201-T81 Aluminum Alloy Conductors.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

Conductors are concentrically stranded, compressed 1350-H19 aluminum. Insulated with either polyethylene or crosslinked polyethylene (XLP). Neutral messengers are concentrically stranded 6201, AAC, or ACSR. Cable meets or exceeds all applicable requirements of ANSI/ICEA S-76-474.

\section*{C Construction}

The cable shall be installed to supply power, usually from a pole, to the user's service head where connection to the service entrance cable is made. All splices must be completed by the contractor unless otherwise designated on plans.

\section*{D Measurement}

The department will measure
E Payment Electrical Cable Type 3\#6 AL by the linear foot, acceptably completed.
The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.302 & Electrical Cable Type 3\#6 AL & LF
\end{tabular}

Payment is full compensation for furnishing labor, equipment, coordination and all materials and incidentals necessary to make water tight wiring connections to complete the work. Also included is the labor, equipment and materials for removal of construction debris and site restoration.

\section*{92. Electrical Cable Type 2\#2/1\#4 AL., Item SPV.0090.304.}

\section*{A Description}

Furnish and install service cable according to current City of Milwaukee
Electrical methods and National Electrical Code standards. All work shall be according to standard spec 651.

\section*{B Materials}

2\#2/1\#4 Triplex ASCR (Aluminum conductor steel reinforced)
Unless otherwise specified, the cable to be furnished shall comply with the manufacture and test requirements of the Insulated Cable Engineers Association (ICEA) specifications No S-61-402, NEMA WC5, and No S-66-524 NEMA WC7, latest revisions.
2 \#2 stranded aluminum wires with \(3 / 64\) polyethylene insulation 7 strands
1 \#4 bare neutral, 6 strands of Aluminum conductors around a steel messenger, ASCR 6/1

\section*{B. 2 Voltage}

Voltage of 600 volts phase-to-phase or less and at conductor temperatures not to exceed \(75^{\circ} \mathrm{C}\) for polyethylene insulated conductors or \(90^{\circ} \mathrm{C}\) for crosslinked polyethylene (XLP) insulated conductors.

\section*{B. 3 Specifications}

Service drop cable meets or exceeds the following ASTM specifications:
- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-232 Aluminum Conductors, Concentric-Lay-Stranded,

Coated Steel Reinforced (ACSR).
- B-399 Stranded 6201-T81 Aluminum Alloy Conductors.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

\section*{B. 4 Insulated Conductors}

All Aluminum conductors are concentrically stranded and shall be Class A or Class B 3\% compressed 1350-H19 aluminum. Solid conductors shall be H 16 temper.

\section*{B. 5 Insulation}

Shall be 600 V either black extruded high molecular weight polyethylene (PE) or black extruded crosslinked polyethylene (XLP). Insulation shall be a nominal 45 mils thickness.

\section*{B. 6 Bare Neutral Messenger}

Neutral messengers are concentrically stranded 6201, AAC, or ACSR. Cable meets or exceeds all applicable requirements of ANSI/ICEA S-76-474. The direction of lay of the outer layer is right hand.

\section*{B. 7 Protection of Ends}

Before shipment, the ends of all wire and cable shall be carefully sealed to protect the insulation from moisture. Both ends of the wire and cable shall be accessible for testing, but shall be covered and protected from injury.

\section*{B. 8 Lengths}

Ten percent of the reels of any one item may be shipped in random length of not less \(50 \%\) of the specified nominal length. This tolerance is permitted so that the cable manufacturers may avoid brazing together lengths of copper conductor. All conductors shall be free from brazes or splices.

\section*{B. 9 Service Drop Cable Schedule}

Triplex Service Drop 600 Volt PE or XLP ASCR reduced size neutral messenger.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline CITY & & & & & BARE & BARE & & WGHT & WEIGHT \\
\hline OF & & & & & NTRL & NTRL & REEL & LBS/ & LBS/ \\
\hline MILW & CODE & SIZE & NO\# & INSUL & SIZE & NO\# & LNG & 1000' & 1000' \\
\hline P/N & WORD & AWG & WIRE & (INS) & AWG & WIRE & (FT) & ALUM & CABLE \\
\hline 3400-032 & Cockle 2 & 7 & 0.045 & 4 & 6/1 & 1800' & 163 & 227 & \\
\hline 3400-034 & Strombus & 4 & 7 & 0.045 & 6 & 6/1 & 1500' & 103 & 154 \\
\hline 3400-036 & Voluta 6* & 7 & 0.045 & 6 & 6/1 & \(2200{ }^{\prime}\) & 73 & 116 & \\
\hline & * ACSR Ful & e Neut & al Mess & nger & & & & & \\
\hline
\end{tabular}

\section*{C Construction}

The cable shall be installed to supply power, usually from a pole-mounted transformer, to
the user's service head where connection to the service entrance cable is made. All splices must be completed by the contractor unless otherwise designated on plans.

\section*{D Measurement}

The department will measure this item by the linear foot unit of measure.

\section*{E Payment}

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

SPV.0090.304 Electrical Cable Type 2\#2/1\#4 AL LF
Payment is full compensation for furnishing and installing, debris removal, and restoration.

\section*{93. Electrical Cable Type 3\#12 AWG with Ground, Item SPV.0090.309.}

\section*{A Description}

Furnish and install type AWG cable according to current City of Milwaukee Electrical methods and National Electrical Code standards. All work shall be according to standard spec 651.

\section*{B Materials}

Furnish type UF cable with ground including the number and size of conductors as the plans show. Use cable conforming to ANSI/UL 493.

\section*{C Construction}

Do not splice underground in pull boxes or conduit. Do not leave wire or cable ends uncovered or submerged in water. If the engineer observes this condition, the engineer may reject the entire length of cable or wire. Make all electrical connections and splices with approved pressure or compression type fittings.
Cover tape with a liberal coating of an electrical varnish or sealant providing flexible protection from oil, moisture, and corrosion. Obtain the engineer's approval of this electrical coating before using. Extend wire for termination 18 inches beyond the pole. Provide 60 inches of cable wire to be pulled into cabinets and left for terminations.

For all cables entering each pull box, provide an extra loop, approximately 6 feet in length, to remain in each pull box. This loop of cable is in addition to the amount needed to reach from the entrance conduit raceway end to the opening in the exiting conduit raceway.

Install conductors in continuous lengths without splices from termination to termination. The contractor may splice only at hand-holes in the bases of poles. At locations where no transformer bases exist, splice at the hand-holes in poles.

Under the Cable Type UF bid items, furnish and install the overhead or underground cable for lighting installations.

Strip the minimum length of jacket necessary to make terminations in a neat and technically proficient manner.

\section*{D Measurement}

The department will measure Cable Type 3\#12 AWG with Ground Electrical Cable Type 3\#6 AL by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.309. & Cable Type 3\#12 AWG with Ground & LF
\end{tabular}

Payment is full compensation for providing cable; for making all connections; for providing all connectors, including wire nuts, splices, tape, insulating varnish, or sealant; and for testing the circuits.

\section*{94. Liquidtight Flexible Nonmetallic Conduit 1 ½-Inch, Item SPV.0090.319}

\section*{A Description}

This special provision describes furnishing and installing Liquidtight flexible nonmetallic conduit for street lighting according to standard spec 652, and as shown in the plan details. All work shall be according to standard spec 651.

\section*{B Materials}

The Liquidtight flexible nonmetallic conduit shall be Type LFNC-B. The conduit shall be nonconductive, noncorrosive to oil, acid, ozone, and alkaline. The conduit shall have a smooth inner surface with integral reinforcement within the conduit wall.
The flexible nonmetallic conduit shall be UL listed for use as indicated in Article 356 of the latest NEC, and for outdoor use and sunlight resistant.

The fittings and adapters shall be of the same manufacturer as the conduit.

\section*{C Construction}

Install the fittings, adapters, and conduit in conjunction with traffic signals and street lighting. Install per the manufacturer's instructions and as shown on the plans.

\section*{D Measurement}

The department will measure Liquidtight Flexible Nonmetallic Conduit (size) by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.319 & Liquidtight Flexible Nonmetallic Conduit 1-1/2-Inch & LF
\end{tabular}

Payment is full compensation for furnishing and installing the conduit, including the connectors.

\section*{95. Electrical Cable Type 4\#8/1\#8 XLP, Item SPV.0090.321; Electrical Cable Type 4\#6/1\#8 XLP, Item SPV.0090.322; Electrical Cable Type 4\#2/1\#8 XLP, Item SPV.0090.324.}

\section*{A Description}

This special provision describes furnishing and installing service cable according to current City of Milwaukee Electrical methods and National Electrical Code standards. The service cable shall consist of four cross-linked polyethylene covered, stranded, copper conductors. All work shall be according to standard spec 651.

\section*{B Materials}

\section*{B. 1}

Unless otherwise specified, the cable to be furnished shall comply with the manufacture and test requirements of the Insulated Cable Engineers Association (ICEA) Specification No. S-61-402, NEMA WC5, latest revision.

\section*{B.1.2 Conductors}

The conductors shall be of soft round annealed uncoated stranded copper conductor per ASTM B-3, ASTM B-8, and UL Standard UL-44. Conductors No. 8 A.W.G. or larger shall be stranded. Conductors smaller than No. 8 A.W.G. shall be solid unless otherwise specified. Stranding must meet the requirements of ASTM B8, Class B.

\section*{B. 2 Insulation}

\section*{B.2.1 600V}

The insulation for cable rated 600 V shall be cross XLPE thermosetting chemically crosslinked polyethylene insulation according to industry standard ICEA Pub. No. S-95-658/Nema WC-70 (2009), latest revision, and shall be a nominal 45 mils. thickness. Insulation shall meet the ANSI/ASTM D2220-74 (latest revision) accelerated water absorption requirements and \(-30^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right)\) cold bend test with a separator applied between the stranded conductor and insulation to facilitate cable stripping. The outside diameter of the insulating covering must be circular and extruded concentrically over the conductor.

\section*{B.2.2 Nominal Thickness}

The nominal insulation thickness around each individual conductor shall be not less than \(90 \%\) of the thickness specified in the schedule.

\section*{B.2.3 Color Code}

The insulation compound which covers each conductor shall be color coded in conformance with the N.E.M.A. Color Code Standard, unless otherwise specified; however, printed color designations as in I.3.2 or I.3.3. will not be acceptable under this specification (see schedule). Individual conductor insulation compound colors will be Black, Red, White, Gray and Green.

\section*{B.2.4 Marking}

\section*{B.2.4.1}

Identification for each conductor must be provided by colors according to I.M.S.A. Standards. The outer insulation must be marked with the following information at a minimum: conductor size (AWG), 600V, XLPE, USE-2, manufacturer's name, date of manufacture. All markings must be a minimum of one-eighth inch ( \(1 / 8^{\prime \prime}\) ) in height. Marking shall be at approximately 2 foot intervals. A sequential footage marking must be located on the opposite side of the jacket. All marking must be perfectly legible with permanent white ink.

\section*{B.2.5 Round Cable}

\section*{B.2.5.1}

This cable shall consist of stranded, uncoated, conductors each concentrically encased with a cross linked polyethylene USE-2 rubber insulation.

\section*{B.2.5.2 Inspection and Tests}

Each length of the individual insulated conductor and completed cable shall comply with all requirements of I.C.E.A. Standards S-61-402. Sampling and Test Methods shall be according to Part 6. A certified report of the tests made on the cable to show compliance with this specification may be required prior to shipment. If requested, a sample of the cable covered by the report shall also be submitted.

\section*{POWER, CABLE SCHEDULE FOR SPECIFICATION}
\begin{tabular}{|c|c|c|l|l|}
\hline & \multicolumn{2}{|c|}{\(4 \# 2 / 1 \# 8\)} & & \\
\hline Size of Conductor & \(\# 2\) & \(\# 8\) & & \\
\hline \begin{tabular}{c} 
Number of \\
Conductors
\end{tabular} & 4 & 1 & & \\
\hline \begin{tabular}{c} 
Number of Wires in \\
Conductor
\end{tabular} & 7 & 7 & & \\
\hline Type of Insulation & \begin{tabular}{c} 
4 \\
Cross-Linked \\
Polyethlene \\
(XLPE)
\end{tabular} & \begin{tabular}{c} 
Cross-Linked \\
Polyethylene \\
(XLPE)
\end{tabular} & & \\
\hline Insulation Thickness & \begin{tabular}{c} 
60 mils
\end{tabular} & \begin{tabular}{c}
60 mils
\end{tabular} & \\
\hline \begin{tabular}{c} 
Insulation Voltage \\
Rating
\end{tabular} & \begin{tabular}{c} 
600 volt
\end{tabular} & 600 volt & & \\
\hline Insulation Color \\
Code & \begin{tabular}{c} 
1-white \\
1-black \\
1-red \\
1. 1-gray
\end{tabular} & 1-green & & \\
\hline Non-Hydroscopic Fill & None & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{Moisture Resisting Sheath} \\
\hline \multirow[t]{2}{*}{Jacket Thickness} & \multicolumn{2}{|l|}{None} & & \\
\hline & \multicolumn{2}{|l|}{4\#6/1\#8} & \multicolumn{2}{|c|}{4\#8/1\#8} \\
\hline Size of Conductor & \#6 & \#8 & \#8 & \#8 \\
\hline Number of Conductors & 4 & 1 & 4 & 1 \\
\hline Number of Wires in Conductor & 7 & 7 & 7 & 7 \\
\hline Type of Insulation & ```
    4
    Cross-Linked
Polyethylene (XLPE)
``` & Cross-Linked Polyethylene (XLPE) & ```
    4
    Cross-Linked
Polyethylene (XLPE)
``` & \begin{tabular}{l}
Cross-Linked \\
Polyethylene (XLPE)
\end{tabular} \\
\hline Insulation Thickness & 60 mils & 60 mils & 60 mils & 60 mils \\
\hline Insulation Voltage Rating & 600 volt & 600 volt & 600 volt & 600 volt \\
\hline Insulation Color Code & \begin{tabular}{l}
1-white \\
1-black \\
1-red \\
1-gray
\end{tabular} & 1-green & \begin{tabular}{l}
1-white \\
1-black \\
1-red \\
1-gray
\end{tabular} & 1-green \\
\hline Non-hydroscopic Fill & \multicolumn{2}{|l|}{None} & \multicolumn{2}{|c|}{None} \\
\hline \multicolumn{5}{|l|}{Moisture Resisting Sheath} \\
\hline Jacket Thickness & \multicolumn{2}{|l|}{None} & \multicolumn{2}{|c|}{None} \\
\hline
\end{tabular}

All conductors shall be uncoated annealed soft copper.

\section*{C Construction}

The cable shall be installed in HDPE, PVC, and Liquidtight Flexible Non-Metallic conduit when indicated on plans. Any turf damage during installation of cable shall be restored (grass, asphalt or concrete) by the contractor, All splices in luminaires and transformer bases, must be completed by the contractor unless otherwise designated on plans. Do not splice directly in underground or conduit. Do not leave wire or cable ends uncovered or submerged in water. If the engineer observes this condition, the engineer may reject the entire length of cable or wire. Make all electrical connections and splices with approved pressure or compression type fittings. Cover tape with a liberal coating of an electrical varnish or sealant providing flexible protection from oil, moisture, and corrosion. Obtain the engineer's approval of this electrical coating before using. Extend wire for termination 15 inches beyond the pole hand hole.
For all cables entering each pull box/vault, provide an extra loop, approximately 3 feet in length, to remain in each pull box/vault. This loop of cable is in addition to the amount needed to reach from the entrance conduit raceway end to the opening in the exiting conduit raceway.

Install conductors in continuous lengths without splices from termination to termination. The contractor may splice only at hand-holes in the bases of poles. At locations where no transformer bases exist, splice at the hand-holes in poles.

\section*{D Measurement}

The department will measure Electrical Cable Type (size) XLP by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{clc} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.321 & Electrical Cable Type 4\#8/1\#8 XLP & LF \\
SPV.0090.322 & Electrical Cable Type 4\#6/1\#8 XLP & LF \\
SPV.0090.324 & Electrical Cable Type 4\#2/1\#8 XLP & LF
\end{tabular}

Payment is full compensation for furnishing and installing, debris removal, and restoration.

\section*{96. 2-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.402.}

\section*{A Description}

This special provision describes furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

\section*{B Materials}

\section*{B. 1 Conduit}

Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

\section*{B. 2 Conduit Spacers}

Furnish and install nonmetallic interlocking base spacers and intermediate spacers that provide a 1-1/2" vertical and 1-1/2" horizontal separation between PVC pipes. The base spacers shall provide a 3" vertical separation from the trench bed to the bottom of the PVC pipes.

\section*{B. 3 Conduit Bed}

Furnish and install a minimum 2" conduit bed of stone chips or crushed stone screenings conforming to the following:
\begin{tabular}{lc}
\(3 / 8\) Inch Crushed Stone Chips \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2^{\prime \prime}\) & 100 \\
\(3 / 8^{\prime \prime}\) & \(90-100\) \\
No. 8 & \(0-15\) \\
No. 30 & \(0-3\) \\
& \\
Crushed Stone Screenings \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2^{\prime \prime}\) & 100 \\
No. 4 & \(75-100\) \\
No. 100 & \(10-25\)
\end{tabular}

\section*{B. 4 Concrete}

The type of concrete mix to be used to encase the ducts will be:
\begin{tabular}{ll} 
Type I Cement & 280 lbs \\
Fly Ash & 100 lbs \\
Sharp Torpedo Sand & 3100 lbs \\
Water & 35 gals \\
Chryso Air 260 or approved equal & 2.0 ozs \\
Chryso Plast 209 or approved equal & 7.0 ozs \\
Air & \(5 \%\)
\end{tabular}

Mix the materials to provide an approximate 3 inch slump

\section*{B. 5 Slurry Backfill}

Aggregate slurry backfill consists of No. 1 concrete aggregate Class ' \(C\) ' concrete mix with the cement deleted.

Fly Ash (Class C)
Concrete Sand (Damp)
No. 1 Concrete Aggregate

75 lbs.
1830 lbs .
1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

\section*{B. 6 Pull Rope}

Pull rope specifications will be:
- Flat construction ( \(7 / 16\) " to \(5 / 8\) " wide)
- \(100 \%\) woven aramid fiber (may include tracer wire)
- 1500 lbs . Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

\section*{C. 1 Excavation}

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:
\begin{tabular}{ccc}
\begin{tabular}{c} 
Number of \\
Ducts Wide
\end{tabular} & \begin{tabular}{c} 
Minimum \\
(Inches)
\end{tabular} & \begin{tabular}{c} 
Maximum \\
(Inches)
\end{tabular} \\
\cline { 1 - 2 } 1 & \(81 / 2\) & 11 \\
2 & \(145 / 8\) & \(171 / 8\) \\
3 & \(203 / 4\) & \(231 / 4\). \\
4 & \(267 / 8\) & \(293 / 8\) \\
5 & 33 & \(351 / 2\) \\
6 & \(391 / 8\) & \(415 / 8\) \\
7 & \(451 / 4\) & \(473 / 4\) \\
8 & \(513 / 8\) & \(537 / 8\)
\end{tabular}

These minimum and maximum trench widths apply to standard 4 inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.

Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.
The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.
Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:

The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.
Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.
Grade the trench to have a minimum pitch of three inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.

In grading a trench for mainline conduit, there are three general practices for direction of pitch.
(a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.
(b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.
(c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.
After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2 " in depth.

\section*{C. 2 Placing of Duct}

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.
Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.

Use full length pieces for the balance of the conduit line.
Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of 20 foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. Place these intermediate spacers on top of the base spacers located within two feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.
This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.

The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.
Install a \#10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.

Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

\section*{C. 3 Concreting}

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.
Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

\section*{C. 4 Slurry Backfill}

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill the concrete encased conduit. The trench shall be backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

\section*{D Measurement}

The department will measure 2-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60 by the linear foot, acceptably completed. The measured quantity will equal the linear foot of encased duct, based on the distance along the centerline of duct between ends of conduit. City of Milwaukee will have final acceptance..

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.402 & 2-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60 & LF
\end{tabular}

2-Duct Conduit Cement Encased 4-Inch Rigid Nonmetalic Conduit DB-60
Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, and for installing the conduit.

\section*{97. 4-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.404.}

\section*{A Description}

This special provision describes furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

\section*{B Materials}

\section*{B. 1 Conduit}

Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

\section*{B. 2 Conduit Spacers}

Furnish and install nonmetallic interlocking base spacers and intermediate spacers that provide a 1-1/2" vertical and \(1-1 / 2^{\prime \prime}\) horizontal separation between PVC pipes. The base spacers shall provide a \(3^{\prime \prime}\) vertical separation from the trench bed to the bottom of the PVC pipes.

\section*{B. 3 Conduit Bed}

Furnish and install a minimum 2 " conduit bed of stone chips or crushed stone screenings conforming to the following:

3/8 Inch Crushed Stone Chips
Sieve Sizes \% Passing by Weight
\(1 / 2^{\prime \prime} \quad 100\)
3/8" 90-100
No. \(8 \quad\) 0-15
No. \(30 \quad 0-3\)

Crushed Stone Screenings
Sieve Sizes \% Passing by Weight
\(1 / 2 " 100\)
No. \(4 \quad\) 75-100
No. 100 10-25

\section*{B. 4 Concrete}

The type of concrete mix to be used to encase the ducts will be:
\begin{tabular}{ll} 
Type I Cement & 280 lbs \\
Fly Ash & 100 lbs \\
Sharp Torpedo Sand & 3100 lbs \\
Water & 35 gals \\
Chryso Air 260 or approved equal & 2.0 ozs \\
Chryso Plast 209 or approved equal & 7.0 ozs \\
Air & \(5 \%\)
\end{tabular}

Mix the materials to provide an approximate 3 inch slump

\section*{B. 5 Slurry Backfill}

Aggregate slurry backfill consists of No. 1 concrete aggregate Class ' C ' concrete mix with the cement deleted.

Fly Ash (Class C)
Concrete Sand (Damp)
No. 1 Concrete Aggregate

75 lbs.
1830 lbs.
1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

\section*{B. 6 Pull Rope}

Pull rope specifications will be:
- Flat construction ( \(7 / 16\) " to \(5 / 8^{\prime \prime}\) wide)
- \(100 \%\) woven aramid fiber (may include tracer wire)
- 1500 lbs . Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

\section*{C. 1 Excavation}

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:
\begin{tabular}{ccc}
\begin{tabular}{c} 
Number of \\
Ducts Wide
\end{tabular} & \begin{tabular}{c} 
Minimum \\
(Inches)
\end{tabular} & \begin{tabular}{c} 
Maximum \\
(Inches)
\end{tabular} \\
\cline { 1 - 2 } 1 & \(81 / 2\) & 11 \\
2 & \(145 / 8\) & \(171 / 8\) \\
3 & \(203 / 4\) & \(231 / 4\). \\
4 & \(267 / 8\) & \(293 / 8\) \\
5 & 33 & \(351 / 2\) \\
6 & \(391 / 8\) & \(415 / 8\) \\
7 & \(451 / 4\) & \(473 / 4\) \\
8 & \(513 / 8\) & \(537 / 8\)
\end{tabular}

These minimum and maximum trench widths apply to standard 4 inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.
Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.
The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.
Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:
The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.
Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.
Grade the trench to have a minimum pitch of three inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.
In grading a trench for mainline conduit, there are three general practices for direction of pitch.
(a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.
(b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.
(c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.

After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2 " in depth.

\section*{C. 2 Placing of Duct}

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.
Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.
Use full length pieces for the balance of the conduit line.
Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of 20 foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers.
Place these intermediate spacers on top of the base spacers located within 2 feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.

This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.
The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.

Install a \#10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.
Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

\section*{C. 3 Concreting}

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

\section*{C. 4 Slurry Backfill}

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill the concrete encased conduit. The trench shall be backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

\section*{D Measurement}

The department will measure 4-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60 by the linear foot, acceptably completed. The measured quantity will equal the linear foot of encased duct, based on the distance along the centerline of duct between ends of conduit. City of Milwaukee will have final acceptance.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.404. & 4-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60 & LF
\end{tabular}

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, and for installing the conduit.

\section*{98. 6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.406.}

\section*{A Description}

This special provision describes furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

\section*{B Materials}

\section*{B. 1 Conduit}

Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

\section*{B. 2 Conduit Spacers}

Furnish and install nonmetallic interlocking base spacers and intermediate spacers that provide a 1-1/2" vertical and 1-1/2" horizontal separation between PVC pipes. The base spacers shall provide a 3" vertical separation from the trench bed to the bottom of the PVC pipes.

\section*{B. 3 Conduit Bed}

Furnish and install a minimum 2 " conduit bed of stone chips or crushed stone screenings conforming to the following:
\begin{tabular}{lc}
\(3 / 8\) Inch Crushed Stone Chips \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2^{\prime \prime}\) & 100 \\
\(3 / 8^{\prime \prime}\) & \(90-100\) \\
No. 8 & \(0-15\) \\
No. 30 & \(0-3\) \\
& \\
Crushed Stone Screenings \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2^{\prime \prime}\) & 100 \\
No. 4 & \(75-100\) \\
No. 100 & \(10-25\)
\end{tabular}

\section*{B. 4 Concrete}

The type of concrete mix to be used to encase the ducts will be:
\begin{tabular}{ll} 
Type I Cement & 280 lbs \\
Fly Ash & 100 lbs \\
Sharp Torpedo Sand & 3100 lbs \\
Water & 35 gals \\
Chryso Air 260 or approved equal & 2.0 ozs \\
Chryso Plast 209 or approved equal & 7.0 ozs \\
Air & \(5 \%\)
\end{tabular}

Mix the materials to provide an approximate 3 inch slump

\section*{B. 5 Slurry Backfill}

Aggregate slurry backfill consists of No. 1 concrete aggregate Class ' \(C\) ' concrete mix with the cement deleted.

Fly Ash (Class C)
Concrete Sand (Damp)
No. 1 Concrete Aggregate

75 lbs.
1830 lbs.
1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

\section*{B. 6 Pull Rope}

Pull rope specifications will be:
- Flat construction ( \(7 / 16\) " to \(5 / 8^{\prime \prime}\) wide)
- \(100 \%\) woven aramid fiber (may include tracer wire)
- 1500 lbs. Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

\section*{C. 1 Excavation}

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:
\begin{tabular}{ccc}
\begin{tabular}{c} 
Number of \\
Ducts Wide
\end{tabular} & \begin{tabular}{c} 
Minimum \\
(Inches)
\end{tabular} & \begin{tabular}{c} 
Maximum \\
(Inches)
\end{tabular} \\
\cline { 1 - 2 } 1 & \(81 / 2\) & 11 \\
2 & \(145 / 8\) & \(171 / 8\) \\
3 & \(203 / 4\) & \(231 / 4\). \\
4 & \(267 / 8\) & \(293 / 8\) \\
5 & 33 & \(351 / 2\) \\
6 & \(391 / 8\) & \(415 / 8\) \\
7 & \(451 / 4\) & \(473 / 4\) \\
8 & \(513 / 8\) & \(537 / 8\)
\end{tabular}

These minimum and maximum trench widths apply to standard 4 inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.
Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.
The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.

Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:

The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.
Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.

Grade the trench to have a minimum pitch of three inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.

In grading a trench for mainline conduit, there are three general practices for direction of pitch.
(a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.
(b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.
(c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.

After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2 " in depth.

\section*{C. 2 Placing of Duct}

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.

Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.
Use full length pieces for the balance of the conduit line.
Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of twenty foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. Place these intermediate spacers on top of the base spacers located within two feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.

This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.
The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.

Install a \#10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.
Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

\section*{C. 3 Concreting}

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

\section*{C. 4 Slurry Backfill}

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill the concrete encased conduit. The trench shall be backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

\section*{D Measurement}

The department will measure 6-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60 by the linear foot, acceptably completed. The measured quantity will equal the linear foot of encased duct, based on the distance along the centerline of duct between ends of conduit. City of Milwaukee will have final acceptance.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.406. & 6-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60 & LF
\end{tabular}

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, and for installing the conduit.

\section*{99. 8-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.408.}

\section*{A Description}

This special provision describes furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

\section*{B Materials}

\section*{B. 1 Conduit}

Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

\section*{B. 2 Conduit Spacers}

Furnish and install nonmetallic interlocking base spacers and intermediate spacers that provide a 1-1/2" vertical and \(1-1 / 2^{\prime \prime}\) horizontal separation between PVC pipes. The base spacers shall provide a \(3^{\prime \prime}\) vertical separation from the trench bed to the bottom of the PVC pipes.

\section*{B. 3 Conduit Bed}

Furnish and install a minimum 2 " conduit bed of stone chips or crushed stone screenings conforming to the following:
\begin{tabular}{lc}
\(3 / 8\) Inch Crushed Stone Chips \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2^{\prime \prime}\) & 100 \\
\(3 / 8^{\prime \prime}\) & \(90-100\) \\
No. 8 & \(0-15\) \\
No. 30 & \(0-3\) \\
& \\
Crushed Stone Screenings \\
Sieve Sizes & \% Passing by Weight \\
\(1 / 2 "\) & 100 \\
No. 4 & \(75-100\) \\
No. 100 & \(10-25\) \\
Concrete &
\end{tabular}

\section*{B. 4 Concrete}

The type of concrete mix to be used to encase the ducts will be:
\begin{tabular}{ll} 
Type I Cement & 280 lbs \\
Fly Ash & 100 lbs \\
Sharp Torpedo Sand & 3100 lbs \\
Water & 35 gals \\
Chryso Air 260 or approved equal & 2.0 ozs \\
Chryso Plast 209 or approved equal & 7.0 ozs \\
Air & \(5 \%\)
\end{tabular}

Mix the materials to provide an approximate 3 inch slump

\section*{B. 5 Slurry Backfill}

Aggregate slurry backfill consists of No. 1 concrete aggregate Class ' \(C\) ' concrete mix with the cement deleted.

Fly Ash (Class C) 75 Ibs.
Concrete Sand (Damp) 1830 lbs .
No. 1 Concrete Aggregate 1830 lbs.
Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

\section*{B. 6 Pull Rope}

Pull rope specifications will be:
- Flat construction ( \(7 / 16\) " to \(5 / 8^{\prime \prime}\) wide)
- \(100 \%\) woven aramid fiber (may include tracer wire)
- 1500 lbs. Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

\section*{C Construction}

\section*{C. 1 Excavation}

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:
\begin{tabular}{ccc}
\begin{tabular}{c} 
Number of \\
Ducts Wide
\end{tabular} & \begin{tabular}{c} 
Minimum \\
(Inches)
\end{tabular} & \begin{tabular}{c} 
Maximum \\
(Inches)
\end{tabular} \\
\cline { 1 - 2 } 1 & \(81 / 2\) & 11 \\
2 & \(145 / 8\) & \(171 / 8\) \\
3 & \(203 / 4\) & \(231 / 4\). \\
4 & \(267 / 8\) & \(293 / 8\) \\
5 & 33 & \(351 / 2\) \\
6 & \(391 / 8\) & \(415 / 8\) \\
7 & \(451 / 4\) & \(473 / 4\) \\
8 & \(513 / 8\) & \(537 / 8\)
\end{tabular}

These minimum and maximum trench widths apply to standard 4 inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.
Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.

The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.

Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:

The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.
Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.

Grade the trench to have a minimum pitch of three inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.

In grading a trench for mainline conduit, there are three general practices for direction of pitch.
(a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.
(b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.
(c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away
from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.
After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2 " in depth.

\section*{C. 2 Placing of Duct}

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.

Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.

Use full length pieces for the balance of the conduit line.
Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of 20 foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. Place these intermediate spacers on top of the base spacers located within two feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.
This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.

The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.

Install a \#10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.
Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

\section*{C. 3 Concreting}

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

\section*{C. 4 Slurry Backfill}

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill the concrete encased conduit. The trench shall be backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

\section*{D Measurement}

The department will measure 8-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60 by the linear foot, acceptably completed. The measured quantity will equal the linear foot of encased duct, based
on the distance along the centerline of duct between ends of conduit. City of Milwaukee will have final acceptance.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.408. & 8-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60 & LF
\end{tabular}

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, and for installing the conduit.

\section*{100. Duct Removal from Concrete Encased Duct Package, Item SPV.0090.422.}

\section*{A Description}

The work under this provision consists of the removal of one empty duct from a cement encased multiple duct conduit package for proposed alterations. (See Item SPV.0090.402).

\section*{B (Vacant)}

C Construction

\section*{Excavate}

Carefully excavate to expose the outside of the existing conduit package.

\section*{Concrete Encasement Removal}

The contractor is to verify that the conduit line is free of all cabling. Break back sections of cement encased conduit by hand around the specified duct to facilitate the proposed conduit alteration. Use caution as not to expose or damage remaining ducts. Hand chip enough concrete from around the end of each pipe to allow for coupling the proposed PVC duct onto the pipes.

\section*{Conduit Removal}

Remove the minimum amount of pipe to complete the alteration.

\section*{Conduit Alteration}

Conduit alteration shall be paid for and installed under Item SPV.0090.402.

\section*{D Measurement}

The department will measure Duct Removal from Concrete-Encased Multiple Duct Package by the linear foot, acceptably completed. City of Milwaukee will have final acceptance.

\section*{E Payment}

The department will pay for measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.422 & Duct Removal from Concrete-Encased Multiple Duct Package & LF
\end{tabular}

Payment is full compensation for removal of concrete encasement and specified duct from concreteencased multiple duct package.
101. Marking Crosswalk Epoxy Transverse Line 12-Inch, SPV.0090.704.

\section*{A Description}

This special provision describes furnishing and installing Marking Crosswalk Epoxy Transverse Line 12-Inch White as directed by the engineer, as shown on the drawings and as hereinafter provided.
Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

\section*{B Materials}

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

\section*{C Construction}

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

\section*{D Measurement}

The department will measure Marking Crosswalk Epoxy Transverse Line 12-Inch White by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for the measured quantities at the contract unit price under the following bid item:
ITEM NUMBER
DESCRIPTION
SPV. 0090.703
Marking Crosswalk Epoxy Transverse Line 12-Inch
UNIT
LF
Payment shall be in accordance with standard spec 646.5.

\section*{102. Marking Crosswalk Epoxy Block Style 12-inch, SPV.0090.705.}

\section*{A Description}

This special provision describes furnishing and installing Marking Crosswalk Epoxy Block Style 12-inch White as directed by the engineer, as shown on the drawings and as hereinafter provided.
Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

\section*{B Materials}

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

\section*{C Construction}

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

\section*{D Measurement}

The department will measure Marking Crosswalk Epoxy Block Style 12-inch White by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for the measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.705 & Marking Crosswalk Epoxy Block Style 12-inch & LF
\end{tabular}

Payment shall be in accordance with standard spec 646.5.
103. Marking Stop Line Epoxy 24-Inch, SPV.0090.706.

\section*{A Description}

This special provision describes furnishing and installing Marking Stop Line Epoxy 24-Inch White as directed by the engineer, as shown on the drawings and as hereinafter provided.
Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

\section*{B Materials}

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

\section*{C Construction}

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and the engineer.
All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

\section*{D Measurement}

The department will measure Marking Stop Line Epoxy 24-Inch White by the linear foot, acceptably completed.

\section*{E Payment}

The department will pay for the measured quantities at the contract unit price under the following bid item:
\begin{tabular}{lll} 
ITEM NUMBER & DESCRIPTION & UNIT \\
SPV.0090.704 & Marking Stop Line Epoxy 24-Inch & LF
\end{tabular}

Payment shall be in accordance with standard spec 646.5.

\section*{104. Joint Sealing, Item SPV.0180.001.}

\section*{A Description}

This special provision describes the minimum requirements for preparing the pavement joints or cracks and furnishing and installing the sealant. Seal all expansion, hand-formed, and sawed joints in the pavement. Also, seal all bond or construction joints.

\section*{B Materials}

Furnish joint sealer that complies with the requirements of ASTM Designation D 3405. Joint sealer shall be composed of a mixture of materials that will form a resilient and adhesive compound capable of effectively sealing joints in concrete against the infiltration of moisture and foreign material throughout repeated cycles of expansion and contraction with temperature changes, and shall be of a mixture that will not flow from the joints or be picked up by vehicle tires at summer temperatures. The material must be capable of being brought to a uniform pouring consistency suitable for completely filling the joints without inclusion of large air holes or discontinuities.
The joint sealer shall be elastic type but poured, and it shall be melted by indirect heat in suitable equipment provided with positive temperature control and mechanical agitation. The material shall not be damaged when heated to the temperature required for satisfactory pouring.

\section*{C Construction}

Prior to the installation of the joint sealer, clean the pavement joint or crack of all foreign material. Completely remove the slurry resulting from the sawing operations from the joint by blowing it clean with compressed air (using a minimum air pressure of 80 psi ).
Only apply the joint sealer when the atmospheric and concrete temperatures are both above \(40^{\circ} \mathrm{F}\).

\section*{D Measurement}

The department will measure Joint Sealing by square yards of area, acceptably completed.

\section*{E Payment}

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

ITEM NUMBER
SPV.0180.001

DESCRIPTION
UNIT
Joint Sealing

Payment is full compensation for furnishing and placing the joint sealant; and cleaning the pavement joints and cracks.


Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, \(4^{\text {th }}\) Floor South
February 1, 2024
Madison, WI 53705
Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

\section*{NOTICE TO ALL CONTRACTORS:}

Proposal \#11: 2395-05-71, WISC 2024223
C Milwaukee E/W Howard Avenue
S 6th Street to S Clement Avenue LOC STR
Milwaukee County
Letting of February 13, 2024
This is Addendum No. 02, which provides for the following:

\section*{Special Provisions:}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{ Added Special Provisions } \\
\hline \begin{tabular}{c} 
Article \\
No.
\end{tabular} & Description \\
\hline & \\
\hline 105 & Notice to Contractor - On-site Crushing \\
\hline
\end{tabular}

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

\section*{Mike Coleman}

Proposal Development Specialist
Proposal Management Section

\section*{ADDENDUM NO. 02}

\section*{PROJECT ID: 2395-05-71}

February 1, 2024

\section*{Special Provisions}

\section*{105. Notice to Contractor - On Site Crushing}

On-site crushing will not be allowed on this project.

END OF ADDENDUM```


[^0]:    ***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

[^1]:    1 The de minimis public interest waiver does not apply to iron and steel subject to the requirements of 23 U.S.C. 313 on financial assistant administered by FHWA. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for iron and steel.
    2 The small grant portion of the waiver does not apply to iron, steel, and manufactured goods subject to the requirements of 49 U.S.C.
    22905(a).

[^2]:    Administrative Review Board
    U.S. Department of Labor

    200 Constitution Avenue, N.W.

