HIGHWAY WORK PROPOSAL

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

Proposal Number: 015

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	HIGHWAY
Milwaukee	2984-51-70	N/A	S Dana Court; Bridge Over Land P-40-0589	LOC STR

ADDENDUM REQUIRED

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: $75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: May 11, 2021 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code SAMPLE NOT FOR BIDDING PURPOSES
Contract Completion Time November 16, 2021	
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

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

Notary Seal

Type of Work: For Department Use Only

Mill, Storm Sewer, Grade, Base, Concrete Pavement, Asphalt Pavement, Curb & Gutter, Sidewalk, Lighting, Structure P-40-589

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

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

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

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

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

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

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

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

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

1. Have a properly executed annual bid bond on file with the department.

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

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

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

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

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at:
https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

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

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

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

C Waiver of Electronic Submittal

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

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

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

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

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

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Special Provisions

Table of Contents

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 2984-51-70, S Dana Court, Bridge Over Land P-40-0589, Loc Str, 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, 2021 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 (20210113)

2. Scope of Work.

The work under this contract shall consist of deck replacement, substructure repairs, removal and replacement of existing bridge railings, bearing replacement, superstructure structural steel repairs and painting, concrete approach slab, asphalt milling and overlaying, grading, base aggregate, concrete curb and gutter, sidewalk, storm sewer structures, conduit and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Arrange weekly construction/progress meetings to apprise all sub-contractors and work being done by others of current status of project.

The contractor will be responsible to find the staging area during construction by occupying the work area on the bridge, approaches, or be negotiating with the adjacent property owners for the construction staging.

Obtain permission from the engineer a minimum of 48 hours prior to any construction schedule change.

Maintain emergency vehicular access at all times to roadways located within the project limits.

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.

Amend standard spec 108.9.2 by adding the following paragraphs:

Coordinate work according to standard spec 105.5.2.

Do not commence work under this contract until the required traffic control devices and markings are in place and the engineer approves the installations. Once work has started on the contract, work continually until the contract work is complete. The contract will not be considered complete until all items on the contract are completed, including seeding and roadway finishing. If the contractor desires to work on Saturday, Sunday, or nationally recognized legal holidays, he must obtain approval from the engineer

at least 24 hours in advance. If scheduling changes after approval has been obtained, the engineer must be notified as soon as possible, but not later than 12:00 PM.

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.

Migratory Birds

Swallow or other migratory bird nests have been observed on or under the existing structure(s). All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from April 15 to August 31.

Either prevent active nests from becoming established or prevent birds from nesting by installing and/or maintaining a suitable deterrent device on the remaining structure prior to nesting activity under the bid item Installing and Maintaining Bird Deterrent System. As a last resort, apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds or clearing nests from all structures before the nests become active in early spring.

The City of Milwaukee will take appropriate action to prevent nesting until the start of project construction.

Northern Long-eared Bat *(Myotis septentrionalis)*

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

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

Clearing is restricted from June 1 to July 31.

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

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

Rusty Patched Bumblebee

This project is located inside a High Potential Zones (HPZ) for the Rusty Patched Bumblebee (RPBB), and coordination with US Fish and Wildlife Service has been completed. All disturbed areas will be reseeded with a native flowering seed mix No. 70.

Construction Staging

The rehabilitation of the South Dana Court Bridge over WE Energies Land will be undertaken in two major stages as shown on the traffic control plans and described below:

During Stage 1 the east side of the bridge will remain functional with one lane carrying one vehicle at a time, either a northbound or a southbound vehicle, while the west side of the bridge is closed for construction. Pedestrian access will be maintained on the east side of the bridge. Bicyclists will need to walk bicycles to avoid one-lane, one-way roadway. Pedestrians are to share roadway access with all other users over the bridge as the majority of roadway on the bridge deck must be closed.

During Stage 2 the west side of the bridge will remain functional with one lane carrying one vehicle at a time, either a northbound or a southbound vehicle, while the east side of the bridge is closed for construction. Bicyclists will need to walk bicycles to avoid one-lane, one-way roadway. Pedestrian access will be maintained on the west side of the bridge.

4. Traffic.

Undertake traffic control in accordance with 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.

Supply the name and telephone number of a local contact person for traffic control repair prior to or at the preconstruction conference.

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.

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.

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 (Project).

Maintain or provide where necessary, as directed by the engineer, pedestrian access to adjacent properties and businesses. 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.

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 extend in accommodating emergency access in the shortest possible time.

All construction vehicles and equipment entering or leaving traffic lanes shall yield to through traffic.

The City of Milwaukee’s Traffic Operations section will provide all posting of parking restrictions required to facilitate construction operations. Contact Mr. Cameron Potter at (414) 286-3276 three working days prior to the start of construction operations.

When an area of the roadway is temporarily closed to traffic, sign and delineate the portion of the roadway that is to remain open, in accordance with Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD), and the WisDOT manual titled “Guidelines for Construction, Maintenance, & Utility Operations”.

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 South Dana Court 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 28, 2021 to 6:00 AM Tuesday, June 1, 2021 for Memorial Day;
- From noon July 2, 2021 to 6:00 AM Monday, July 5, 2021 for Independence Day;
- From noon Friday, September 3, 2021 to 6:00 AM Tuesday, September 7, 2021 for Labor Day.

stp-107-005 (20210113)

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.

A. American Transmission Company (ATC)

ATC has 138 kV transmission facilities within the project limits. There are no anticipated conflicts. Maintain a safe working clearance to the 138 kV conductor at all times based on the latest OSHA requirements. NOTE: There can be no outage requests for the 138 kV conductors due to the vital service it provides to the nearby Hospital.

Contact Mr. Chris Daily at (262) 506-6884 with questions or concerns.

B. AT&T Wisconsin

AT&T Wisconsin has facilities within the project limits. AT&T will remove two pedestals located at station 12+23, 32' LT and 13+13, 32.5' LT and the service wires between the pedestals and any associated hardware prior to the start of construction of the bridge wok. The work is anticipated to begin in May of 2021 and will take up to 5 working days to complete.

Contact Mr. Jay Bulanek of AT&T with questions or concerns at (262) 896-7669; jb5175@att.com.

C. Charter

Charter/Spectrum has coax and fiber overhead cable suspended from the We Energies-Electric poles located over the south bridge abutment of South Dana Court. The overhead lines will be temporarily relocated by Charter/Spectrum forces prior to the start of construction work.

Contact Mr. Charlie Brasile at (414) 908-4822, work or (414) 430-5812 cell with questions or concerns

D. City of Milwaukee

D.1 City Underground Conduit (CUC)

The City of Milwaukee has existing City Underground Conduit (CUC) conduit packages and manholes within the limits of the project. There are two existing 3" iron conduits suspended from the existing bridge deck between girder #'s 21 & 22. Removal and disposal of the conduits on the bridge shall be included under the bid item 'Removing Old Structure Station 12+81.34'. The existing conduits beyond the bridge limits to the existing manholes shall be discontinued in place. Provide and install two 4" fiberglass conduits with stainless steel hangers on the bridge as shown on the plans and these special provisions. The concrete encased conduit and manholes to be installed beyond 5' foot of the abutments are included in the plans and special provisions. Install a 3/8" nylon pull rope thru the conduits between manholes.

All existing and proposed CUC manholes will be adjusted to grade by the contractor.

Contact Karen Rogney at (414) 286-3243 seven days in advance of working on CUC facilities. For general questions regarding this utility contact Ms. Karen Rogney of the City of Milwaukee at (414) 286-3243 (office) or (414) 708-3501 (mobile).

D.2 Sewer

The City of Milwaukee has sewer facilities within the limits of the project. Proposed drainage and sewer work will be done by the contractor as part of the project.

Contact Mr. Elliot Smyth at (414) 704-0468 for coordination of the work.

D.3 Signal

Traffic signals interconnect is located within the CUC duct package. Prior to construction, City of Milwaukee – Traffic Signals staff will disconnect and discontinue the existing interconnect cabling within the CUC duct package.

Contact Mr. Rudy Gutierrez at (414) 708-5148 or (414) 286 5941 for coordination of the work

D.4 Street Lighting

There is one 2” diameter street lighting conduit which is mounted on the outside of the west sidewalk parapet that is discontinued in place. Existing street lighting facilities close to the structure will be removed by the City before construction starts. Removal and disposal of the existing conduits will be part of the bid item ‘Removing Old Structure Station 12+81.34’.

The contractor is responsible for supplying and installing conduit and hangers as detailed in the plans. The contractor shall contact the City Street Lighting Field Operation Manager(s) as noted below after the new conduit is installed but before concrete is poured for inspection of the installation. There must be expansion couplers installed as noted on the bridge plans. Each conduit that runs under the bridge structure is to be extended to a pull box on either end of the bridge. All street lighting conduits are to have a 3/8-inch nylon pull rope installed.

During and after construction, permanent underground street lighting facilities and lighting units will be installed in coordination with this project by the city. The contractor is to keep Street Lighting Field Operations informed of the progress of the bridge construction.

Contact either of the City of Milwaukee Street Lighting Field Operation Managers: Mr. Morgan Monnot at (414) 286-5942 (office) or (414) 708-4251 (mobile) or Neal Karweik at (414) 286-5943 (office) (414) 708-4245 at least seven working days before construction work starts, and during construction to give a three working day notice for coordination of permanent street lighting work. If the contractor requests the relocation of any street lighting facilities, permanent or temporary, for his convenience, he will be responsible for all costs incurred by the street lighting personnel fulfilling his request.

A generator is to be provided and maintained by the contractor throughout the entire construction project to power the City of Milwaukee street lighting located south of the bridge construction work.

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.

For general questions regarding this utility contact Mr. Morgan Monnot of the City of Milwaukee at (414) 286-5942 (office) or (414) 708-4251 (mobile).

Contractor to provide two sets of red lined as-built plans to the City of Milwaukee Street Lighting Engineer Senior Manager upon completion of the installation for the street lighting conduit and pull boxes. The plan sets are incidental to the conduit installation, and no extra payment will be made by the City.

Send red lined as-built plans to:

Street Lighting Engineer Senior Manager
Eng Kie Lee
841 North Broadway, Room 920
Milwaukee, WI. 53202

D.5 Water

The City of Milwaukee has water facilities located within the limits of the project. Water valve boxes and manholes will be adjusted as part of this project by the contractor.

There is an existing 16” water main bored under the bridge 20’ east of the West ROW of South Dana Court. This utility will remain in place and active for the duration of construction. No impact is anticipated to the utility beyond adjusting manholes and valve boxes which will be paid for by the appropriate bid item.

Secure two hydrant permits for the hydrants closest to the bridge for each stage’s concrete pours. Only one hydrant is expected to be used for each pour in each stage, and the other hydrant permit will serve as back-up.

Contact Mr. Dave Goldapp of Milwaukee Water Works at (414) 286-6301 (office) or (414) 708-2695 (mobile) for any questions regarding this facility.

For general questions regarding this utility contact Mr. Joseph Mestnick of the City of Milwaukee at (414) 286-3405 (office) or (414) 708-7015 (mobile).

E. Metropolitan Milwaukee Sewerage District (MMSD)

MMSD has one manhole located within the project limits. It is located at Station 11+14, 3-ft LT The manhole cover will be adjusted by MMSD forces in coordination with paving operations. The contractor shall notify MMSD a minimum of 3 days prior to the adjustment, the work is anticipated to take half a working day.

Contact Micki Klappa-Sullivan at (414) 416 5389 (cell) or (414) 225-2178 (office) to coordinate the work.

F. We Energies - Electric

We Energies has two separate overhead facilities above the south bridge abutment and the north bridge abutment.

The overhead facilities above the north abutment will be removed by We Energies forces before the start of construction work on this project.

The overhead facilities above the south abutment will remain in place except that the pole located at the south east corner of the bridge will be removed 5 feet east of the current location. This work will be done by We Energies forces prior to or in coordination with the bridge construction work, installation work is anticipated to take 15 working days, prior to construction. There are no anticipated conflicts.

There are two We Energies ducts located under the existing bridge deck between girders 5 & 6 and 20 & 21 to be removed during the bridge deck removal. They currently do not have any facilities in them.

All OSHA and WE Energies standards must be followed while working near the energized lines.

Contact Mr. Alex Dantinne at (920) 621-6903 with concerns or questions. - We Energies Electric Dispatch #1 (800) 662-4797.

G. We Energies – Gas

We Energies Gas has gas main facilities within the limits of the project.

We Energies gas main required procedure for the South Dana Court Bridge:

The 6” Gas Main between girder #’s 7 & 8 is to remain in place from Station 12+30, 11’ LT to Station 13+35, 11’ LT. New 2” PE will be run through the existing 6” Steel mounted to the bridge and sealed on each end. North and South of the bridge, the 2” PE will continue approximately 40’ after it comes out of the bridge.

1. The 6” main must remain live during all bridge removal and installation operations.
2. The City of Milwaukee’s contractor will protect the 6” gas main when removing and replacing the deck. Payment for the materials and labor associated with this work will be paid under, Gas Main Protection P-40-589, Item SPV.0105.590.
3. After the deck has been removed, We Energies will need two working days to examine and repair any faulty pipe coating and clean and grease the existing expansion coupling.
4. When the City of Milwaukee’s contractor exposes the gas main and the backside of the abutment girder end diaphragm, We Energies will require half day at each location to install wooden supports under the main.
5. The City of Milwaukee’s contractor will then carefully remove the abutment girder end diaphragm in and around the gas main at both east and west abutments.

6. After the abutment girder end diaphragm is removed, We Energies will need one day at each location to remove the existing steel casing sleeve, clean and rewrap the main and install a new plastic casing sleeve.
7. The City of Milwaukee's contractor can then install the new abutment girder end diaphragm. When cured and before backfilling, We Energies will remove the wooden supports.
8. See Gas Main Protection P-40-589, Item SPV.0105.590 for additional requirements.

If the line has been verified by We Energies to be dead per the above paragraph, it is the responsibility of the contractor to remove and dispose of all sections of the discontinued facility necessary for them to continue with the project.

Contact Mr. Alex Dantinne at (920) 621-6903 with concerns or questions. - We Energies Gas Dispatch # 1 (800) 261-5325.

7. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

John Roelke, License Number All-119523, inspected Structure P-40-589 for asbestos on November 19, 2019. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: James Hagen at (414) 286-3696.

In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Greg Hafeman, (262) 548-8677 and DOT BTS-ESS attn: Hazardous Materials Specialist, PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure P-40-589, South Dana Court over Land
- Site Address: 0.3 M South Junction USH 18
- Ownership Information: City of Milwaukee, 841 North Broadway, Milwaukee, WI 53202
- Contact: Greg Hafeman
- Phone: (262) 548-8677
- Age: 95 years old. This structure was constructed in 1926.
- Area: 4446 SF of deck

Insert the following paragraph in Section 6.g.:

If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

stp-107-125 (20120615)

8. Traffic Control.

Perform the work under this item in accordance with the requirements of standard spec 643, as shown on the plans or as approved by the engineer, except as herein modified.

Permanently label each barricade, sign or other traffic control device with the name and telephone number for 24-hour emergency service, printed in letters at least ¾ inches in height.

No operation may proceed until all traffic control devices for such work are in the proper location.

During the life of this contract, provide 24 hour-a-day availability of equipment and forces to promptly restore barricades, lights, signs or other traffic control devices that are damaged or disturbed. 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, therefore.

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to route traffic in order to perform the operations.

Provide the City of Milwaukee Police Department and the engineer a 24-hour emergency contact number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Mask out all traffic control signs and have flags removed when not in use.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

Receive prior approval from the engineer for the location of egress or ingress for construction vehicles to prosecute the work.

Park or store equipment and materials only at work sites approved by the engineer.

Do not disturb, remove, or obliterate any traffic control signs, advisory signs, shoulder delineators, or beam guard in place along the traveled roadways without the approval of the engineer.

Install appropriate advance and intermediate warning signs of standard design. Install the signs at locations indicated on the plan and at locations as directed by the engineer in accordance with Part VI of the Manual of Uniform Traffic Control Devices. Sign shape, message and color must be in accordance with Part VI of the Manual of Uniform Traffic Control Devices.

9. Erosion Control.

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 (*Ms. Kristina Betzold; WDNR Southeast Region Headquarter; 2300 N. Dr. Martin Luther King Jr. Dr.; Milwaukee, WI 53212*). 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 5 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.

10. 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.

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.

12. Archaeological Site.

Beth Hamedrosh HAS Cemetry (BMI-0024) site is located approximately (Station 10+80 to Station 12+31) 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)

13. 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 9:00 PM until the following 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 in accordance with 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 6th Street
(414) 286-2268

14. Removing Old Structure Station 12+81.34, Item 203.0200.001.

Supplement standard spec 203 by adding the following:

The contractor shall obtain permission to use WE Energies land below and adjacent to the S. Dana Court Bridge construction site for a temporary construction staging area.

15. Excavation for Structures Bridges P-40-589, Item 206.1000.001.

Supplement standard spec 206 by adding the following:

Excavation at the S. Dana Court Bridge construction site will only occur behind the north and south abutments ranging from a depth of 1' to 3' from the existing grade. The area of the excavation will be 6' behind each abutment for width of the existing bridge. The area of the excavation will be entirely within the right-of-way of South Dana Court. The excavation will be filled with compacted structural fill, road base course and then paved.

No excavation shall occur in the WE Energies owned corridor. The Beth Hamedrosh Hagodel Anshe Sfard Cemetery abuts the SE corner of the Dana Bridge project site. The offset from the cemetery property corner to the new is approximately 1'. Temporary shoring will be used at this location to prevent any disturbance of the cemetery property.

16. 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.

17. Concrete Aggregates.

Modify standard spec 501 as follows:

A 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.

18. Concrete Masonry Bridges.

Perform this work according to standard spec 502, except as otherwise provided in the plans or in these special provisions.

The exterior face of the concrete slabs, walks, curbs and all surfaces of the bridge railing which do not receive architectural surface treatment shall receive a sack-rubbed surface finish.

Supplement standard spec 501.3.1.3 as follows:

The grade of concrete used in the superstructure shall be Grade A-FA or A-S. The chosen grade is to be used for all components of the superstructure.

19. Notice to Contractor – Restoration within Right-of-Way.

Excavation and restoration for installation of sidewalk will be limited to nine (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.

20. Removing Bearings, P-40-589, Item 506.7050.S.001.

A Description

This special provision describes raising the girders and removing the existing bearings, as the plans show.

B (Vacant)

C Construction

Raise the structure’s girders and remove the existing bearings as the plans show.

Obtain prior approval from the engineer for the method of jacking the girders and of supporting them as required.

D Measurement

The department will measure Removing Bearings P-40-589 by the unit for each bearing removed, 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
506.7050.S.001	Removing Bearings, P-40-589	EACH

Payment is full compensation for raising the bridge girders; and for removing the old bearings.

Cost of furnishing and installing the bearings will be paid for under separate bid items.

stp-506-035 (20130615)

21. Epoxy Injection Crack Repair, Item 509.9025.S; Cored Holes 2-Inch Diameter, Item 509.9026.S.

A Description

This special provision describes repairing structural cracks in piers using the epoxy injection method, and coring 2-inch diameter core samples the repaired cracks.

Conform to standard spec 509 as modified in this special provision.

B Materials

Furnish epoxy injection material that is insensitive to the presence of water and is composed of a two-component epoxy resin designed specifically for structurally re-bonding cracks in Portland cement concrete. The epoxy injection material shall conform to the following physical properties at 77 degrees F:

	Unmixed		**Mixed**
	Component A (Resin)	**Component B (Catalyst)**	
Weight per gallon, lbs	9.15 ±0.1	8.2 ±0.1	9.15 ±0.1
Viscosity, cps	500-700	120-160	275-350
Specific Gravity, g/cc	1.128 ±0.012	0.984 ±0.012	1.099 ±0.012
Color Straw	Straw	Straw	Straw
Shelf Life (closed containers)	2 years	2 years	---
Solids by Weight	---	---	100%
Pot Life (200 gram mass)	---	---	12-15 mins.
Mixing Ratio (by weight)	80%	20%	---
Mixing Ratio (by volume)	78%	22%	---
Bond Strength	---	---	2000 psi min
Shrinkage Resistance	---	---	ASTM C883
Thermal Compatibility	---	---	ASTM C884

Furnish surface seal material for confining the injected epoxy resin in the cracks that meets the following requirements:

1. Adequate strength to hold the injection fittings firmly in place to resist injection pressures and prevent leakage during injection.
2. Non-sag consistency.
3. Insensitive to the presence of water.
4. Controlled cure time.
5. Two-component epoxy resin.
6. 100% solids by weight.
7. Applicable to wet surfaces.
8. Viscosity should be paste.

C Construction

C.1 Injection Equipment

Use equipment to meter and mix the two-epoxy resin components and to inject the mixture into the cracks. The equipment shall be portable and have positive displacement type pumps equipped with an interlock to provide positive ration control of exact proportions of the two components at the nozzle. Use electric or air powered pumps that provide in-line metering and mixing.

Use injection equipment that has automatic pressure control capable of discharging the mixture at any present pressure up to 160 psi (±5 psi) and is equipped with a manual pressure control override.

The equipment shall have the capability of maintaining the volume ratio for the mixture prescribed by the manufacturer of the epoxy resin material within a tolerance of ±5% by volume at any discharge pressure up to 160 psi.

The injection equipment shall be equipped with sensors on both the Component A and B reservoirs that will automatically stop the machine when only one component is being pumped to the mixing head.

C.2 Surface Area Preparation

Clean the surface areas adjacent to cracks of all dirt, dust, grease, oil, efflorescence, or other foreign matter, which may be detrimental to adhesion of the surface seal material. Acids and corrosives will not be permitted for cleaning.

Install injection ports along the cracks on both faces of the pier at intervals of 4 to 10 inches, or as appropriate to accomplish full penetration of the injection resin. Center the injection ports over the cracks and secure in place using surface seal material. Where possible, install the injection ports over the widest areas of the cracks.

Apply the surface seal material to the face of the crack between the entry ports. For known through cracks, apply the surface seal material to both faces of the member. Before proceeding with the injection operation, allow sufficient time to elapse for the surface seal material to gain adequate strength.

C.3 Epoxy Injection

Install the epoxy injection resin according to the manufacturer’s instructions.

During installation, in general, limit pressures to 35 psi at the point of entry into the crack.

On vertical cracks, start the injection at the lowest point and continue upward along the crack. While injecting, resin should flow to and out of the next higher port. When this flow is established, cap the lower port and continue the injection until all ports have been injected and flow has been established between them.

On horizontal cracks, follow the same procedures used for vertical cracks; start the injection at one end and continue the injection in succession along the crack until all ports have been injected and flow has been established between them.

C.4 Finishing and Clean-Up

When cracks are completely filled, cure the epoxy resin for a sufficient length of time so that when the surface seal is removed, there is no draining or runback of the epoxy material from the cracks. Grind, or use other appropriate method, to remove surface seal material, excess epoxy material, and injection ports. No epoxy material shall extend beyond the plane of the surfaces of the in-situ concrete.

C.5 Core Sampling

To determine if the crack injection is complete, obtain two 2 -inch diameter core samples from the repaired pier. Take the cores to the depth of the element or at least 12 inches. Take the cores at locations selected by the engineer. The engineer will have the option of increasing or decreasing the number of cores taken.

The injection shall be considered complete if more than 90% of the crack void, to 12 inches deep, is filled with the epoxy resin in each of the samples taken. If the injection is incomplete, re-injection and additional cores may be required.

Repair the core holes left in the member using one of the two following methods:

1. Fill core holes with an epoxy mortar consisting of one part epoxy injection resin to four parts clean, dry, bagged fine aggregate mixed by volume. Match the finish repair to the surrounding surface.
2. Fill core holes with an epoxy mortar consisting of one part epoxy gel to one part clean, dry, bagged fine aggregate mixed by volume. Match the finish repair to the surrounding surface.

D Measurement

The department will measure Epoxy Injection Crack Repair in length by the linear foot crack, acceptably repaired.

The department will measure Cored Holes 2-Inch Diameter as each individual cored hole, as approved by the engineer, and acceptably completed. Additional cores taken as required by the engineer after re-injection (due to incomplete injection) will not be measured for payment. Additional cores taken by the contractor that are not ordered by the engineer will not be measured for payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.9025.S	Epoxy Injection Crack Repair	LF
509.9026.S	Cored Holes 2-Inch Diameter	EACH

Payment is full compensation for furnishing and placing the epoxy sealant, including any cleaning before and after injection; coring samples of the work; inspecting the core samples; and for repairing the core holes left in the member.

stp-509-025 (20100709)

22. Structure Repainting General.

A General

A.1 Inspection

On all structures in this contract, notify the engineer of any missing or broken bolts or nuts, any missing or broken rivets, or of any cracks or flaws in the steel members while cleaning or painting.

A.2 Date Painted

At the completion of all painting work, stencil in black paint or contrasting color paint the date of painting the bridge. The numbers shall be 3 inches (75 mm) in height and shall show the month and year in which the painting was completed: e.g., 11-95 (November 1995). On each bridge painted, stencil the date at two locations. On truss bridges, stencil the date on the cover plates of end posts near and above the top of the railings at the oncoming traffic end. On steel girder bridges, stencil the date on the inside of the outside stringers at the abutments. The date on grade separation bridges shall be readable when going under the structure or at some equally visible surface near the ends of the bridge, as designated by the engineer.

A.3 Graffiti Removal

Remove any graffiti on concrete abutments, piers, pier caps, parapet railings, slope paving or any other location at the direction of the engineer. Use a brush sandblast to remove graffiti.

The above work will not be measured and paid for separately but will be considered incidental to other items in the contract.

B (Vacant)

C Construction

C.1 Repainting Methods

Do not perform blasting, cleaning and painting on days of high winds. Prevailing winds in excess of 15 mph (25 km/hr) shall be considered high winds.

Place the final field coat of paint on the exterior of the exterior beams as a continuous painting operation. Stop at splices, vertical stiffeners or other appropriate locations so that lap marks are not evident or noticeable.

Completely clean and remove spent abrasive and other waste materials resulting from the contractor's operation from bridge deck surfaces, gutter lines, drains, curbs, bridge seats, pier caps, slope paving, roadway below, and all structural members and assemblies.

C.2 Inspection

Add the following to standard spec 105.9:

Furnish, erect and move scaffolding and other equipment to allow the inspector to closely observe all affected surfaces. The scaffolding, with appropriate safety devices, shall meet the approval of the engineer.

stp-517-005 (20150630)

23. Preparation and Coating of Top Flanges P-40-589, Item 517.0900.S.001.

A Description

This special provision describes thoroughly cleaning and coating the top surface and edges of the top flanges, removing loose paint, rust, mill scale, dirt, oil, grease, or other foreign substances until the specified finish is obtained.

B (Vacant)

C Construction

For top flanges and edges that have no paint on them and in accordance with the department’s Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean the top surface and edges of the top flanges and paint them with one coat of an approved zinc rich primer. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For top flanges and edges that have paint on them and in accordance with the department’s Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean all areas of rust and loose paint on the top surface and edges of the top flanges. Wash the top surface and edges of the top flanges and paint them with one coat of an approved zinc-rich primer in accordance with paint manufacture’s recommendations. If flash rusting occurs before the application of the primer, stop painting application, remove the flash rusting and paint cleaned surface. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

Where plans call for the cleaning of other painted structural steel including hanger assemblies, bearings, field splices, and connections, clean areas of loose paint and rust in accordance with the department’s Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, or and in accordance with paint manufacture’s cleaning recommendations. Sound paint need not be removed with the exception of an area 12 inch on either side of hanger assembly centerlines. Clean this area to base metal according to the paint manufacture’s cleaning recommendations and paint them one coat of an approved zinc-rich primer in accordance with paint manufacture’s recommendations. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For areas of exposed steel members that are to be imbedded in new concrete and in accordance with the department’s Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, thoroughly clean the surface area of exposed steel members that are to be imbedded in the new concrete and solvent wash and paint one coat of an approved zinc rich primer in accordance with paint manufacture’s recommendations to these areas. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

According to the approved project specific hazardous material containment plan, furnish and erect tarpaulins or other materials to collect all of the spent paint containing material resulting from blasting or hand and power tool cleaning and coating. Minimize dust during all clean-up activities. Collect and store waste material at the end of each work day or more often if needed. Store waste materials in the hazardous waste containers provided. Lock and secure all waste containers at the end of each work day. Cover containers at all times except when adding or removing waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water. Transportation and disposal of such waste material will be the responsibility of the department.

Damage to existing painted surfaces as a result of construction operations, shall be restored to the approval of the engineer at the contractor's expense.

D Measurement

The department will measure Preparation and Coating of Top Flanges P-40-589 as a single complete lump sum unit of work for the structure, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
517.0900.S.001	Preparation and Coating of Top Flanges P-40-589	LS

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the coating.

stp-517-010 (20140630)

24. Structure Repainting Recycled Abrasive P-40-589, Item 517.1800.S.001.

A Description

This special provision describes surface preparation and painting of the metal surfaces according to the manufacturer's recommendations as modified in this special provision.

A.1 Areas to be Cleaned and Painted

All structural metal surfaces of:

1. Structure P-40-589, 10,830 SF.

Areas are approximate and given for informational purposes only.

B Materials

B.1 Coating System

Furnish a complete coating system from the department's approved list for "Structure Repainting Recycle Abrasive Structure". The color for the finish coating material shall match the color number the plans show according to Federal Standard Number 595. Supply the engineer with the product data sheets for approval before any coating is applied. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, and the minimum drying time between coats.

The color of the primer must be such that a definite contrast between it and the color of the blasted steel is readily apparent. There shall be a color contrast between all subsequent coats for the paint system selected. Submit color samples of the primer and all coats to the engineer for approval before any application of paint.

C Construction

C.1 Surface Preparation

Before blast cleaning, solvent clean all surfaces to be coated according to SSPC-SP1.

All metal surfaces must be blast cleaned in accordance with SSPC-SP10 and verified before painting.

Upon completion of surface preparation, test representative surfaces, which were previously rusted (i.e. pitted steel) for the presence of residual chloride. Perform Surface Contamination Tests (SCAT) in accordance with the manufacturer's recommendations. The tests must be witnessed by the engineer. If chlorides are detected at levels greater than 7ug/cm^2, continue to clean the affected areas until results are below the specified limit. Submit anticipated testing frequencies and chloride remediation methods to the engineer for review and approval.

Apply the prime coat the same day that the metal surfaces receive the No. 10 blast or re-blast before application. Cleaned surfaces shall be of the specified condition immediately before paint application. If rust bloom occurs before applying the primer, stop the painting operation in the area of the rust bloom and re-blast and clean the area to SSPC SP-10 before applying the primer.

The steel grit and any associated equipment brought to the site and used for blast cleaning shall be clean. Remove immediately dirty grit or equipment brought to the site at no expense to the department. Furnish an abrasive that has a gradation such that it will produce a uniform surface profile between 1 to 3 mils on the steel surface, as measured in accordance with ISO 8503-5.

The abrasive blasting and recovery system shall be a completely integrated self-contained system for abrasive blasting and recovery. It shall be an open blast and recovery system that will allow no emissions from the recovery operation. The recovery equipment shall be such that the amount of contaminants in the clean recycled steel grit shall be less than 1 percent by weight as per SSPC AB-2.

Remove by grinding all fins, tears, slivers, and burred or sharp edges that are present on any steel member, or that appear during the blasting operation, and re-blast the area to give a 1 to 3 mils surface profile.

Remove all spent material and paint residue from steel surfaces with a good commercial grade vacuum cleaner equipped with a brush-type cleaning tool, and test cleanliness in accordance with ASTM D4285. The airline used for surface preparation shall have an in-line water trap and the air shall be free of oil and water as it leaves the airline.

Take care to protect freshly coated surfaces from subsequent blast cleaning operations. Thoroughly wire brush damaged primed surfaces with a non-rusting tool, or if visible rust occurs, re-blast to a near white condition. Clean and re-prime the brushed or blast cleaned surfaces in accordance with this specification.

C.2 Coating Application

Apply paint according to the manufacturer’s recommendations in a neat workmanlike manner. Paint application shall normally be by airless spray or inaccessible areas by brush, roller or other methods approved by the engineer.

The engineer may allow the use of conventional spray equipment after satisfactory demonstration by the contractor of the proper application technique and handling of that equipment.

Mix the paint or coatings according to the manufacturer’s directions to a smooth lump-free consistency. Keep paint thoroughly mixed during the painting application.

After the inspector approves the entire cleaned surface to be coated, apply a prime coat uniformly to the entire surface. Either before or after applying the prime coat, brush or spray a stripe coat of primer on all plate edges, bolt heads, nuts, and washers. Apply succeeding coats as the product data sheet shows.

Remove all dry spray by vacuuming, wiping, or sanding if necessary.

If the application of the coating at the required thickness in one coat produces runs, bubbles, or sags; apply a "mist-coating" in multiple passes of the spray gun; separate the passes by several minutes. Where excessive coating thickness produces "mud-cracking", remove such coating back to soundly bonded coating and re-coat the area to the required thickness.

The resultant paint film shall be smooth and uniform, without skips or areas of excessive paint in accordance with SSPC PA1.

The coating is supplied for normal use without thinning. If in cool weather it is necessary to thin the coating for proper application, thin according to the manufacturer’s recommendations.

During surface preparation and coating application the ambient and steel temperature shall be between 39 degrees F and 100 degrees F. The steel temperature shall be at least 5 degrees F above the dew point temperature. (This requires the steel to be dry and free of any condensation or ice regardless of the actual temperature of the steel.) The relative humidity shall not exceed 85%. The manufacturer’s ambient condition requirements must be followed if they are more stringent.

Paint thickness shall be within the requirements for a three coat paint system listed in the department’s approved list for Structure Repainting Recycle Abrasive Structure and the paint system being used.

Time to recoat shall be according to the manufacturer’s recommendations.

The dry film thickness will be determined by use of a magnetic film thickness gage. The gage shall be calibrated for dry film thickness measurement according to SSPC-PA 2. Dry film thickness in each area measured will be based on an average of three gage readings, after calibration of the gage to account for surface profile of the bare steel as a result of surface preparation.

D Measurement

The department will measure Structure Repainting Recycled Abrasive P-40-589 as a single complete lump sum unit of work, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1800.S.001	Structure Repainting Recycled Abrasive P-40-589	LS

Payment is full compensation for preparing and cleaning the designated surfaces; furnishing and applying the paint; and for providing the listed equipment.

stp-517-050 (20190618)

25. Labeling and Disposal of Waste Material.

The EPA ID number for Structure B-40-589 is WIR000174458

The state has an exclusive mandatory use contract with a private waste management contractor to transport and dispose of hazardous waste.

The state's waste management contractor shall furnish and deliver appropriate hazardous waste containers and site-specific labels to each bridge site. The provided containers shall be placed at pre-selected drop-off and pick-up points at each bridge site, and these locations shall be determined at the preconstruction conference. The custody of the containers and labels shall be the responsibility of the painting contractor while they are at the job site.

Contact the waste management contractor a minimum of 10 working days in advance to request container drop-off or pickup. Provide the waste management contractor with the project ID, structure number, EPA ID, and the agreed-upon location for container staging. Contact information for the waste management contractor is located on the WisDOT Internet site at

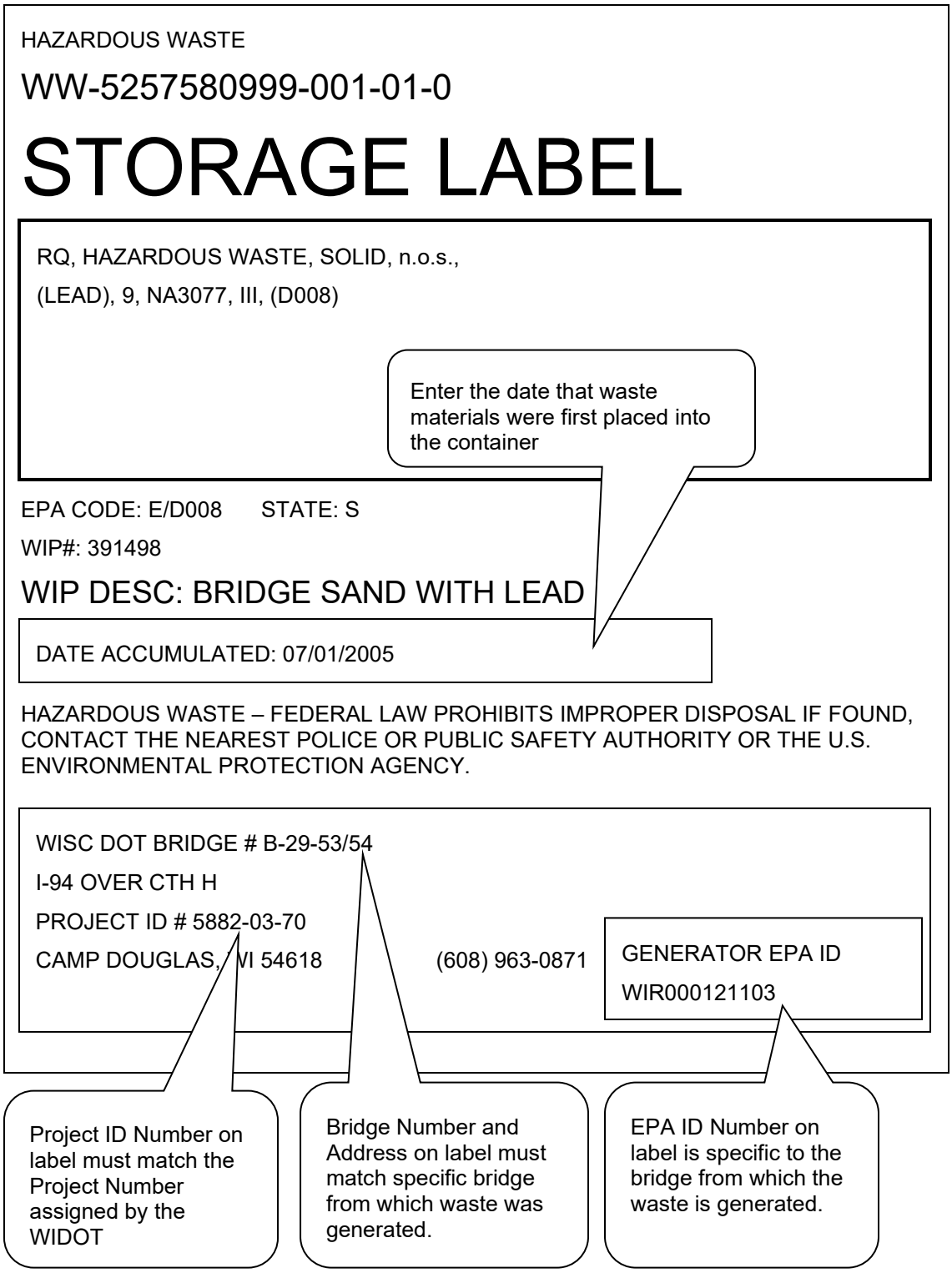
https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/hazwaste-contacts.pdf

Report all reportable spills and discharges according to the contingency plan.

Labels are site-specific. Check the labels to ensure that the project ID, structure number, and EPA ID match the structure generating the waste. Apply a label to each drum when it is opened for the first time. Fill in the date on the label the first day material is accumulated in the drum. The following page is an example of a properly filled-in label.

During paint removal operations, continuously monitor and notify the project inspector of the status of waste generation and quantity stored so that timely disposal can be arranged.

stp-517-055 (20190618)



26. Negative Pressure Containment and Collection of Waste Materials, P-40-589, Item 517.4500.S.001.

A Description

This special provision describes providing a dust collector to maintain a negative air pressure in the enclosure; furnishing and erecting enclosures as required to contain, collect and store waste material resulting from the preparation of steel surfaces for painting, and repainting, including collection of such waste material, and labeling and storing waste material in approved hazardous waste containers.

B (Vacant)

C Construction

Erect an enclosure to completely enclose (surround) the blasting operations. The ground, slope paving, or roadway cannot be used as the bottom of the enclosure unless covered by approved containment materials. So that there are no visible emissions to the air or ground or water, design, erect, operate, maintain and disassemble the enclosures in such a manner to effectively contain and collect dust and waste materials resulting from surface preparation and paint over spray. Suspend all enclosures over water from the structure or as approved by the engineer.

Construct the enclosure of flexible materials such as tarpaulins or of rigid materials such as plywood, or of a combination of flexible and rigid materials and meet SSPC Guide 6 requirements with Level 1 emissions. Systems manufactured and provided by Eagle Industries, Detroit Tarps, or equal, are preferred. The tarpaulins shall be a non-permeable material, either as part of the tarp system or have a separate non-permeable lining. Maintain all materials free of tears, cuts or holes. The vertical sides of the enclosure shall extend from the bottom of the deck down to the level of the covered work platform or covered barge where used for structures over water and shall be fastened securely to those levels to prevent the wind from lifting them. Bulkheads are required between beams to enclose the blasting area as approved by the engineer. Where bulkheads are required, construct them of plywood and properly seal them. To prevent spent materials and paint over spray from escaping the enclosed area, overlap and fasten together all seams. Place groundcovers under all equipment before operations or as approved by the engineer.

To allow proper cleaning, inspection of structures or equipment, and painting, provide safe adequate artificial lighting in areas where natural light is inadequate.

Provide a dust collector so that there are no visible emissions outside of the enclosure and so that a negative air pressure inside the enclosure is maintained. The dust collector shall be sized to maintain the minimum air flow based on the cross-sectional area of the enclosure.

A combination of positive air input and negative air pressure may be needed to maintain the minimum airflow within the enclosure.

Filter all air exhausted from the enclosure to create a negative pressure within the enclosure so as to remove all hazardous and other particulate matter.

After all debris has been removed and all painting has been approved in the containment area is complete, remove containment in accordance with SSPC Guide 6.

As a safety factor for structures over water, provide for scum control. Provide a plan for corrective measures to mitigate scum forming and list the procedures, labor and equipment needed to assure compliance. Effectively contain the scum that forms on the water and does not sink in place from moving upstream or downstream by the use of floating boom devices.

If in the use of floating boom devices, the scum tends to collect at the devices, contain, collect, store the scum, and do not allow it to travel upstream or downstream beyond the devices. Remove the scum at least once a day or more often if needed.

Collect and store at the bridge site for disposal all waste material or scum collected by this operation, or any that may have fallen onto the ground tarps. Collect and store all waste material and scum at the end of each workday or more often if needed. Storage shall be in provided hazardous waste containers. Label each container as it is filled, using the labels provided by the Hazardous Waste Disposal contractor. Check the label and ensure that the project ID, bridge number and EPA ID match the structure. Fill in the generation date when the first material is placed in the container. Secure all containers at the end of each workday. Keep the containers covered at all times except to add or remove waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain, or exposed to standing water.

In a separate operation, recover the recyclable abrasive for future application, and collect the paint and/or corrosion particles for disposal.

D Measurement

The department will measure Negative Pressure Containment and Collection of Waste Materials P-40-589 as a single complete lump sum unit of work for each structure designated in the contract, completed in accordance with the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
517.4500.S.001	Negative Pressure Containment and Collection of Waste MaterialsP-40-589	LS

Payment is full compensation for designing, erecting, operating, maintaining, and disassembling the containment devices; providing negative pressure exhaust ventilation; collecting, labeling, and for storing spent materials in provided hazardous waste containers.

stp-517-065 (20140630)

27. Portable Decontamination Facility, Item 517.6001.S.001.

A Description

This special provision describes furnishing and maintaining weekly, or more often if needed, a single unit portable decontamination facility.

B Materials

Supply and operate all equipment in accordance with OSHA.

Supply adequate heating equipment with the necessary fuel to maintain a minimum temperature of 68° F in the facility.

The portable decontamination facility shall consist of a separate "Dirty Room", "Shower Room" and "Clean Room". The facility shall be constructed so as to permit use by either sex. The facility shall have adequate ventilation.

The "Dirty Room" shall have appropriately marked containers for disposable garments, clothing that requires laundering, worker shoes, and any other related equipment. Each container shall be lined with poly bags for transporting clothing, or for disposal. Benches shall be provided for personnel.

The "Shower Room" shall include self-contained individual showering stalls that are stable and well secured to the facility. Provide showers with a continuous supply of potable hot and cold water. The wastewater must be retained for filtration, treatment, and/or for proper disposal.

The "Clean Room" shall be equipped with secure storage facilities for street clothes and separate storage facilities for protective clothing. The lockers shall be sized to store clothing, valuables and other personal belongings for each worker. Benches shall be provided for personnel.

Supply a separate hand wash facility, either attached to the decontamination facility or outside the containment.

C Construction

Properly contain, store, and dispose of the wastewater.

D Measurement

The department will measure Portable Decontamination Facility by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
517.6001.S.001	Portable Decontamination Facility	EACH

Payment is full compensation for furnishing and maintaining a portable decontamination facility.

stp-517-060 (20140630)

28. Field Office.

Add the following to standard spec 642:

For field offices without indoor handwashing facilities, provide and maintain a portable handwashing station at every project field office. The station shall include a hands-free sink with foot pump-operated faucet, soap dispenser, paper towel dispenser, fresh water supply, and collection tank for gray water. When daily low temperatures fall below 40 degrees F, provide a hand sanitizing station consisting of lotion and/or wipes inside the field office within 2 feet of the field office entry. Regularly service and maintain the stations and all supplies as needed, and properly dispose of all materials. Costs associated with the handwashing station are incidental to the field office bid item.

stp-642-010 (20210113)

29. Seismograph, Item 999.1000.S.

A Description

This special provision describes furnishing seismographs and employing trained operators to monitor construction-induced vibrations on buildings/structures, and submittal of all required documentation.

B Material

Use seismographs conforming to Wisconsin Department of Safety and Professional Services (SPS) 307.43, Wisconsin Administrative Code that are continuous data recorders supplied with all the accessories necessary for making vibration and noise monitoring observations.

C Construction

Conduct monitoring procedures conforming to SPS 307.44 and as follows: Take seismograph readings before construction activities to establish an ambient or background index.

During construction, place seismographs to monitor all vibration-inducing construction activities or as the engineer directs. At a minimum utilize one seismograph. If more than one major construction activity per day is taking place, multiple seismographs may be required. Place seismographs on a stable surface within 3 feet of the building/structure nearest to the construction operation. Provide data recorded for each vibration occurrence to the engineer which includes the following:

1. Identification of vibration monitoring instrument used.
2. Description of equipment used by the contractor.
3. Name of qualified observer and interpreter.
4. Distance and direction of recording station from the vibration area.
5. Type of ground at recording station and material on which the instrument is sitting.
6. Peak particle velocity and principal frequency in each component.
7. A dated and signed copy of records of seismograph readings.
8. A comparison of measured seismograph readings to maximum allowable readings identified in SPS 307.43 or as specified in this special provision.

If construction activities generate ground vibration in excess of the peak particle velocity limits as shown in SPS 307.44, stop the construction operation in progress and implement alternate construction methods to produce results within the allowable peak particle velocity limits.

D Measurement

The department will measure Seismograph as a single complete lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.1000.S	Seismograph	LS

Payment is full compensation for furnishing and operating seismographs, operators, and for producing documentation reports

stp-999-005 (20161130)

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

A Description

This special provision describes conducting a crack and damage survey of the residences and business located at 101 South Dana Court, Milwaukee, WI 53214.

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

B (Vacant)

C Construction

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

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

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

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

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

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

D Measurement

The department will measure Crack and Damage Survey as single complete lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.1500.S	Crack and Damage Survey	LS

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

stp-999-010 (20170615)

31. Installing and Maintaining Bird Deterrent System, Item 999.2000.S.

A Description

This special provision describes inspecting, installing and/or maintaining approved deterrents that prevent migratory bird nesting on bridges and culverts. Swallows or other migratory birds' nests have been observed on or under the existing culvert or bridge at the station identified. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

B Materials

B.1 Hardware and Lumber

Pressure treated lumber shall conform to the requirements of standard specification 507.

Hardware and fastening devices shall be either galvanized or stainless steel. Fastening device and system must be approved by the engineer prior to installation on culverts and bridges that will remain in service after removal of deterrent systems. The method of fastening should not compromise the culvert or bridge concrete surfaces or steel protection systems. The attachment locations must be restored and repaired as needed by use of engineer approved fillers, sealers and paint systems.

B.2 Netting Materials

Exclusion netting is material either wrapped around or draped and fastened to bridge decks/abutments and culvert corners to prevent bird entry.

Furnish exclusionary netting to deter nesting in bridge decks and abutments and corners of box culverts, consisting of either:

a. 1/2” x 1/2” or 3/4" x 3/4” knotless, flame resistant, U.V. stabilized polyethylene netting with minimum 40-pound breaking strength per strand, or engineer proved equal.
b. Galvanized wire mesh (hardware cloth) with a wire diameter of .040 inches (19-gauge) and opening width of 1/2-inch.

Furnish 1” x 2” pressure treated lumber of equal length as the netting.

B.3 Plastic Strip Curtain

Plastic strip curtains are strips of plastic attached to vertical surfaces in areas suitable for nesting.

Furnish three-foot wide lengths of 6 mil minimum plastic sheeting with the lower 2 feet cut into vertical strips two inches wide.

Furnish 1” x 2” treated wood and galvanized staples to attach plastic strips to wood to fabricate the strip curtain.

Furnish concrete screws to attach strip curtain to structure.

B.4 Corner Slope Materials

Corner slopes are pieces of curved plastic placed in corners suitable for nesting. They are particularly effective in preventing nesting in top corners of box culverts.

Furnish U.V. stabilized pre-fabricated PVC or polycarbonate corner slopes from commercial bird-deterrent manufacturers such or an approved equal.

C Construction

C.1 General

If active nests are observed after construction starts, or if a trapped bird or an active nest is found, stop work that may affect birds or their nests, and notify the engineer to consult with the Wisconsin Department of Natural Resources transportation liaison at Kristina Betzold, at (414) 507-4946, or the department regional environmental coordinator Brenda Ruenger, at (262) 548-6709.

Efforts should be made to release trapped birds, unharmed.

C.2 Nest Removal

Remove unoccupied nests prior to the beginning of the nesting season as designated in Prosecution and Progress. Nest removal involves the removal and disposal of unoccupied or partially constructed nests without eggs or nestlings. Removing all evidence of nesting (e.g. cleaning droppings from structures) eliminates a visual cue for a potential breeding location, especially for first-time breeders. Nest removal is not a type of deterrent and does not prevent nest establishment, but can delay the process. As such, it should only be used in conjunction with other methods. It cannot be used on its own to ensure compliance. However, nest removal is not required if deterrents are installed before the start of the avoidance window.

Remove nests on the structure by scraping or pressure washing prior to established avoidance windows to deter nesting. Remove only unoccupied or partially constructed nests without eggs or nestlings. Remove newly built nests every two days before eggs are laid. Nest removal is intended to be used prior to and in conjunction with other nesting deterrents.

C.3 Exclusion Netting

C.3.1 Installation

Using concrete screws, anchor lumber to bridge or culvert along perimeter of intended netting. Fasten netting to lumber until netting is held taut. Eliminate any loose pockets or wrinkles that could trap and entangle birds. Ensure the net is pulled taut in order to prevent flapping in the wind, which results in tangles or breakage at mounting points.

For culverts, attach netting at a 45-degree angle at the culvert corner so it extends at least 12” below the corner.

C.4 Plastic Curtains

C.4.1 Installation

Attach plastic curtains along the entire length of vertical surface or corner on which nest building is to be deterred. Affix plastic curtain strips to treated lumber with staples spaced a minimum of 1 foot O.C. Wrap plastic curtains around lumber prior to attaching it to the structure to reduce the likelihood of it tearing out at the staples. Screw lumber into the underside of the bridge deck or top of box culvert with concrete screws placed 24-inches O.C. minimum.

C.5 Corner Slopes

C.5.1 Installation

Attach corner slopes to the structure per the manufacturer’s recommendations. Use urethane-based adhesives if manufacturer supplied hardware or adhesives are not available or no recommendations are provided. Install end caps or seal ends of corner slopes to prevent entry of birds or other animals.

C.6 Inspection and Maintenance

Inspect bird deterrent devices every 2 weeks both during and prior to construction when deterrents have been installed to exclude birds prior to nesting windows, and after large storm events or high winds. Ensure that netting is taut, that no gaps or holes have formed, and that the nets are functioning properly. Ensure that corner slopes are not cracked or otherwise damaged and are functioning properly. Ensure that curtains are undamaged, with no tears, holes, or creases. Repair any damaged or loose deterrent devices. Inspect, maintain, and repair nesting deterrents whether installed by the contractor or others. Repair, replace, supplement deterrents as necessary with materials meeting the requirements of this specification.

Remove any unoccupied or partially constructed nests without eggs or nestlings

Repair deterrents to prevent birds from attempting to nest again.

Record all inspection, removal, and maintenance activities. Provide inspection, removal and maintenance records to the engineer upon request.

C.7 Removal and Structure Repair

Maintain the deterrent until the engineer determines that the deterrent is deemed no longer necessary. Upon completion of the project, remove any remaining migratory bird deterrent from the project site. If the existing bridge or culvert is to remain after construction, restore and repair as needed by use of engineer approved fillers, sealers and paint systems.

D Measurement

The department will measure Installing and Maintaining Bird Deterrent System as a single unit at each structure, acceptably completed.

The department will measure Maintaining Bird Deterrent System as a single unit at each structure, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.2000.S	Installing and Maintaining Bird Deterrent System	EACH

Payment for Installing and Maintaining Bird Deterrent System is full compensation for providing and installing deterrents that prevent migratory bird nesting; removing and disposing of unoccupied or partially

constructed nests without eggs or nestlings; maintaining, repairing, replacing, supplementing, existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

Payment for Maintaining Bird Deterrent System is full compensation for inspecting structures for the presence of migratory birds, inspecting deterrents installed by others; maintaining, repairing, replacing, and supplementing existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

stp-999-200 (20210113)

32. Adjusting Water Service Boxes, Item SPV.0060.001; Adjusting Water Manholes Frame and Lid, Item SPV.0060.002.

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, water valve boxes and water manhole frames & lids located within the project limits.

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 Andray DeCordova, Milwaukee Water Works, at (414)708-3209 (or Dave Goldapp, Milwaukee Water Works at (414)286-6301).

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. 35th St.

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, water valve boxes and water manhole frames and lids within the limits of the project prior to commencement of work on the project.

All water service boxes, water valve boxes and water manhole frames & lids 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, water valve boxes and water manholes 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 and manholes 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.

D Measurement

The department will measure Adjusting Water Service Boxes and Adjusting Water Manholes Frame and Lid as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Adjusting Water Service Boxes	EACH
SPV.0060.002	Adjusting Water Manholes Frame and Lid	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, water box or manhole clean-out, adjustment of water service boxes or manholes, and restoration of the work site.

33. Adjusting Sanitary Manhole; Item SPV. 0060.100.

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.

B Materials

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.

B.2 Manhole

Precast manholes and cones shall conform to ASTM Specifications, C478, latest revision.

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.

C Construction

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.

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 one-component, 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.

D Measurement

The department will measure Adjusting Sanitary Manhole as a unit per each manhole location, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.100	Adjusting Sanitary Manhole	EACH

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.

34. Inlet Covers Type 57, Item SPV.0060.102; Manhole Covers Type 58A, Item SPV.0060.103; Catch Basins Type 45A, Item SPV.0060.110.

A Description

This special provision describes furnishing and installing Inlet Covers Type 57; Manhole Covers Type 58-A and Catch Basins Type 45A.

Perform work under these items in accordance with the requirements of standard spec 611 and the details as shown on the plans.

B Materials

Furnish and install materials that conform to the requirements of standard spec 611.2 and as detailed on the construction plans.

C (Vacant)

D Measurement

The department will measure Inlet Covers Type 57; Manhole Covers Type 58-A and; and Catch Basins Type 45A by the unit in place, furnished, installed, and 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.0060.102	Inlet Covers Type 57	EACH
SPV.0060.103	Manhole Covers Type 58-A	EACH
SPV.0060.110	Catch Basins Type 45A	EACH

Payment is full compensation for furnishing and installing the manhole and inlet covers and inlet.

35. Fiberglass/Polymer Concrete Pull Box 13-Inch x 24-Inch x 24-Inch; Item SPV.0060.302.

A Description

This special provision describes furnishing and installing Fiberglass/Polymer Concrete Pull Box at the locations shown on the plans according to standard spec 653.

B Materials

Furnish fiberglass/polymer concrete pull box of rectangular composite enclosure with Tier 15 Rating (15,000 lb Design Load) & (22,500 lb Test Load), and nominal 13” wide x 24” long and 24” total depth, flared wall style *#CHB132424 as by Highline Products* or *#B12132424A as by Hubbell Power Systems*, or approved equal. Cover shall be Tier 15 Rating (15,000 lb Design Load) & (22,500 lb Test Load), bolted cover with logo “Street Lighting” *#CHC1324HL1 as by Highline Products* or *#C12132402A41 as by Hubbell Power Systems*, or approved equal and use penta bolts to secure cover. The pull box shall be listed and labeled by (UL) or other Nationally Recognized Testing Laboratory.

C. Construction

The pull box shall be installed on 12-inches of crushed stone, set flush with grade and backfilled Conform to standard spec. 673.3 and City of Milwaukee standards. Contact Eng-Kie Lee at (414) 286-2174 for a copy of the City Standards.

D Measurement

The deparetment will measure Fiberglass/Polymer Concrete Pull Box 13-Inch x 24-Inch x 24-Inch as each individual pull box, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.302	Fiberglass/Polymer Concrete Pull Box 13-Inch x 24-Inch x 24-Inch	EACH

Payment is full compensation for furnishing and installing all materials, including pull box, end bells, crushed aggregate, excavation, backfilling, and for disposing of surplus material.

36. Portable Generator to Power Existing Street Lights; Item SPV.0060.339.

A Description

This special provision describes furnishing and maintaining a portable generator necessary to power two existing City of Milwaukee street lights just south of the South Dana Court Bridge for the entire duration of the bridge and roadway work.

B (Vacant)

C Construction

C.1 General

This provision shall apply when providing, fueling, maintaining, securing, moving, and removing the portable generator. The generator needs to be operational from sunset to sunrise each night to power existing street lighting.

City of Milwaukee to provide from a street lighting pole at the south end of South Dana Court next to the freeway, an electrical cord connection with an electrical plug on one end to connect/plug into the contractor provided portable generator.

C.2 Continuous Operation

Provide and have available sufficient fuel, for the portable generator, and qualified personnel to ensure that the generator will operate continuously from sunset to sunrise. In the event of any failure of the generator, the contractor will be responsible to immediately fix or replace the portable generator within 24 hours to return power to the street lights.

D (Vacant)

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.339	Portable Generator to Power Existing Street Lights	EACH

Payment is full compensation for furnishing portable generator and fuel, installing, maintaining, securing, and removing after the contract is completed.

37. Adjusting CUC Manhole Cover, Item SPV.0060.400.

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 in accordance with the standard specifications, the provisions of the article Adjusting Manhole Covers, as shown on the plans, and as hereinafter specified.

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 Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frames and lids from the DPW Field Headquarters at 3850 N. 35th St. Contractor must have the "Castings Requisitions Form" which shall be supplied by the city at the Preconstruction Meeting to obtain the covers.

C Construction

Report any pre-existing problems to Ms. Karen Rogney of City Underground Conduits Section at (414) 286-3243 three (3) working days in advance of any construction on manholes.

Before removing the pavement around the manhole, the contractor shall place a ¾-inch plywood cover or equal over existing active Street Lighting, Traffic Control, Communication 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.

The portable generator will need to provide for a minimum usage of 150 watts.

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 ¾-inch plywood cover or equal which is over the existing electrical cables in the manhole as mentioned above.

Notify Ms. Rogney three (3) 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.

D Measurement

The department will measure Adjusting CUC Manhole Cover 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.0060.400.	Adjusting CUC Manhole Cover	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.

38. 4' Diameter Manhole Type CUC, Item SPV.0060.401.

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, in accordance with standard specs 301, 611 and 501, and as hereinafter provided.

B Materials

Furnish and install a 4' diameter precast concrete manhole. 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.

Cast 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.

Cast 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.

Cast four 5/8” diameter plastic threaded cable rack bolt inserts in the wall of the riser section.

Supply and lay 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. 35th St. Contractor must have the “Casting Requisition Form” which shall be supplied by the city at the Preconstruction Meeting.

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

C Construction

4’ Diameter Manholes Type CUC shall be installed in accordance with 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.

D Measurement

The department will measure 4’ Diameter Manhole Type CUC by each individual manhole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.401.	4’ Diameter Manhole Type CUC	EACH

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.

39. Installing Conduit Into Existing Manhole, Item SPV.0060.425.

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 in accordance with the pertinent provisions of the standard specifications, and as hereinafter provided.

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.

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.

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.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.425.	Installing Conduit Into Existing Manhole	EACH

Payment is full compensation for inspecting the existing system. 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; and for disposal of surplus materials.

40. Girder Repair Detail 1, Item SPV.0060.536.

A Description

This special provision describes furnishing materials and construction activities for installing the Girder Repair Detail 1 as shown on plan sheet 17 of the structure plans. The engineer will make determination of girder locations for Girder Repair Detail 1 at both the north and south abutments.

B Materials

Provide steel material in accordance with standard spec 506. Provide galvanized high strength bolts conforming to ASTM A325, nuts conforming to ASTM A563 and flat washers. Provide connection hardware that conforms to all applicable provisions of standard spec 506. Supply all materials needed for the Girder Repair Detail 1 as shown on plan sheet 17. Materials include but are not limited to structural steel carbon plates, bars, shims and angles, fasteners including bolts, washers, lock washers and nuts, and welding supplies. Structural plates and angles shall conform to the requirements of ASTM A709 GRADE A36. Supply all necessary welding materials needed for welding of the Girder Repair Detail 1.

C Construction

Perform the work in accordance with Standard spec 506 and the following applicable code requirements; AASHTO/AWS D1.5M/D1.5:2015-AMD1 BRIDGE WELDING CODE and AWS D1.1/D1.1M:2020 STRUCTURAL WELDING CODE-STEEL. Properly contain, store, and dispose of tailings and used welding supplies.

All labor needed for the construction of Girder Repair Detail 1 including but not limited to grinding, drilling, welding, jacking, temporary support, and bracing shall be included. Welding to be performed by AWS certified welders.

Do not let temperature at rubber sole plate interface exceed 200 degrees F. Preheat steel to 250 degrees F for field welding.

Prior to installing plates and angles, remove rust scale from existing web and bottom flange.

Provide primer on new and existing steel contact surfaces before installation. Paint all girder repair elements in accordance with bridge repainting work items.

D Measurement

The department will measure Girder Repair Detail 1 by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.536.	Girder Repair Detail 1	EACH

Payment is full compensation for installing Girder Repair Detail 1 at each individual girder end.

41. Girder Repair Detail 2, Item SPV.0060.537.

A Description

This special provision describes furnishing materials and construction activities for installing Girder Repair Detail 2 as shown on plan sheet 18 of the structure plans. The engineer will make determination of girder locations for Girder Repair Detail 2 at both the north and south abutments.

B Materials

Provide steel material in accordance with Standard spec 506. Provide galvanized high strength bolts conforming to ASTM A325, nuts conforming to ASTM A563 and flat washers. Provide connection hardware that conforms to all applicable provisions of standard spec 506. Supply all materials needed for the Girder Repair Detail 2 as shown on plan sheet 18. Materials include but are not limited to structural steel carbon plates, bars, shims and angles, and fasteners including bolts, washers, lock washers and nuts. Structural plates and angles shall conform to the requirements of ASTM A709 GRADE A36.

C Construction

Perform the work in accordance withsStandard spec 506 and to all applicable code requirements.

All labor needed for the construction of Girder Repair Detail 2 including but not limited to grinding, drilling, jacking, temporary support, and bracing shall be included.

Prior to installing plates and angles, remove rust scale from existing web and bottom flange.

Provide primer on new and existing steel contact surfaces before installation. Paint all girder repair elements in accordance with bridge repainting work items.

D Measurement

The department will measure Girder Repair Detail 2 by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.537.	Girder Repair Detail 2	EACH

Payment is full compensation for installing Girder Repair Detail 2 at each individual girder end.

42. Construction Staking Concrete Sidewalk, SPV.0090.001.

A Description

This special provision describes furnishing and setting construction stakes or control points, including all calculations required, necessary to establish the horizontal and vertical position of the concrete sidewalk as shown on the plans.

B (Vacant)

C Construction

C.1 General

Obtain or calculate benchmark data, grades, and alignment from data in the plan and verify with the engineer prior to beginning the work. The engineer will furnish horizontal alignment, horizontal alignment ties and control point data. This work shall include reestablishing the plan horizontal roadway alignment, alignment ties, and control points.

Obtain approval from the engineer prior to beginning the work for methods of survey and prior to beginning the work. The degree of accuracy used in the survey work shall be consistent with third order, class II. Establish additional benchmarks and control points as necessary or as directed by the engineer. Check plan dimensions, alignment, and elevations for accuracy with existing field conditions. Immediately call to the engineer's attention any errors and apparent discrepancies for correction or interpretation prior to proceeding with the work.

Maintain neat, orderly and complete survey notes and computations used in establishing the lines and grades. Make the survey notes and computations available to the engineer within 24 hours upon request as the work progresses.

C.2 Concrete Sidewalk

Place construction stakes for concrete sidewalk at intervals of 25 feet. A minimum of three stakes per cross section is required. Set and maintain as necessary additional stakes per cross section to achieve the required accuracy and to satisfy the contractors' method of operations. Set additional stakes as necessary to establish location and grade along intersecting road radii; and for auxiliary lanes, vertical curves, horizontal curves, and curve transitions. Locate all concrete sidewalk construction stakes to within 0.25 ft. of the true horizontal position and establish the grade elevation to within 0.01 ft. of the true vertical position.

D Measurement

The department will measure Construction Staking, Concrete Sidewalk by the linear foot along each roadway centerline or reference line. When sidewalk occurs on both sides of the roadway, the quantity of Construction Staking, Concrete Sidewalk, will be measured by the linear foot along the centerline or reference line of each side of the roadway.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Construction Staking, Concrete Sidewalk	LF

Payment is full compensation for all survey work necessary to locate and set all concrete sidewalk construction stakes including additional stakes per cross section set to achieve the required accuracy and to satisfy the contractors' method of operations including intersecting road radii, auxiliary lanes, vertical curves, horizontal curves, and curve transitions; for resetting damaged or missing concrete sidewalk construction stakes.

43. Storm Sewer Pipe Corrugated PVC, 8-Inch, Item SPV.0090.002.

A Description

This special provision describes furnishing and installing storm sewer in accordance with standard spec 607 and 608, as shown on the plans, and as hereinafter provided.

B Materials

Supplement standard spec 607.2 and 608.2 as follows:

Furnish corrugated polyvinyl chloride (PVC) pipe. Storm sewer will be accepted on the basis of a Manufacturer's Certificate of Compliance and WisDOT field inspection upon delivery to a project.

Manufacturers of corrugated PVC pipe shall request evaluation and approval of their projects by filing with the department's Bureau of Technical Services, a certificate setting forth the name or brand of pipe to be furnished, the specified type, category, grade and PVC plastic cell classification. The certificate shall have attached a certified test report from an approved independent testing laboratory showing specific results of tests performed on each diameter pipe to be furnished conforming to all requirements of these specifications. The pipes tested shall be randomly selected for test by the independent testing laboratory as being representative of that manufacturer's pipe. The manufacturer of the pipe shall also submit with the certification, a guarantee that all pipe furnished be of the same quality and composition and conform to the specifications requirements as tested by the independent laboratory, as long as the manufacturer continues to furnish materials for WisDOT projects.

Corrugated PVC pipe and fittings shall conform to the requirements of standard specification for PVC Corrugated Sewer Pipe with a smooth interior and fittings, ASTM Designation: F949. Joint connections shall include gaskets as recommended by the manufacturer.

C Construction

Supplement standard spec 607.3 for corrugated PVC pipe with the following:

Trench width shall be in accordance with standard practice for underground installation of flexible thermoplastic sewer pipe, ASTM Designation D 2321. Minimum trench width shall be not less than a greater of either the pipe outside diameter plus 16 inches or the pipe outside diameter times 1.25 plus 12 inches.

Seal joints for sewer pipe to be soil tight in accordance with AASHTO Standard Specifications for Highway Bridges, section 26.4.2(e).

Protect all storm sewer pipes until final acceptance of the work; replace all pipes that are damaged either through the construction operations or due to contractor failure to properly protect the same, in kind at contractor expense.

Backfill all trenches and excavations immediately after the sewers have been constructed therein. Use backfilling material that is in accordance with the requirements for granular backfill, standard spec 209, except that all such materials placed around the pipe and to 6 inches above the pipe shall pass a 25 mm sieve.

D Measurement

The department will measure Storm Sewer Pipe Corrugated PVC 8 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.0090.002	Storm Sewer Pipe Corrugated PVC 8 Inch	LF

Payment is in accordance with standard spec 607.5.1. The payment includes the incidental costs of connecting to existing manhole structures.

44. 2-Duct, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.402.

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.

B Materials

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).

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.

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
½”	100
3/8”	90 - 100
No. 8	0 - 15
No. 30	0 - 3

Crushed Stone Screenings

Sieve Sizes	% Passing by Weight
½”	100
No. 4	75 - 100
No. 100	10 - 25

B.4 Concrete

The type of concrete mix to be used to encase the ducts will be:

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%

Mix the materials to provide an approximate 3 inch slump

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 lbs.
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.

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.

C Construction

C.1 Excavation

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:

Number of Ducts Wide	Minimum (Inches)	Maximum (Inches)
1	8 1/2	11
2	14 5/8	17 1/8
3	20 3/4	23 1/4.
4	26 7/8	29 3/8
5	33	35 1/2
6	39 1/8	41 5/8
7	45 1/4	47 3/4
8	51 3/8	53 7/8

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.

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.

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.

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.

D Measurement

The department will measure 2-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60, by the linear foot, acceptably installed. The measured quantity will equal the linear feet of encased duct, based on the distance along the centerline of duct between ends of conduit.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.402	2-Duct Conduit Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF

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.

45. Underdeck Utility Structure P-40-589, City of Milwaukee Communications Conduit, Item SPV.0105.400.

A Description

This section describes furnishing and installing a duct package of two, 4-inch diameter, Fiberglass Reinforced Epoxy (FRE) conduits, the conduit support system including all deck inserts and hangars, and the abutment penetrations to the underside of the deck of Structure P-40-589 as shown on the plans.

B Materials

Use material conforming to the class of material named and as specified. Conduit shall be non-metallic, filament-wound epoxy, suitable for direct burial, concrete encasement, and suspended from bridge members without regard to outdoor ambient light. The product shall contain carbon black to provide ultraviolet protection.

The conduit shall have an interference joint system consisting of an integral bell and spigot with interlocking male and female threads. Epoxy adhesive shall be applied on joints per manufacturer's specifications prior to use.

Product shall be listed by Underwriters Laboratories and conform to the National Electrical Code.

The ID dimension shall be full, actual trade size.

All adaptors, couplings, expansion joints and suspended hangers shall be FRE fittings corresponding to and manufactured for use with FRE conduit as specified on the plans. The suspended hanger assemblies shall include stainless steel threaded concrete inserts as specified on the plans.

Epoxy coated reinforcement tie bar shall conform to standard spec 505.

C Construction

Construct according to the pertinent provisions of standard spec 502 and 652.

The two-duct package to be installed on P-40-589 consists of two 4-inch ducts, one high by two wide.

Install the conduit 5 feet beyond the back of the bridge abutment walls. Install a fiberglass to PVC adaptor on the end of each duct and temporarily cap.

Coupling of the duct sections shall be accomplished and secured by first applying epoxy adhesive then mating a spigot end into an integral bell end with a blow to the open end of the duct section.

Submit shop drawings for all deck inserts, hangers, braced hangers, expansion couplings and hanger spacing to Ms. Karen Rogney at (414) 286-3243 of the City of Milwaukee for review 60 business days in advance of the bridge deck placement.

Install all FRE duct and components according to the manufacturer's instructions.

D Measurement

The department will measure Underdeck Utility Structure P-40-589 City of Milwaukee Communications Conduit, as a single lump sum of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.400.	Underdeck Utility Structure P-40-589, City of Milwaukee Communications Conduit	LS

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.

46. Underdeck Utility Structure P-40-589, City of Milwaukee Electrical Conduit, Item SPV.0105.401.

A Description

This section describes furnishing and installing a duct package of two 3-inch diameter, Fiberglass Reinforced Epoxy (FRE) conduits, the conduit support system including all deck inserts and hangars, and the abutment penetrations to the underside of the deck of Structure P-40-589 as shown on the plans.

B Materials

Use material conforming to the class of material named and as specified. Conduit shall be non-metallic, filament-wound epoxy, suitable for direct burial, concrete encasement, and suspended from bridge members without regard to outdoor ambient light. The product shall contain carbon black to provide ultraviolet protection.

The conduit shall have an interference joint system consisting of an integral bell and spigot with interlocking male and female threads. Epoxy adhesive shall be applied on joints per manufacturer's specifications prior to use.

Product shall be listed by Underwriters Laboratories and conform to the National Electrical Code.

The ID dimension shall be full, actual trade size.

All adaptors, couplings, expansion joints and suspended hangers shall be FRE fittings corresponding to and manufactured for use with FRE conduit as specified on the plans. The suspended hanger assemblies shall include stainless steel threaded concrete inserts as specified on the plans.

Epoxy coated reinforcement tie bar shall conform to standard spec 505.

C Construction

Construct according to the pertinent provisions of standard spec 502 and 652.

The two-duct package to be installed on P-40-589 consists of two 3-inch ducts, 1 high by 2 wide.

Install the conduit from proposed pull box location on the south side of the bridge to the proposed pull box on the north side of the bridge as shown on the plans. Install end bells on each duct entering into the pull boxes.

Coupling of the duct sections shall be accomplished and secured by first applying epoxy adhesive then mating a spigot end into an integral bell end with a blow to the open end of the duct section.

Submit shop drawings for all deck inserts, hangers, braced hangers, expansion couplings and hanger spacing to Ms. Karen Rogney at (414) 286-3243 of the City of Milwaukee for review 60 business days in advance of the bridge deck placement.

Install all FRE duct and components according to the manufacturer's instructions.

D Measurement

The department will measure Underdeck Utility Structure P-40-589, City of Milwaukee Electrical Conduit, as a single lump sum of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.401	Underdeck Utility Structure P-40-589, City of Milwaukee Electrical Conduit	LS

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.

47. Gas Main Protection (P-40-589), Item SPV.0105.590.

A Description

This special provision describes providing protection, temporary, and permanent mounting of the existing gas main during construction operations.

B Materials

WE Energies will furnish materials and engineering details as required for the temporary mounting of the gas main during construction. WE Energies will furnish materials and engineering details as required for the permanent mounting of the gas main to the underside of the deck after the completion of the deck. The contractor shall provide materials for the protection of the gas main during construction operations.

C Construction

The We Energies owns the 6 inch gas main which is hanging from the underside of the existing bridge deck between girders 7 and 8. The bridge contractor shall provide adequate protection to ensure the safe operation and service of the gas main during removal and reconstruction of the bridge deck and abutment girder end diaphragm.

The 6 inch gas main will remain in service during construction. The bridge contractor shall install the temporary mounting and protect the gas main hanging on the bridge from falling concrete debris during the deck removal and installation. The bridge contractor shall install the permanent mounting of the gas main to the bridge deck. We Energies may require a company representative be on site during deck removal over the gas main and installation of the new deck.

Coordinate work at least 21 days in advance of construction with We Energies. Contact Mr. Paul Osmanski at (414) 315-1278 or Mr. Scott Bohn at (414) 587-3983 of We- Energies (GAS) for any question, coordination or other of work as described in the utility section of the project specification. Submit documentation on the proposed methods of gas main protection.

D Measurement

The department will measure Gas Main Protection P-40-589 as a single lump sum of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.590	Gas Main Protection (P-40-589)	LS

Payment is full compensation for protecting and providing the temporary/permanent mountings of the gas main during bridge construction.

48. Cross Bracing Adjustment P-40-589, Item SPV.0105.597.

A Description

This special provision describes furnishing materials and construction activities for Cross Bracing Adjustment as shown in the plans. One H2(5x5)@18.9 cross brace is mounted transversely at the center of span 2 and is fastened to bottom flange of the B4(18x6)@54.7 girders located at this span. Steel cover plates are being installed on the bottom flanges of girders 1, 11, 13, and 15 in span 2. The H2(5x5)@18.9

cross brace will need to be removed prior to the installation of the cover plates and then reinstalled using shims after the cover plate installation has been completed.

B Materials

Provide steel material in accordance with standard spec 506. Provide galvanized high strength bolts conforming to ASTM A325, nuts conforming to ASTM A563 and flat washers. Provide connection hardware that conforms to all applicable provisions of standard spec 506. Supply all materials needed for the Cross Bracing Adjustment as shown in the plans. Materials include but are not limited to structural steel carbon plates, bars, shims, and fasteners including bolts, washers, lock washers and nuts. Structural plates shall conform to the requirements of ASTM A709 GRADE A36.

C Construction

Perform the work in accordance with standard spec 506 and to all applicable code requirements.

All labor needed for the construction of Cross Bracing Adjustment including but not limited to grinding, drilling, jacking, temporary support, and bracing shall be included.

Prior to installing plates and shims, remove rust scale from existing web and bottom flange.

Provide primer on new and existing steel contact surfaces before installation. Paint all cross bracing adjustment elements in accordance with bridge repainting work items.

D Measurement

The department will measure Cross Bracing Adjustment as a single lump sum of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.597.	Cross Bracing Adjustment P-40-589	LS

Payment is full compensation for completing the cross bracing adjustment.

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.

Additional Special Provision 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

102.1 Prequalifying Bidders

Replace paragraph two with the following effective with the October 2020 letting:

(2) Furnish a dated prequalification statement on the department's form at least 10 business days before the time set for the letting to close.

102.6 Preparing the Proposal

Replace the entire text with the following effective with the October 2020 letting:

102.6.1 General

(1) Submit completed proposals on the department's bidding proposal described in 102.2. Submit legible information only. Write everything in ink, by typewriter, or by computer-controlled printer. Provide all dollar amounts in dollars and cents, in numerals. Attach all addenda to the submitted proposal.

(2) Properly execute the proposal. Place the required signatures, in ink, in the space provided on the bidding proposal as indicated below:

ENTITY SUBMITTING PROPOSAL	REQUIRED SIGNATURE
Individual	The individual or a duly authorized agent.
Partnership	A partner or a duly authorized agent.
Joint venture	A member or a duly authorized agent of at least one of the joint venture firms.
Corporation	An authorized officer or duly authorized agent of the corporation. Also show the name of the state chartering that corporation and affix the corporate seal.
Limited liability company	A manager, a member, or a duly authorized agent.

(3) Instead of using the schedule of items provided on the department's bidding proposal, the bidder may submit a substitute schedule with the proposal. Use a format for the substitute schedule conforming to the department’s guidelines for approval of a bidder-generated schedule of items. Obtain the department’s written approval before using a substitute schedule.

(4) Provide a unit price for each bid item listed in the schedule of items. Calculate and show, in the bid amount column, the products of the respective unit prices and quantities. For a lump sum bid item, show the same price in the unit price column and in the bid amount column pertaining to that bid item. Show the total bid obtained by adding the values entered in the bid amount column for the listed bid items.

(5) If a unit price or lump sum bid already entered in the proposal needs to be altered, cross out the entered unit price or lump sum bid with ink or typewriter and enter the new price above or below and initial it in ink.

(6) A change that the bidder makes in the proposal is not an alteration if the bidder makes that change as directed in a specific instruction contained in an addendum.

102.6.2 Disadvantaged Business Enterprise (DBE) Commitment

(1) Before the letting is closed, submit the following documentation for proposals with a DBE goal:

1. Commitment to subcontract to DBE on department form DT1506.
2. Attachment A for each subcontractor listed on the DT1506.
3. If the DBE goal is not attained, certificate of good faith efforts on department form DT1202.

(2) Within 24 hours after the letting is closed, email all supplemental documentation for the DT1202 verifying efforts made to attain the DBE goal to DBE_Alert@dot.wi.gov.

102.7.3 Department Will Reject

Replace paragraph one with the following effective with the January 2021 letting:

(1) Proposals are irregular and the department will reject and will not post them if the bidder:

1. Does not furnish the required proposal guaranty in the proper form and amount as specified in 102.8.
2. Does not submit a unit price for each bid item listed, except for lump sum bid items where the bidder may show the price in the bid amount column for that bid item.
3. Includes conditions or qualifications not provided for in the department-supplied bidding proposal.
4. Submits a bid on a bidding proposal issued to a different bidder without obtaining departmental authorization to do so.
5. Submits a bid that contains unauthorized revisions in the name of the party to whom the bidding proposal was issued.
6. Submits a schedule of items with illegibly printed bid item numbers, descriptions, or unit prices.
7. Submits a schedule of items for the wrong contract.
8. Submits a bidder-generated schedule of items with an incorrect bid item number and incorrect description for a single bid item.
9. Omits a bid item or bid items on a bidder-generated schedule of items.
10. Submits a materially unbalanced bid.
11. Does not sign the proposal.
12. Does not submit the DBE forms and required supplemental documentation of the good faith efforts as specified in 102.6.2.

102.12 Public Opening of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

(1) The letting will close at the time and place indicated in the notice to contractors. The department will publicly open and post the total bid for each proposal on the Bid Express web site beginning at noon on the day after the letting is closed except as specified in 102.7.3 and 102.8. If a proposal has no total bid shown, the department will not post the bid. After verification for accuracy under 103.1, the department will post bid totals on the HCCI web site.

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

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103.1 Consideration of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

(1) Following the public opening of the proposals received, the department will compare them based on the summation of the products of the quantities of work listed and the contract unit prices offered. In case of discrepancies, errors, or omissions, the department will make corrections as specified in 102.7.1. In awarding contracts, the department, in addition to considering the amounts stated in the proposals, may consider one or more of the following:

1. The responsibility of the various bidders as determined from a study of the data required under 102.1.
2. The responsiveness of the bid as determined under 102.6.
3. Information from other investigations that the department may make.

107.17.1 General

Replace paragraph four with the following effective with the November 2020 letting:

(4) Comply with the railroad's rules and regulations regarding operations on or near the railroad right-of-way as follows:

- When working on the railroad right-of-way.
- When working within 25 feet of the track centerline or adjacent facilities, including equipment or extensions of equipment that can fall within 25 feet of the track centerline or adjacent facilities.

If the railroad's chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Bear the cost of these services and pay the railroad directly. Notify the railroad's representative, specified in the project special provisions, in writing at least 40 business days before starting work near a track. Provide the specific time planned to start the operations.

109.6.3.3 Retainage

Delete paragraph two effective with the December 2020 letting:

450.2.1 Acronyms and Definitions

Add the following definitions to 450.2.1(2) effective with the November 2020 letting:

Butt Joint	A transverse joint between existing and newly paved surfaces, formed by milling or sawing a vertical notch into the existing surface and then paving against the notch.
Echelon Paving	Paving two or more adjacent lanes with adjacent pavers offset from each other by 200 feet or less.
Notched Wedge Joint	A longitudinal joint consisting of a wedge placed at the edge of the initially paved lane with an overlapping wedge placed on the subsequent lane.
Tandem Paving	Paving two or more adjacent lanes with adjacent pavers offset from each other by more than 200 feet.
Vertical Joint	A longitudinal joint between 2 paved lanes with a vertical or nearly vertical interface between the adjacent mats.

450.3.2.8 Jointing

Replace paragraph two with the following with the November 2020 letting:

(2) Where placing against existing HMA pavement, saw or mill the existing mat to form a full-depth joint.

Replace paragraphs five and six with the following effective with the November 2020 letting:

(5) At the prepave meeting, submit documentation to the engineer that includes the brand name and model of each extruding and compacting device proposed for notched wedge joint construction. Alternatively, submit pictures of fabricated wedging and compacting devices. Do not use devices before engineer approval.

(6) For notched wedge joints, construct and shape the wedge for each layer using the engineer-approved extruding device and compacting device that will provide a uniform slope and will not restrict the main screed. Compact the wedge with a weighted roller wheel or vibratory plate compactor the same width as the wedge. Clean and apply tack coat to the wedge surface and both notches before placing the adjacent lane.

(7) For butt and vertical joints, clean and apply tack coat to promote bonding and seal the joint.

(8) If paving in echelon, the contractor may use a vertical or notched wedge joint. Joints paved in echelon need not be tack coated.

460.2.2.3 Aggregate Gradation Master Range

Replace table 460-1 with the following effective with the November 2020 letting:

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm)	No. 2 (25.0 mm)	No.3 (19.0 mm)	No. 4 (12.5 mm)	No. 5 (9.5 mm)	No. 6 (4.75 mm)	SMA No. 4 (12.5 mm)	SMA No. 5 (9.5 mm)
50.0-mm	100							
37.5-mm	90 - 100	100						
25.0-mm	90 max	90 - 100	100					
19.0-mm	___	90 max	90 - 100	100			100	
12.5-mm	___	___	90 max	90 - 100	100		90 - 97	100
9.5-mm	___	___	___	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm	___	___	___	___	90 max	90 - 100	25 - 35	35 - 45
2.36-mm	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm	___	___	___	___	___	30 - 55	___	___
0.60-mm	___	___	___	___	___	___	18 max	18 max
0.075-mm	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min[1]	15.0 min[2]	16.0 - 17.5	16.0 min	17.0 min

[1] 14.5 for LT and MT mixes.

[2] 15.5 for LT and MT mixes.

522.2 Materials

Replace paragraph three with the following effective with the January 2021 letting:

(3) Manufacture precast reinforced concrete pipe, cattle pass, and apron endwalls in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO standard materials requirements except as follows:

- The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.

532.2.1 General

Replace paragraph one with the following effective with the November 2020 letting:

(1) Furnish structural steel conforming to ASTM as follows:

<= 1/2 inch thick structural tube and pipe ..... ASTM A500 grade C

> 1/2 inch thick structural tube and pipe ..... API 5L PSL 2 grade 46 or ASTM 1085

Tapered vertical supports ..... ASTM A595 grade A or ASTM A572 grade 55

Multi-sided or greater than 26-inch diameter round tapered poles ..... ASTM A572 grade 65

Structural angles and plates ..... ASTM A709 grade 36

532.3.8 Acceptance and Inspection

Add the following new subsection effective with the November 2020 letting:

532.3.8 Acceptance and Inspection

(1) Demonstrate to the engineer that electrical and mechanical systems for each high mast tower installation are fully operational. The department will not accept an installation until the engineer is satisfied that it functions properly.

(2) Inspect completed "S" or "L" designated structures before opening to public traffic conforming to the BOS structure inspection manual part 4 for sign, signal, and high mast towers available at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/inspection-manual.aspx

Ensure that a department-certified active team leader for sign/signal inspections, listed on the department's highway structures information system (HSIS) website, performs inspections. Conform to the following:

- Notify the engineer at least 5 business days before inspection.
- Ensure that the team leader performing inspections submits the signed inspection reports and provides punch list items as maintenance items in the inspection report to the engineer within one business day after completing each inspection. Submit that signed final inspection report to the engineer and HSIS at:

  https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/hsi.aspx
- Notify the engineer and region ancillary structure project manager upon completion of the punch list items.

550.2.1 Steel Piles and Pile Shells

Replace paragraph three with the following effective with the November 2020 letting:

(3) For steel pipe sections and steel pile shells for cast-in-place concrete piles, use ASTM A252 grade 3 steel.

608.2.1 Pipe

Replace paragraph three with the following effective with the January 2021 letting:

(3) Manufacture precast reinforced concrete pipe for storm sewer in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO materials requirements for the class of precast concrete pipe specified except as follows:

- The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.

611.2 Materials

Replace paragraph three with the following effective with the January 2021 letting:

(3) For precast structures conform to AASHTO M199 for circular structures and ASTM C913 for square and rectangular structures. Manufacture in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO materials requirements for the structure specified except as follows:

- Use concrete with 470 pounds or more cementitious material per cubic yard.
- The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.
- For wet cast use air-entrained concrete with 7.0 percent +/- 1.5 percent air content.

614.3.2.1 Installing Posts

Replace paragraphs four and five with the following effective with the December 2020 letting:

(4) For bid items 614.0220, 0230, and 2500; do not trim posts before installation and mark one face of each post as follows:

- Draw an embedment depth line.
- Above the embedment line, write the post length.
- Posts 3 through 8 of bid item 614.0220 do not require marking.

Install posts with the markings on the roadway side. Ensure the markings remain on the posts until guardrail final acceptance.

(5) Ensure that posts are at least the minimum length and minimum embedment the plans show before cutting post tops to the finished elevation. After installation, the engineer may direct the contractor to remove and re-install up to 5% of the posts to verify they were placed to the required plan depth. If a post is embedded less than the required plan depth, the engineer may direct additional sampling. Re-install sampled posts at the locations and to the depths the plans show. Replace posts and other components that are damaged during sampling.

(6) Provide offset block-mounted reflectors as the plans show.

650.3.7 Structure Layout Staking

Replace the entire text with the following effective with the January 2021 letting:

(1) Set construction stakes or marks on a line offset from the structure centerline or on a reference line, whichever is appropriate, for both roadway and substructure units. Establish the plan horizontal and vertical positions to the required accuracy. Also, set and maintain stakes and marks as necessary to support the method of operations. Locate stakes and marks to within 0.02 feet of the true horizontal position, and establish the grade elevation to within 0.01 feet of true vertical position.

(2) For girder bridges, the department will compute deck grades with contractor-supplied girder elevation data.

(3) For slab span bridges, the department will compute slab grades using contractor-supplied falsework settlement and deflection data at tenth points along slab edges, the crown, and reference line locations. Before releasing falsework, survey top-of-slab elevations at the centerline of the abutments and at the 5/10th point along slab edges, the crown, and reference line locations to verify the camber.

710.2 Small Quantities

Replace paragraph one with the following effective with the November 2020 letting:

(1) For contracts with only small quantities of material subject to testing, as defined under specific contract QMP provisions, modify the requirements of 710 as follows:

1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
2. The engineer may accept aggregate based on documented previous testing and non-random start-up gradation testing as allowed in 710.5.6.1.

710.4 Concrete Mixes

Replace paragraph two with the following effective with the January 2021 letting:

(2) At least 3 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:

1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, and air content.
2. For cementitious materials and admixtures: type, brand, and source.
3. For aggregates: absorption, SSD bulk specific gravity, wear, soundness, freeze thaw test results if required, and air correction factor. Also include proposed combined gradation limits and target individual gradations, including P200 limits..

710.5.6 Aggregate Testing

Replace the entire text with the following effective with the January 2021 letting:

710.5.6.1 General

(1) Test aggregate gradations during concrete production. The department will accept non-random start-up testing during concrete production for the following:

- Small quantities, as defined in 715.1.1.2, of class I concrete placed under 715.
- Less than 400 cubic yards of class II ancillary concrete placed under the contract.

710.5.6.2 Gradation Testing During Concrete Production

(1) Test aggregate gradation during concrete production batching either at a central mix batch plant or at a ready mix plant. The contractor's concrete production QC tests can be used for the same mix design on multiple contracts.

(2) Conform to combined gradation limits either calculated using department form WS3012 or custom limits approved as a part of the contractor's quality control plan. For class II concrete, also conform to the additional combined gradation requirements specified for class I concrete in 715.2.2.

(3) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.

(4) Contractor QC testing frequency is based on the cumulative plant production for each mix design across multiple WisDOT contracts.

TABLE 710-1 PLANT PRODUCTION QC GRADATION TESTING FREQUENCY

Daily Plant Production Rate for WisDOT Work	Minimum QC Frequency per Stockpile
250 cubic yards or less	one test per cumulative total of 250 cubic yards
more than 250 through 1000 cubic yards	one test per day
more than 1000 cubic yards	two tests per day

(5) Department QV testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract.

TABLE 710-2 CONTRACT PLACEMENT QV GRADATION TESTING FREQUENCY

Anticipated Daily Placement Rate Each WisDOT Contract	Minimum QV Frequency per Stockpile
less than or equal to 1000 cubic yards	one test per 5 days of placement
more than 1000 cubic yards	two tests per 5 days of placement

715.2.2 Combined Aggregate Gradation

Replace the entire text with the following effective with the January 2021 letting:

(1) Ensure that the combined aggregate gradation conforms to the following, expressed as weight percentages of the total aggregate:

1. One hundred percent passes the 2-inch sieve.
2. For mixes containing size No. 2 stone, the percent passing the 1-inch sieve is less than or equal to 89. The engineer may waive this requirement if the clear spacing between reinforcing bars is less than 2 inches.
3. The percent passing the No. 4 sieve is less than or equal to 42, except if the coarse aggregate is completely composed of crushed stone, up to 47 percent may pass the No. 4 sieve. For pavement, coarse aggregate may be completely composed of crushed concrete, in which case up to 47 percent may pass the No. 4 sieve.
4. The percent passing the No. 200 sieve is less than or equal to 2.3 percent.

716.2.1 Class II Concrete

Replace paragraphs four through six with the following effective with the November 2020 letting:

(4) Provide concrete with a 28-day compressive strength that equals or exceeds the following:

- If the contract specifies f'c, then f'c.
- If the contract does not specify f'c, then 3000 psi.

ERRATA

101.3 Definitions

Adopt AASHTO change order definition.

Change order A written order to the contractor detailing changes to the specified work quantities or modifications within the scope of the original contract..

Delete existing contract change order, contract modification, and contract revision definitions.

460.2.7(1) HMA Mixture Design

Correct table 460-2 errata by eliminating plasticity index requirements for LT, MT, and HT mixes.

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	35
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103 as modified in CMM 860.2.7) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821 as modified in CMM 860.7.2) (one face/2 face, % by count)	65/___	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40[1]	43[1]	45	45
Sand Equivalency (AASHTO T176, min)	40	40[2]	45	50
Clay Lumps and Friable Particle in Aggregate (AASHTO T112)	<= 1%	<= 1%	<= 1%	<= 1%
Plasticity Index of Material Added to Mix Design as Mineral Filler (AASHTO T89/90)				<= 4
Gyratory Compaction				
Gyrations for Nini	6	7	8	7
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	100
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.5 (95.5)
% Gmm Nini	<= 91.5[3]	<= 89.0[3]	<= 89.0	___
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	<= 98.0
Dust to Binder Ratio[4] (% passing 0.075/Pbe)	0.6 - 1.2[5]	0.6 - 1.2[5]	0.6 - 1.2[5]	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80[6] [8]	65 - 75[6] [7] [9]	65 - 75[6] [7] [9]	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283)[10] [11]				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.80 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)	___	___	___	<= 0.30
Minimum Effective Asphalt Content, Pbe (%)	___	___	___	5.5

[1] For No 6 (4.75 mm) nominal maximum size mixes, the specified fine aggregate angularity is 43 for LT and 45 MT mixes.

[2] For No 6 (4.75 mm) nominal maximum size mixes, the specified sand equivalency is 43 for MT mixes.

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

[4] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

[5] For No 6 (4.75 mm) nominal maximum size mixes, the specified dust to binder ratio limits are 1.0 - 2.0 for LT mixes and 1.5 - 2.0 for MT and HT mixes.

[6] For No. 6 (4.75mm) nominal maximum size mixes, the specified VFB is 67 - 79 percent for LT mixes and 66 - 77 percent for MT and HT mixes.

[7] For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

[8] For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

[9] For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

[10] WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

[11] Run TSR at asphalt content corresponding to 3.0% air void regressed design, or 4.5% air void design for SMA, using distilled water for testing.

513.2.1(2) General

Correct errata by changing the CMM reference from 875.2 to 875.4.

(2) Conform to the department's certification method of acceptance, as defined in CMM 875.4, for railing and railing components. Furnish a certificate of compliance for miscellaneous hardware.

531.1(1) Description

Correct errata by adding structural steel sign supports constructed under 635.

(1) This section describes constructing drilled shaft foundations for the following:

- Overhead sign structures constructed under 532.
- High mast light towers constructed under 532.
- Structural steel sign supports constructed under 635.
- Camera poles constructed under 677.

635.3.1(1) Structural Steel Sign Supports

Correct errata by adding "type NS" concrete footings.

(1) Locate and erect the supports as specified for placement and orientation in 637.3.3.2. Construct Type NS concrete footings conforming to 531.

654.5(2) Payment

Correct errata by changing excavating to drilling.

(2) Payment for the Bases bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor templates, rods, nuts, and washers; for bar steel reinforcement; and for drilling and backfilling.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.

B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf

Effective January 2019 Letting ASP 9

ADDITIONAL SPECIAL PROVISION 9

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 (HCCI) site on the Labor, Wages, and EEO Information page at:

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, including all trucking firms, 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 seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin 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

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the contractor under the contract until the contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Effective November 2020 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this “Buy America” provision.

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form DT4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form DT4567 is available at:

https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0110 Clearing	460.000 SY	_____.____	_____.____
0004	201.0220 Grubbing	42.000 ID	_____.____	_____.____
0006	203.0200 Removing Old Structure (station) 001. 12+81.34	LS	LUMP SUM	_____.____
0008	204.0100 Removing Concrete Pavement	86.000 SY	_____.____	_____.____
0010	204.0120 Removing Asphaltic Surface Milling	715.000 SY	_____.____	_____.____
0012	204.0150 Removing Curb & Gutter	259.000 LF	_____.____	_____.____
0014	204.0155 Removing Concrete Sidewalk	137.000 SY	_____.____	_____.____
0016	204.0215 Removing Catch Basins	3.000 EACH	_____.____	_____.____
0018	205.0100 Excavation Common	115.000 CY	_____.____	_____.____
0020	206.1000 Excavation for Structures Bridges (structure) 001. P-40-589	LS	LUMP SUM	_____.____
0022	210.1500 Backfill Structure Type A	90.000 TON	_____.____	_____.____
0024	213.0100 Finishing Roadway (project) 001. 2984-51-70	1.000 EACH	_____.____	_____.____
0026	305.0120 Base Aggregate Dense 1 1/4-Inch	49.000 TON	_____.____	_____.____
0028	320.0155 Concrete Base 9-Inch	20.000 SY	_____.____	_____.____
0030	415.0410 Concrete Pavement Approach Slab	86.000 SY	_____.____	_____.____
0032	416.0170 Concrete Driveway 7-Inch	16.000 SY	_____.____	_____.____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	416.0610 Drilled Tie Bars	20.000 EACH	_____.____	_____.____
0036	455.0605 Tack Coat	74.000 GAL	_____.____	_____.____
0038	465.0105 Asphaltic Surface	208.000 TON	_____.____	_____.____
0040	502.0100 Concrete Masonry Bridges	133.000 CY	_____.____	_____.____
0042	502.3200 Protective Surface Treatment	305.000 SY	_____.____	_____.____
0044	502.3210 Pigmented Surface Sealer	115.000 SY	_____.____	_____.____
0046	502.4205 Adhesive Anchors No. 5 Bar	158.000 EACH	_____.____	_____.____
0048	505.0600 Bar Steel Reinforcement HS Coated Structures	25,653.000 LB	_____.____	_____.____
0050	506.0105 Structural Steel Carbon	520.000 LB	_____.____	_____.____
0052	506.2605 Bearing Pads Elastomeric Non-Laminated	30.000 EACH	_____.____	_____.____
0054	506.3015 Welded Stud Shear Connectors 7/8x6-Inch	256.000 EACH	_____.____	_____.____
0056	506.3025 Welded Stud Shear Connectors 7/8x8-Inch	904.000 EACH	_____.____	_____.____
0058	506.3030 Welded Stud Shear Connectors 7/8x9-Inch	184.000 EACH	_____.____	_____.____
0060	506.3035 Welded Stud Shear Connectors 7/8x10-Inch	336.000 EACH	_____.____	_____.____
0062	506.7050.S Removing Bearings (structure) 001. P-40-589	30.000 EACH	_____.____	_____.____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	509.1500 Concrete Surface Repair	195.000 SF	_____.____	_____.____
0066	509.9025.S Epoxy Injection Crack Repair	280.000 LF	_____.____	_____.____
0068	509.9026.S Cored Holes 2-Inch Diameter	4.000 EACH	_____.____	_____.____
0070	511.1200 Temporary Shoring (structure) 001. P-40-589	80.000 SF	_____.____	_____.____
0072	513.4056 Railing Tubular Type H	103.000 LF	_____.____	_____.____
0074	516.0100 Dampproofing	61.000 SY	_____.____	_____.____
0076	516.0500 Rubberized Membrane Waterproofing	24.000 SY	_____.____	_____.____
0078	517.0900.S Preparation and Coating of Top Flanges (structure) 001. P-40-589	LS	LUMP SUM	_____.____
0080	517.1800.S Structure Repainting Recycled Abrasive (structure) 001. P-40-589	LS	LUMP SUM	_____.____
0082	517.4500.S Negative Pressure Containment and Collection of Waste Materials (structure) 001. P-40-589	LS	LUMP SUM	_____.____
0084	517.6001.S Portable Decontamination Facility	1.000 EACH	_____.____	_____.____
0086	601.0331 Concrete Curb & Gutter 31-Inch	259.000 LF	_____.____	_____.____
0088	602.0410 Concrete Sidewalk 5-Inch	810.000 SF	_____.____	_____.____
0090	602.0515 Curb Ramp Detectable Warning Field Natural Patina	24.000 SF	_____.____	_____.____
0092	603.8000 Concrete Barrier Temporary Precast Delivered	125.000 LF	_____.____	_____.____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	603.8125 Concrete Barrier Temporary Precast Installed	250.000 LF	_____.____	_____.____
0096	611.8110 Adjusting Manhole Covers	4.000 EACH	_____.____	_____.____
0098	616.0206 Fence Chain Link 6-FT	128.000 LF	_____.____	_____.____
0100	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0102	625.0100 Topsoil	670.000 SY	_____.____	_____.____
0104	628.7005 Inlet Protection Type A	3.000 EACH	_____.____	_____.____
0106	628.7015 Inlet Protection Type C	5.000 EACH	_____.____	_____.____
0108	629.0210 Fertilizer Type B	0.200 CWT	_____.____	_____.____
0110	630.0170 Seeding Mixture No. 70	7.000 LB	_____.____	_____.____
0112	631.0300 Sod Water	2.000 MGAL	_____.____	_____.____
0114	631.1000 Sod Lawn	105.000 SY	_____.____	_____.____
0116	642.5201 Field Office Type C	1.000 EACH	_____.____	_____.____
0118	643.0300 Traffic Control Drums	762.000 DAY	_____.____	_____.____
0120	643.0420 Traffic Control Barricades Type III	2,544.000 DAY	_____.____	_____.____
0122	643.0705 Traffic Control Warning Lights Type A	5,088.000 DAY	_____.____	_____.____
0124	643.0715 Traffic Control Warning Lights Type C	762.000 DAY	_____.____	_____.____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0126	643.0900 Traffic Control Signs	2,274.000 DAY	_____._____	_____._____
0128	643.5000 Traffic Control	1.000 EACH	_____._____	_____._____
0130	644.1810 Temporary Pedestrian Barricade	212.000 LF	_____._____	_____._____
0132	650.4500 Construction Staking Subgrade	150.000 LF	_____._____	_____._____
0134	650.6500 Construction Staking Structure Layout (structure) 001. P-40-589	LS	LUMP SUM	_____._____
0136	650.7000 Construction Staking Concrete Pavement	200.000 LF	_____._____	_____._____
0138	650.8500 Construction Staking Electrical Installations (project) 001. 2984-51-70	LS	LUMP SUM	_____._____
0140	650.9000 Construction Staking Curb Ramps	3.000 EACH	_____._____	_____._____
0142	650.9910 Construction Staking Supplemental Control (project) 001. 2984-51-70	LS	LUMP SUM	_____._____
0144	652.0230 Conduit Rigid Nonmetallic Schedule 40 2 1/2-Inch	150.000 LF	_____._____	_____._____
0146	690.0150 Sawing Asphalt	50.000 LF	_____._____	_____._____
0148	690.0250 Sawing Concrete	40.000 LF	_____._____	_____._____
0150	715.0415 Incentive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0152	715.0502 Incentive Strength Concrete Structures	798.000 DOL	1.00000	798.00
0154	999.1000.S Seismograph 001. P-40-589	LS	LUMP SUM	_____._____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0156	999.1500.S Crack and Damage Survey 001. P-40-589	LS	LUMP SUM	_____.____
0158	999.2000.S Installing and Maintaining Bird Deterrent System	1.000 EACH	_____.____	_____.____
0160	SPV.0060 Special 001. Adjusting Water Service Boxes	2.000 EACH	_____.____	_____.____
0162	SPV.0060 Special 002. Adjusting Water Manholes Frame & Lid	3.000 EACH	_____.____	_____.____
0164	SPV.0060 Special 100. Adjusting Sanitary Manhole	4.000 EACH	_____.____	_____.____
0166	SPV.0060 Special 102. Inlet Covers Type 57	3.000 EACH	_____.____	_____.____
0168	SPV.0060 Special 103. Manhole Covers Type 58-A	1.000 EACH	_____.____	_____.____
0170	SPV.0060 Special 110. Catch Basin Type 45A	3.000 EACH	_____.____	_____.____
0172	SPV.0060 Special 302. Fiberglass/Polymer Concrete Pull Box 13-Inch X 24-Inch X 24-Inch	4.000 EACH	_____.____	_____.____
0174	SPV.0060 Special 339. Portable Generator To Power Existing Street Lights	1.000 EACH	_____.____	_____.____
0176	SPV.0060 Special 400. Adjusting CUC Manhole Cover	2.000 EACH	_____.____	_____.____
0178	SPV.0060 Special 401. 4' Diameter Manhole Type CUC	2.000 EACH	_____.____	_____.____
0180	SPV.0060 Special 425. Installing Conduit Into Existing Manhole	2.000 EACH	_____.____	_____.____
0182	SPV.0060 Special 536. Girder Repair Detail 1	10.000 EACH	_____.____	_____.____

Proposal ID: 20210511015 **Project(s):** 2984-51-70

Federal ID(s): N/A

SECTION: 0001 ROADWAY ITEMS

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0184	SPV.0060 Special 537. Girder Repair Detail 2	10.000 EACH	_____._____	_____._____
0186	SPV.0090 Special 001. Construction Staking Concrete Sidewalk	200.000 LF	_____._____	_____._____
0188	SPV.0090 Special 002. Storm Sewer Pipe Corrugated PVC, 8-Inch	15.000 LF	_____._____	_____._____
0190	SPV.0090 Special 402. 2-Duct Cement Encased 4 Inch Rigid Nonmetallic Conduit DB-60	111.000 LF	_____._____	_____._____
0192	SPV.0105 Special 400. Underdeck Utility Structure P-40-589 City Of Milwaukee Comm Conduit	LS	LUMP SUM	_____._____
0194	SPV.0105 Special 401. Underdeck Utility Structure P-40-589 City Of Milwaukee Elect Conduit	LS	LUMP SUM	_____._____
0196	SPV.0105 Special 590. Gas Main Protection (P-40-589)	LS	LUMP SUM	_____._____
0198	SPV.0105 Special 597. Cross Bracing Adjustment P-40-589	LS	LUMP SUM	_____._____
	Section: 0001		**Total:**	_____._____

Total Bid: _____._____

PLEASE ATTACH ADDENDA HERE

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

April 26, 2021

NOTICE TO ALL CONTRACTORS:

Proposal #15: 2984-51-70
S Dana Ct,
Bridge Over Land P-40-589
Loc Str
Milwaukee County

Letting May 11, 2021

This is Addendum No. 01, which provides the following:

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
93	Addition to note under General Notes
96	Note added

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

Sincerely,

Mike Coleman
Proposal Development Specialist
Proposal Management Section

END OF ADDENDUM

W:\STR\B1102\2021\PLANS\03_ESTIMATE OF QUANTITIES_REV1.DGN

REVISED: 04-20-2021 BY GJR

STATE PROJECT NUMBER

2984 - 51 - 70

GENERAL NOTES

ALL STATIONS AND ELEVATIONS ARE IN FEET.

DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS.

ELEVATIONS ARE REFERRED TO CITY OF MILWAUKEE DATUM: 580.6 NGVD.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

BEVEL EXPOSED CONCRETE EDGES ¾" UNLESS OTHERWISE NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES P-40-589 SHALL BE THE EXISTING GROUND LINE.

SPACES EXCAVATED AND NOT OCCUPIED BY NEW CONSTRUCTION SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

JOINT FILLER SHALL CONFORM TO AASHTO DESIGNATION M 153 TYPE I, II, OR III, OR AASHTO DESIGNATION M213.

LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN PROJECT AREA THAT ARE NOT SHOWN.

SEE ROADWAY PLANS FOR EXISTING AND PROPOSED UTILITY LOCATIONS.

CONCRETE INSERTS FOR UTILITY COMPANY TO BE FURNISHED BY UTILITY COMPANY AND PLACED BY CONTRACTOR. COSTS OF PLACING UTILITY COMPANY INSERTS SHALL BE INCLUDED IN BID PRICE FOR CONCRETE MASONRY BRIDGES.

STEEL PAINTING COLOR TO MATCH AMS STANDARD NO. 595C, COLOR NO. 25052.

VARIATIONS TO NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY FIELD ENGINEER TO STRUCTURES DESIGN SECTION FOR REVIEW.

THE CONTRACTOR SHALL SUPPLY NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR (1927).

⚠1 ALL EXISTING STEEL SHALL BE SANDBLASTED AND PAINTED UNDER BID ITEMS 517.0900.S "PREPARATION AND COATING OF TOP FLANGES (STRUCTURE P-40-589)", 517.1800.S "STRUCTURE REPAINTING RECYCLED ABRASIVE P-40-589", AND 517.4500.S "NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS P-40-589." PORTIONS OF EXISTING B4 (18X6) @ 54.7 GIRDER ENDS EMBEDDED IN ABUTMENT GIRDER END DIAPHRAGM TO BE PAINTED PRIOR TO PLACEMENT OF CONCRETE.

AMERICAN TRANSMISSION COMPANY HIGH VOLTAGE TRANSMISSION LINES AND WE-ENERGIES ELECTRIC LINES ARE LOCATED OVER THE CONSTRUCTION SITE. SEE SPECIAL PROVISIONS REGARDING ALL WORK DONE AT THIS LOCATION.

EXISTING ABUTMENTS AND PIERS ARE TO REMAIN IN PLACE AS SHOWN AND INCORPORATED INTO NEW CONSTRUCTION.

CLEAN, STRAIGHTEN, EPOXY COAT AND INCORPORATE EXISTING BAR STEEL REINFORCEMENT INTO NEW WORK, WHERE APPLICABLE.

ALL CONCRETE REMOVALS SHALL BE DEFINED BY A 1" DEEP SAW CUT.

IF AN ITEM IS LISTED OR DESCRIBED IN SPECIAL PROVISIONS AND IS NOT SPECIFICALLY SHOWN ON DRAWINGS, OR IF AN ITEM IS SHOWN ON THE DRAWINGS AND IS NOT SPECIFICALLY LISTED OR DESCRIBED IN SPECIAL PROVISIONS, THEN IT SHALL BE CONSIDERED A PART OF THE WORK AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. IF IT IS NOT OBVIOUS AS TO WHICH PAY ITEM IT BELONGS, THEN ENGINEER SHALL BE CONSULTED FOR INTERPRETATION, AND THE ENGINEER'S DECISION SHALL GOVERN.

WELDING NOT SHOWN ON THE PLANS WILL NOT BE PERMITTED, EXCEPT BY WRITTEN PERMISSION FROM THE ENGINEER AND WITH AN APPROVED WELD PROCEDURE BY THE CONTRACTOR.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

ESTIMATE OF QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER.	CLOSURE WALLS	TOTAL
203.0200	REMOVING OLD STRUCTURE STA. 12+81.34	LS					1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES P-40-589	LS					1
210.1500	BACKFILL STRUCTURE TYPE A	TON	45	45			90
502.0100	CONCRETE MASONRY BRIDGES	CY			116	17	133
502.3200	PROTECTIVE SURFACE TREATMENT	SY			305		305
502.3210	PIGMENTED SURFACE SEALER	SY			75	40	115
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH				158	158
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB			23,941	1,712	25,653
506.0105	STRUCTURAL STEEL CARBON	LB			520		520
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	15	15			30
506.3015	WELDED STUD SHEAR CONNECTORS ⅞ X 6-INCH	EACH			256		256
506.3025	WELDED STUD SHEAR CONNECTORS ⅞ X 8-INCH	EACH			904		904
506.3030	WELDED STUD SHEAR CONNECTORS ⅞ X 9-INCH	EACH			184		184
506.3035	WELDED STUD SHEAR CONNECTORS ⅞ X 10-INCH	EACH			336		336
506.7050.S	REMOVING BEARINGS P-40-589	EACH	15	15			30
509.1500	CONCRETE SURFACE REPAIR	SF	134	61			195
509.9025.S	EPOXY INJECTION CRACK REPAIR	LF	80	200			280
509.9026.S	CORED HOLES 2-INCH DIAMETER	EACH	2	2			4
511.1200	TEMPORARY SHORING P-40-589	SF	50	30			80
513.4056	RAILING TUBULAR TYPE H	LF			84	19	103
516.0100	DAMPPROOFING	SY	31	30			61
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	12	12			24
517.0900.S	PREPARATION AND COATING OF TOP FLANGES P-40-589	LS					1
517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE P-40-589	LS					1
517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS P-40-589	LS					1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH					1
616.0206	FENCE CHAIN LINK 6-FT	LF			84	44	128
999.1000.S	SEISMOGRAPH	LS					1
999.1500.S	CRACK AND DAMAGE SURVEY	LS					1
SPV.0060.536	GIRDER REPAIR DETAIL 1	EACH			10		10
SPV.0060.537	GIRDER REPAIR DETAIL 2	EACH			10		10
SPV.0105.400	UNDERDECK UTILITY STRUCTURE P-40-589, CITY OF MILWAUKEE COMMUNICATIONS CONDUIT	LS			1		1
SPV.0105.401	UNDERDECK UTILITY STRUCTURE P-40-589, CITY OF MILWAUKEE ELECTRICAL CONDUIT	LS			1		1
SPV.0105.590	GAS MAIN PROTECTION P-40-589	LS					1
SPV.0105.597	CROSS BRACING ADJUSTMENT P-40-589	LS					1
	NON-BID ITEMS						
	PREFORMED JOINT FILLER						
	NON-BITUMINOUS JOINT FILLER						
	NAME PLATE						
	PLASTIC OR ZINC SHEETS 1/8-INCH						
	POLYETHLENE SHEETS						

DESIGN DATA

DEAD LOAD

CONCRETE = 150 PCF
F.W.S. = 20 PSF
W. RAILING = 395 PLF
E. RAILING = 581 PLF

LIVE LOAD

INVENTORY RATING HS-18
OPERATING RATING HS-30
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 195 KIPS

MATERIAL PROPERTIES

CONCRETE SUPERSTRUCTURE f'_c = 4,000 PSI
CONCRETE SUBSTRUCTURE f'_c = 3,500 PSI
BAR STEEL REINFORCEMENT f_y = 60,000 PSI
STEEL PLATES AND ANGLES F_y = 36,000 PSI

TRAFFIC VOLUME

ADT (2018) = 52
ADT (2043) = 100
R.D.S. = 25 MPH

UTILITIES

CITY UNDERGROUND COMMUNICATION (CUC) AND TRAFFIC ENGINEERING AND ELECTRICAL SERVICES (TE&ES) SHALL BE TEMPORARILY RELOCATED PRIOR TO CONSTRUCTION. CUC AND TE&ES CONDUITS SHALL BE REINSTALLED BY CONTRACTOR DURING CONSTRUCTION. SEE PROJECT SPECIFICATIONS.

BRIDGE REMOVAL AND CONSTRUCTION NOTES

EXISTING BRIDGE PLANS ARE ON FILE IN CITY OF MILWAUKEE INFRASTRUCTURE SERVICES DIVISION'S STRUCTURAL DESIGN UNIT, ROOM 907, FRANK P. ZEIDLER MUNICIPAL BUILDING, 841 N. BROADWAY, MILWAUKEE, WI 53202 PHONE (414)-286-0463.

EXISTING BRIDGE DECK WILL BE REMOVED IN TWO STAGES TO KEEP S. DANA COURT OPEN FOR 2-WAY TRAFFIC (ONE DIRECTION AT ANY GIVEN TIME) DURING CONSTRUCTION. EXISTING SOUTHBOUND ROADWAY IS TO BE REMOVED FIRST WHILE 2-WAY TRAFFIC IS TO BE CARRIED BY EXISTING NORTHBOUND ROADWAY. AFTER PROPOSED SOUTHBOUND ROADWAY IS COMPLETED THE NORTHBOUND ROADWAY WILL BE REMOVED.

REMOVE EXISTING BRIDGE DECK P-40-589 OVER LAND IN LARGE SECTIONS AND CONFORMING TO CONTRACTOR'S APPROVED STRUCTURE REMOVAL AND CLEAN-UP PLAN.

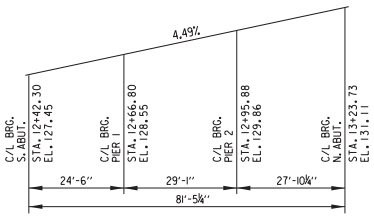
PROPOSED IMPROVEMENTS

PROJECT AS PROPOSED CONSISTS OF: REMOVAL OF EXISTING BRIDGE DECK AND RAILINGS; REMOVAL OF EXISTING SUPERSTRUCTURE STRUCTURAL STEEL AT THE EAST 1/3 OF BRIDGE AND THE WALK FRAMING ON THE WEST SIDE OF BRIDGE, CONCRETE SURFACE REPAIR AND EPOXY INJECTION CRACK REPAIR OF ABUTMENTS AS DIRECTED BY ENGINEER; PREPPING AND PAINTING STEEL SUBSTRUCTURE AND SUPERSTRUCTURE; INSTALLATION OF GIRDER SHEAR STUD CONNECTORS; PLACEMENT OF NEW CONCRETE BRIDGE DECK AND WALK; INSTALLATION OF NEW BRIDGE RAILING; REPLACE BEARINGS AT ABUTMENTS.

SDR
04/22/21

WISCONSIN
JONATHAN D. THOMAS
E-42372
MILWAUKEE, WI
PROFESSIONAL ENGINEER
4/20/2021

Addendum No. 01
ID 2984-51-70
Revised Sheet 93
April 26, 2021



PROFILE GRADE LINE (P.G.L.) ALONG T/L OF SOUTH DANA COURT BRIDGE

NO.	DATE	REVISION	BY
⚠1	4/20/21	ADDENDUM #1	J.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE P-40-589

DRAWN BY M.P.F. | PLANS CK'D. M. V. J.P.H.

ESTIMATE OF QUANTITIES

SHEET 3 OF 22

93

8

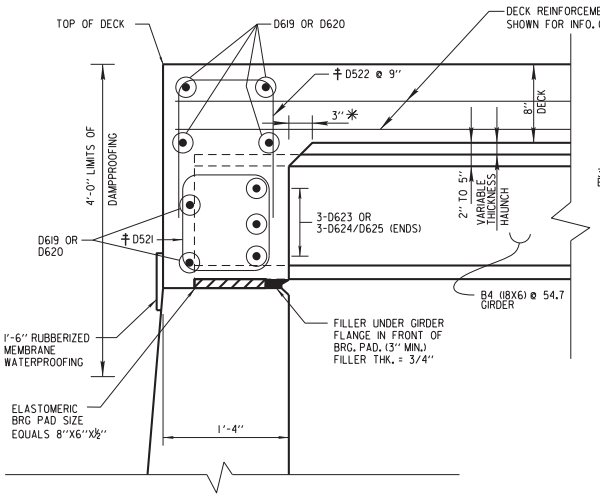
8

W:\STR\B1102\2021\PLANS\06_ABUTMENT DIAPHRAGM_REV1.DGN

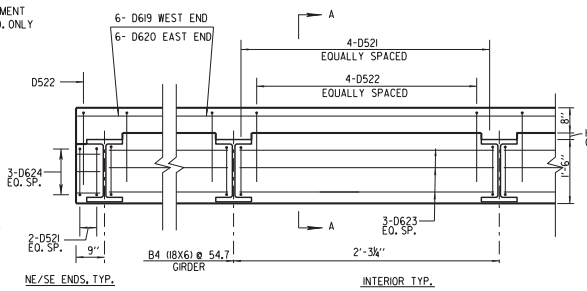
REVISED: 4-20-2021 BY GJR

STATE PROJECT NUMBER

2984 - 51 - 70

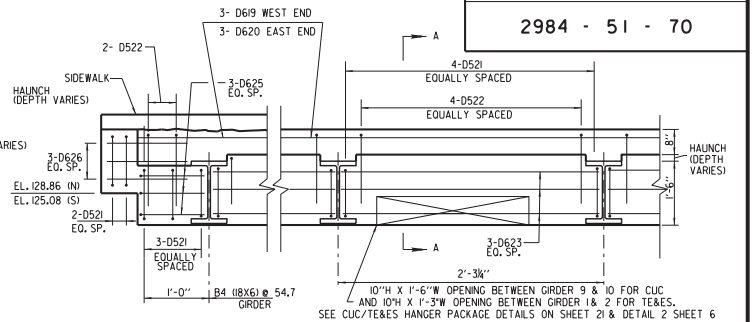


ABUTMENT DIAPHRAGM SECTION A



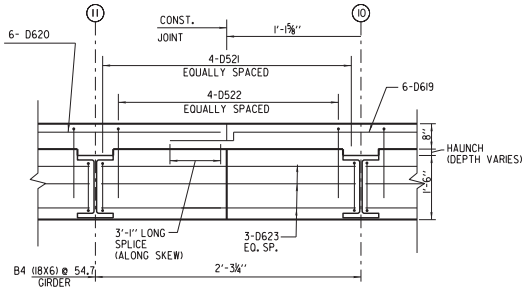
SOUTH ABUTMENT DIAPHRAGM ELEVATION - EAST SIDE

LOOKING SOUTH (TYP. COND. ON NORTH ABUTMENT)



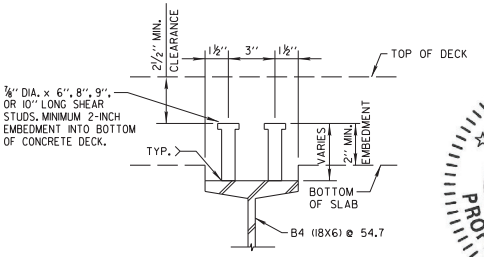
NORTH ABUTMENT DIAPHRAGM ELEVATION - WEST SIDE

LOOKING NORTH (TYP. COND. ON SOUTH ABUTMENT)

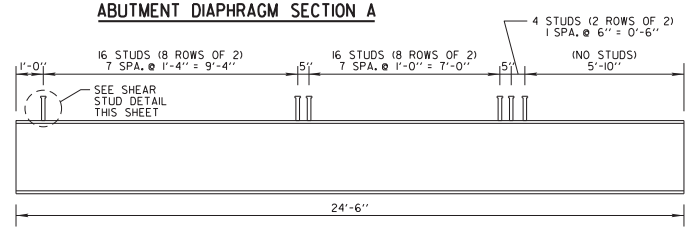


SOUTH ABUTMENT DIAPHRAGM ELEVATION AT CONST. JOINT

LOOKING SOUTH (TYP. COND. ON NORTH ABUTMENT)

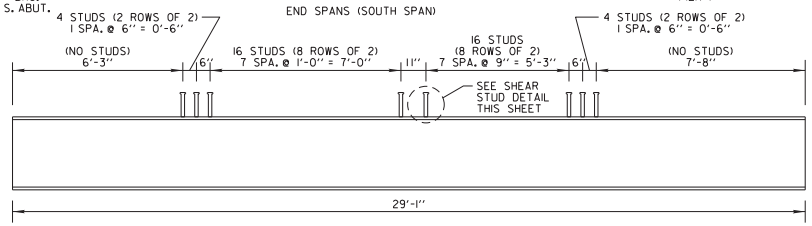


SHEAR STUD DETAIL 1



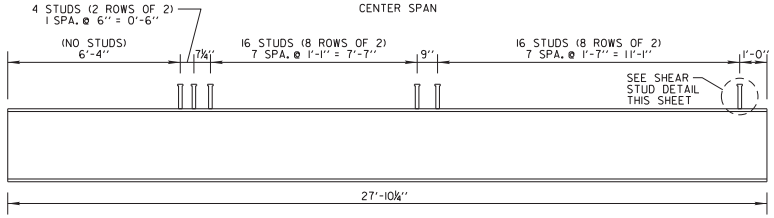
SHEAR STUD SPACING - ALL GIRDERS

END SPANS (SOUTH SPAN)



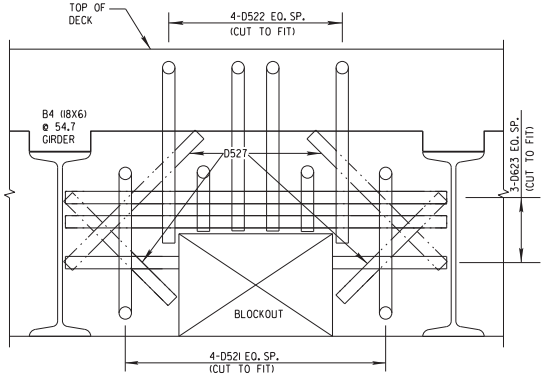
SHEAR STUD SPACING - ALL GIRDERS

CENTER SPAN



SHEAR STUD SPACING - ALL GIRDERS

END SPANS (NORTH SPAN)



DETAIL 2 FOR BLOCK OUT OPENINGS IN N. & S. ABUTMENT DIAPHRAGM

(LOCATED BETWEEN GIRDERS 1 & 2 AND 9 & 10)

BLOCK OUT OPENINGS
C.U.C., BETWEEN GIRDERS 9 & 10
1'-6" W x 10" H
TE&ES, BETWEEN GIRDERS 1& 2
1'-3" W x 10" H

Addendum No. 01
ID 2984-51-70
Revised Sheet 96
April 26, 2021

WISCONSIN
JONATHAN D. THOMAS
E-42372
MILWAUKEE, WI
PROFESSIONAL ENGINEER
4/20/2021

SDR
04/22/21

NOTES:

ALL DIMENSIONS SHOWN ARE NORMAL TO ROADWAY EXCEPT AS INDICATED BY NOTE "ALONG THE SKEW."

USE EXISTING GIRDER BEARING ELEVATIONS FOR NEW ELASTOMERIC BEARING PAD ELEVATIONS.

AFTER REMOVAL OF DECK, AND BEFORE ORDERING THE SHEAR STUDS, THE CONTRACTOR SHALL SHOOT GRADES OF THE TOP OF THE GIRDERS TO DETERMINE HAUNCH HEIGHTS. ORDER APPROPRIATE SIZE STUDS AS NEEDED TO ACHEIVE MINIMUM 2" EMBEDMENT INTO BOTTOM OF NEW DECK SLAB.

⚠ PORTIONS OF EXISTING B4 (18X6) @ 54.7 GIRDER ENDS EMBEDDED IN ABUTMENT GIRDER END DIAPHRAGM TO BE PAINTED PRIOR TO PLACEMENT OF CONCRETE USING BID ITEMS 517.1800.S "STRUCTURE REPAINTING RECYCLED ABRASIVE P-40-589" AND 517.4500.S "NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS P-40-589."

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS

‡ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO C/L GIRDERS.

NO.	DATE	REVISION	BY
⚠	4/20/21	ADDENDUM #1	J.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE P-40-589

DRAWN BY M.P.F. | PLANS CK'D. J.H.

GIRDER END DIAPHRAGM AND SHEAR STUD SPACING

SHEET 6 OF 22

96