HIGHWAY WORK PROPOSAL

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

Notice of Award Dated

Proposal Number:

LOC STR

COUNTY STATE PROJECT **FEDERAL** PROJECT DESCRIPTION **HIGHWAY**

Barron 8997-00-40 N/A C Rice Lake, South Main Street; Red

Cedar River Bridge B030002

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 Attach Proposal Guaranty on back of this PAGE. Payable to: Wisconsin Department of Transportation Firm Name, Address, City, State, Zip Code Bid Submittal Date: April 10, 2018 SAMPLE Time (Local Time): 9:00 am NOT FOR BIDDING PURPOSES Contract Completion Time August 16, 2019 This contract is exempt from federal oversight. Assigned Disadvantaged Business Enterprise Goal 0

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

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet. Subscribed and sworn to before me this date ____ (Signature, Notary Public, State of Wisconsin) (Bidder Signature) (Print or Type Name, Notary Public, State Wisconsin) (Print or Type Bidder Name) (Date Commission Expires) (Bidder Title) **Notary Seal**

For Department Use Only Type of Work: Excavation, Base, Concrete Pavement, Asphaltic Surface, Curb and Gutter, Sidewalk, Signs, Pavement Marking, Lighting, Water and Sanitary Sewer, Bridge Rehabilitation

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

- Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 - 1. Electronic bid on the internet.
 - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
 - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at: http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

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

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

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

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

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

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 ExpediteTM software to enter a unit price for every item in the schedule of items.
 - 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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 ExpressTM web site reflecting the latest addenda posted on the department's web site at:

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

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

(2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM 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 ExpediteTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is not the same on each page.
 - 2. The check code printed on the printout of the ExpediteTM generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
 - 3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

(Company Name) (Affix C	orporate Seal)		
(Signature and Title)			
(Company Name)			
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTA	RY FOR PRINCIPAL	NOTARY FOR	SURETY
	(Date)	(Date))
State of Wisconsin)	State of Wisconsin)
) ss. County)	() ss. County)
On the above date, this instrunamed person(s).	ument was acknowledged before me by the	On the above date, this instrument was named person(s).	acknowledged before me by the
(Signature, Nota	ary Public, State of Wisconsin)	(Signature, Notary Public,	State of Wisconsin)
(Print or Type Name	, Notary Public, State of Wisconsin)	(Print or Type Name, Notary Po	ublic, State of Wisconsin)
(Date Commission Expires)		(Date Commission Expires)	

Notary Seal Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

Time Period Valid ((From/To)
Name of Surety	
Name of Contracto	ır
Certificate Holder	Wisconsin Department of Transportation
	y that an annual bid bond issued by the above-named Surety is currently on file with the partment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder 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.

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 8997-00-40, C Rice Lake, South Main Street, Red Cedar River Bridge B030002, Loc Str, Barron 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, 2018 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 (20170615)

2. Scope of Work.

The work under this contract shall consist of grading, base aggregate dense, concrete pavement, concrete sidewalk, storm sewer, bridge rehabilitation of Structure B-03-0002 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. Mandatory Pre-Bid Meeting.

Add the following to standard spec 102.3.1:

Prospective bidders are required to attend a mandatory pre-bid meeting at 10:00 AM, February 27, 2018 at Rice Lake City Hall, 30 East Eau Claire Street, Rice Lake, WI 54868.

No meeting minutes will be prepared. Issues discovered at the meeting will be handled by addendum.

stp-102-010 (20150630)

4. 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.

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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.

Fish Spawning

There shall be no instream disturbance of the Red Cedar River as a result of construction activity under or for this contract, from March 1 to May 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of suckers, minnows, and several lake species such as smallmouth bass.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridge. 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 usually between May 1 and August 30. Either prevent active nests from becoming established, or 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. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure Over Waterway with Minimal Debris.

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.

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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.

5. Traffic.

Close South Main Street lanes to traffic no earlier than August 1, 2018. Maintain two lanes (one in each direction) with a minimum of 11-foot travel lanes at all times after August 1, 2018, except as noted for girder erection and deep sanitary and storm sewer installations. Two night-time full closures of South Main Street are allowed from 11:00 PM to 5:00 AM for erection of bridge girders. Seven days of full closures of South Main Street are allowed for deep sanitary and storm sewer installations.

Conduct operations in a manner that will cause the least interference to traffic, pedestrian movements, commercial access, and residential access adjacent to and within the construction area.

Submit to the engineer for approval a detailed traffic control plan if different than the traffic control plan provided in the plan set. Submit the plan ten days prior to the preconstruction conference.

Maintain emergency and local vehicular access at all times to all driveways within the project limits unless otherwise noted below.

6. Holiday Work Restrictions.

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

- · From noon Friday, May 25, 2018 to 6:00 AM Tuesday, May 29, 2018 for Memorial Day;
- From noon Tuesday, July 3, 2018 to 6:00 AM Thursday, July 5, 2018 for Independence Day;

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- From noon Friday, August 31, 2018 to 6:00 AM Tuesday, September 4, 2018 for Labor Day;
- From noon Wednesday, November 21, 2018 to 6:00 AM Monday, November 26, 2018 for Thanksgiving;
- From noon Friday, December 21, 2018 to 6:00 AM Wednesday, December 26, 2018 for Christmas;
- From noon Monday, December 31, 2018 to 6:00 AM Wednesday, January 2, 2019 for New Year's Day;
- · From noon Friday, May 24, 2019 to 6:00 AM Tuesday, May 28, 2019 for Memorial Day;
- From noon Wednesday, July 3, 2019 to 6:00 AM Friday, July 5, 2019 for Independence Day.

stp-107-005 (20050502)

7. Utilities.

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

We Energies (Gas)

Underground gas line enters the project area from the south approximately 17 feet left of the South Main Street centerline. The line continues north and has service lines that branch off at Stations 16+60, 16+65, and 17+35. The line continues north approximately 30 feet left of road centerline and is hung from the west side of existing bridge. The line continues north to Station 21+75 where the line branches west down Water Street and east crossing South Main Street. The line continues north approximately 40 feet right of South Main Street outside the project limits.

The gas line hung from the existing bridge will be discontinued. A new gas line heading east from the existing gas line at approximately Station 17+35 will be connected during construction. Other underground gas lines within the project area are to remain in place.

CenturyLink (Telephone/Fiber Optic)

Underground lines run along South Main Street approximately 20 feet right of centerline. In addition, lines branch off at Station 21+90 and head west along Water Street. The lines and conduit pack hanging along east side of existing bridge will be relocated prior to construction.

Rice Lake Utilities (Electric)

Overhead lines cross South Main Street at approximately Station 17+25, 18+25, and Station 22+25. Overhead lines crossing South Main Street at Station 18+25 will be removed prior to construction.

Underground line runs along the east side of South Main Street approximately 35 feet right of centerline. The line continues to a pole at Station 17+30, 35 feet right. A line is also located starting at Station 21+95, 40 feet right and continuing north outside the project

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limits. A line is also located starting at 22+30, 35 feet left and continuing north outside the project limits. Underground lines south and north of the bridge will replaced by Rice Lake Utilities during construction.

Rice Lake Utilities (Water and Sanitary Sewer)

A water line enters the project limits from the south approximately 15 feet right of centerline. The line continues north to Stein Street and leaves the project limits heading east along Stein Street. Another line enters the project limits from the west along Water Street. The line continues north along South Main Street at Station 21+95 approximately 20 feet left of centerline. A branch heads east and crosses the South Main Street centerline at Station 22+55. Underground lines within the project limits to be replaced during construction as part of the contract.

A sanitary sewer line enters the project limits from the south approximately 7 feet right of centerline. The line continues north to Station 17+60 where one line continues north to a manhole at Station 18+30 and one line continues east along Stein Street outside the project limits. North of the bridge lines connect to a manhole at Station 21+95, 8 feet left. One line continues east outside the project limits. One line continues west along Water Street outside the project limits. One line continues north along South Main Street approximately 7 feet left of centerline.

All known conflicts or adjustments of sanitary sewer and water main facilities are shown on the plans. If additional water main or sanitary sewer conflicts are encountered, they will be resolved during construction using the applicable unit price items of work needed to accommodate the construction.

Construction, testing, and other improvements to water main and sanitary sewer under this contract will be observed and inspected by a representative of the City of Rice Lake and Rice Lake Utilities or their engineer. 48 hours' notice shall be given to city personnel and engineer prior to commencing any sewer or water related work.

The City of Rice Lake and Rice Lake Utilities shall have the first right to retain any city items removed by the contractor. Contact city and utility personnel to review removed items such as manhole castings and covers, inlet frames, street signs, hydrants, valves, valve boxes, etc. Items that the city or utility wish to retain shall be set aside and protected. Items that the city or the utility do not wish to retain shall become the property of the contractor and properly removed and disposed of by the contractor.

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

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

stp-105-001 (20140630)

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9. Coordination – Sanitary Sewer and Water Mains.

The contractor shall coordinate all utility tie-ins (sanitary sewer and water mains) and opening and closing of water valves with the Rice Lake Utilities.

The contractor shall be responsible for contacting and coordinating utility activities. All property owners shall be contacted 72 hours and again 24 hours in advance of an interruption in utility service. Where utility shutdowns may affect businesses, interruptions shall be scheduled closely with the properties and may require night work to minimize disruption. Sanitary sewer and water service may not be interrupted for a period exceeding two hours unless prior approval is obtained from Rice Lake Utilities and property owners. Only utility water department personnel shall operate live water main valves. Contractor shall give 48-hour notice to the utility when requesting valve operation.

10. Underground Utility Record Drawings.

Keep a current set of plans at the project that are marked to show the location of underground utilities. Accurately record the location of valves, fittings, service lines, and field changes for water main and sanitary sewer work. Dimension utilities from permanent reference points; record vertical distances. Submit record drawings to City of Rice Lake, Rice Lake Utilities, and their engineer upon completion of work.

Record drawing work will be incidental to the items of underground utility work

11. Rice Lake Dam Operations.

Rice Lake Dam is located immediately upstream of the project. Water depths fluctuate frequently within the construction limits. Water flowing out of the dam can be switched to different gates, if needed. Contact Barron County and the City of Rice Lake for information regarding Red Cedar River flow management.

The Barron County contact is Tyler Gruetzmacher, (715) 537.6246, and the City of Rice Lake contact is Jim Anderson, (715) 234.7402.

12. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Jeff Olson, (715) 395-3032, WisDOT RW Region – Superior, 1701 N 4th St., Superior, WI 54880. stp-107-054 (20080901)

13. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters

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of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

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

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

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

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

14. Construction Over or Adjacent to Navigable Waters.

Add the following to standard spec 107.19:

The Red Cedar River is classified as a navigable waterway. stp-107-060 (20150630)

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15. Erosion Control Structures.

Within seven calendar days after the commencement of work on the bridge superstructure, place all permanent erosion control devices, including riprap, erosion mat, ditch checks, seed, fertilizer, mulch, soil stabilizer, or any other item required by the contract or deemed necessary by the engineer. These devices shall be in place in the area under the bridge and on both sides of the roadway, from the waterway to a point 100-feet behind the backwall of the abutment. Within said limits, place these devices to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as directed by the engineer. Prior to initial construction operations, place turbidity barriers, silt screens, and other temporary erosion control measures as shown on the plans, and remove them after the permanent erosion control devices are in place unless directed otherwise by the engineer.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived. stp-107-070 (20030820)

16. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

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

Barron County Sheriff's Department Wisconsin State Patrol City of Rice Lake Fire Department City of Rice Lake Police Department City of Rice Lake Community Services Department Rice Lake School District

17. Coordination with Businesses and Residents.

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

stp-108-060 (20141107)

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18. Abatement of Asbestos Containing Material B-3-2, Item 203.0210.S.01.

A Description

This special provision describes abating asbestos containing material on structures according to the plans, the pertinent provisions of the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction

John Roelke, License Number AII-119523, inspected Structure B-3-2 for asbestos on March 9, 2016. Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: caulk in the parapet expansion joints, non-friable, 7.7 square feet.

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is available from Jeff Olson, (715) 395-3032, WisDOT NW Region – Superior, 1701 N 4th St., Superior, WI 54880. According to 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 prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Jeff Olson, (715) 395-3032, WisDOT NW Region – Superior, 1701 N 4th St., Superior, WI 54880 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 B-3-2, South Main Street over Red Cedar River
- · Site Address: Section 21, T35N, R11W, City of Rice Lake, Barron County
- Ownership Information: City of Rice Lake, 30 East Eau Claire Street, Rice Lake, WI 54868
- Contact: Jeff Olson, WisDOT
- Phone: (715) 395-3032
- Age: 69 years and 40 years. This structure was constructed in 1949 and 1978.
- · Area: 17,754 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 according to standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

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D Measurement

The department will measure Abatement of Asbestos Containing Material (Structure), completed according to the contract and accepted, as a single complete unit of work.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 203.0210.S.01 Abatement of Asbestos Containing Material B-3-2 LS

Payment is full compensation for submitting necessary forms; removing all asbestos; properly disposing of all waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work. stp-203-005 (20120615)

19. Removing Old Structure Over Waterway Station 19+76.30, Item 203.0500.S.02.

Conform to standard spec 203 as modified in this special provision.

Add the following to standard spec 203:

203.3.6 Removals Over Waterways and Wetlands 203.3.6.1 Removing Old Structure Over Waterway

- (1) Remove the existing west portion (concrete arch) of Structure B-3-2 over the Red Cedar River conforming to the contractor's approved structure removal and clean-up plan. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. Remove large pieces of the structure within 36 hours. The contractor may leave limited amounts of small concrete pieces scattered over the waterway floor or wetland only if the engineer allows.
- (2) Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal and clean-up plan without the department's written approval of the plan. Include the following information in the structure removal and clean-up plan:
 - 1. Methods and schedule to remove the structure.
 - 2. Methods to control potentially harmful environmental impacts.
 - 3. Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
 - 4. Methods for cleaning the waterway or wetlands.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

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(4) Perform topographic survey of the existing stream bottom under the bridge prior to performing structure removal. Perform topographic survey of the stream bottom again after structure removal to confirm that materials have been removed and stream bottom is returned to pre-construction state. Provide the topographic survey information to the Wisconsin Department of Natural Resources.

Add the following Removing Old Structure bid item to standard spec 203.5.1:

ITEM NUMBER DESCRIPTION UNIT 203.0500.S.02 Removing Old Structure Over Waterway LS

Station 19+76.30

20. Removing Old Structure Over Waterway With Minimal Debris Station 19+76.30, Item 203.0600.S.02.

Conform to standard spec 203 as modified in this special provision.

Add the following to standard spec 203:

203.3.6 Removals Over Waterways and Wetlands 203.3.6.2 Removing Old Structure Over Waterway with Minimal Debris

- (1) Remove the existing east portion (concrete deck) of Structure B-3-2 over Red Cedar River in large sections and conforming to the contractor's approved structure removal and clean-up plan. During superstructure removal, prevent all large pieces and minimize the number of small pieces from entering the waterway or wetland. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. The contractor may leave limited amounts of small concrete pieces scattered over the waterway floor or wetland only if the engineer allows.
- (2) Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal and clean-up plan without the department's written approval of the plan. Include the following information in the structure removal and clean-up plan:
 - Methods and schedule to remove the structure.
 - Methods to control potentially harmful environmental impacts.
 - Methods for superstructure removal that prevent all large pieces and minimize the number of small pieces from entering the waterway or wetlands.
 - Methods to control dust and contain slurry.
 - Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
 - Methods for cleaning the waterway or wetlands.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

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(4) Perform topographic survey of the existing stream bottom under the bridge prior to performing structure removal. Perform topographic survey of the stream bottom again after structure removal to confirm that materials have been removed and stream bottom is returned to pre-construction state. Provide the topographic survey information to the Wisconsin Department of Natural Resources.

Add the following Removing Old Structure bid item to standard spec 203.5.1:

ITEM NUMBER DESCRIPTION UNIT 203.0600.S.02 Removing Old Structure Over Waterway With LS

Minimal Debris Station 19+76.30

21. General Provisions for Removing Pavement and Removing Curb and Gutter.

Subsurface concrete pavement and concrete curb and gutter may be encountered 2 to 3 feet below existing pavement during utility construction. The removal shall be paid at the unit price for Removing Pavement or Removing Curb and Gutter.

22. Abandoning Culvert Pipes, Item 204.0270.

Replace standard spec 204.3.3.2 (1) with the following:

(1) Under the Abandoning Culvert Pipes bid item, fill the abandoned pipe with Backfill Controlled Low Strength (Item 209.0200.S) and plug both ends of the abandoned pipe as specified in standard spec 204.3.3.1.

23. Backfill Controlled Low Strength, Item 209.0200.S.

A Description

This special provision describes furnishing and placing a controlled low strength material designed for use as backfill in trenches for culverts, sewers, utilities, or similar structures, as backfill behind bridges abutments, or as fill for the abandonment of culverts, pipes, or tanks.

B Materials

Provide controlled low strength backfill that consists of a designed cementitious mixture of natural or processed materials. Allowable materials include natural sand, natural gravel, produced sand, foundry sand, produced gravel, fly ash, Portland cement, and other broken or fragmented mineral materials. The designed mixture shall be self-leveling and shall be free of shrinkage after hardening. Design the mixture to reach a state of hardening such that it can support foot traffic in no more than 24 hours. Provide a mixture that also meets the following requirements.

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Test Method Value Flow (inch) ASTM D-6103 9 min

Compressive ASTM D-6024 20-40 @ 14 days Strength (psi) 40-80 @ 28 days 80-120 @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days prior to placement, furnish the engineer with a design mix detailing all components and their proportions in the mix. Also, provide documentation from the supplier of the industrial byproducts that the foundry sand and fly ash used in the mixture meet the requirements for Industrial Byproducts Categories 1, 2, 3, or 4 in NR 538 of the Wisconsin Administrative Code for use as a confined geotechnical fill.

C Construction

Place controlled low strength backfill at the locations and to the lines and grades as shown on the plan. Proportion and mix materials to produce a product of consistent texture and flow characteristics. The engineer may reject any materials exhibiting a substantial change in properties, appearance, or composition.

If the official Weather Bureau forecast for the construction site predicts temperatures at or below freezing within the next 24 hours after placement of controlled low strength backfill, protect the placed materials from freezing during that time period. If the temperature is not forecast to rise above 40° F for 72 hours after placement, the engineer may require protection from freezing for up to 72 hours.

No controlled low strength backfill shall be allowed to enter any stream, lake, or sewer system. The contractor shall be responsible for any clean up or remediation costs resulting from such occurrences.

D Measurement

The department will measure Backfill Controlled Low Strength in volume by the cubic yard of material, placed and accepted. Such volume shall be computed from actual measurements of the dimensions of the area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT209.0200.SBackfill Controlled Low StrengthCY

Payment is full compensation for designing the mix; supplying all materials; preparing the proportioned mix; hauling it to the construction site; placing the material; and protecting it from freezing.

stp-209-010 (20090901)

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24. QMP Base Aggregate.

A Description

A.1 General

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

http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

A.2 Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a contract quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

A.2.1 Quality Control Plan

- (1) Submit an abbreviated quality control plan consisting of the following:
 - 1. Organizational chart including names, telephone numbers, current certification(s) with HTCP number(s) and expiration date(s), and roles and responsibilities of all persons involved in the quality control program for material under affected bid items.

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A.2.2 Contractor Testing

1.

Contract Quantity	Minimum Required Testing per source
≤ 6000 tons	One stockpile test prior to placement, and two production or one loadout test. ^{[1] [2]}
$>$ 6000 tons and \leq 9000 tons	One stockpile and Three placement tests ^[3]

- [1] Submit production test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.
- [2] If the actual quantity overruns 6,000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
- [3] If the actual quantity overruns 9000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
- [4] For 3-inch material or lift thickness of 3-inch or less, obtain samples at load-out.
- Divide the aggregate into uniformly sized sublots for testing
- 2. Stockpile testing for concrete pavement recycled in place will be sampled on the first day of production.
- 3. Until a four point running average is established, individual placement tests will be used for acceptance. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
- 4. Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

A.2.3 Department Testing

- (1) The department will perform testing as specified in B.8 except as follows:
 - Department stockpile verification testing prior to placement is optional for contract quantities of 500 tons or less.

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:

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- 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
- 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
- 3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
- 4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
- 5. Descriptions of stockpiling and hauling methods.
- 6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
- 7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

Materials Management Section

3502 Kinsman Blvd. Madison, WI 53704

Telephone: (608) 246-5388

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

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B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within one business day after obtaining a sample. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- Provide control charts to the engineer within one business day after obtaining a sample. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 - 1. Contractor individual QC tests.
 - 2. Department QV tests.
 - 3. Department IA tests.
 - 4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV placement tests, include only QC placement tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Perform one stockpile test from each source prior to placement.
- (3) Test gradation once per 3000 tons of material placed or fraction thereof. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples or lift thickness of 3-inch or less from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only

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- material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (4) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for seven calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (5) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (6) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (7) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

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

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

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B.6.2 Fracture

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

B.6.3 Liquid Limit and Plasticity

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

- Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 - 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 - 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after four additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after four additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

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- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
 - 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
 - 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
 - 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 - 1. Perform one stockpile test from each source prior to placement.
 - 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates or for a lift thickness of 3-inch or less, the department will collect samples at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

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

B.8.3 Independent Assurance

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

B.9 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

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D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay according to CMM 8-10.5.2 for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

stp-301-010 (20170615)

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

A Description

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

B (Vacant)

C Construction

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

D Measurement

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

E Payment

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

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

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

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The department will adjust pay for crack repairs as specified in standard spec 415.5.3 stp-415-020 (20170615)

26. Epoxy Crack Sealing, Item 509.9020.S.

A Description

Seal vertical cracks in the abutments according to the plan details and as hereinafter provided.

B Materials

Furnish a penetrating epoxy sealant manufactured by Sika, Adhesive Engineering, Technical Sealants, Dayton Superior, or equal. Before using, obtain the engineer's approval for the epoxy system which is proposed to seal the cracks.

C Construction

Before sealing, clean the cracks by chipping and by using high-pressure air.

After all of the cleaning is completed, inject epoxy sealant into the cracks to be sealed. Seal the cracks using the penetrating epoxy sealant as recommended by the sealant manufacturer.

D Measurement

The department will measure Epoxy Crack Sealing in length by the linear foot of crack, acceptably sealed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 509.9020.S Epoxy Crack Sealing LF

Payment is full compensation for cleaning the cracks; and for furnishing and placing the epoxy sealant.

stp-509-020 (20100709)

27. Concrete Staining Multi-Color B-3-2, Item 517.1015.S.01.

A Description

Furnish and apply a multi-color concrete stain to the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

B Materials

B.1 Mortar

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

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Preblended, Packaged Type II Cement: Tri-Mix by TK Products

Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied according to manufacturer's recommendations:

Acrylic Bonding Admixture: TK-225 by TK Products

Achro 60 by Thoro Products Achro Set by Master Builders

B.2 Concrete Stain

Use concrete stain manufactured for use on exterior concrete surfaces. Use the following products, or equal as approved by the department:

Tri-Sheen Concrete Surfacer, Smooth by TK Products Tri-Sheen Acrylic by TK Products

TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products

Safe-Cure & Seal EPX by Chem Masters

H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

C Construction

C.1 General

Furnish, prepare, apply, cure, and store all materials according to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

C.2 Preparation of Concrete Surfaces

Provide a sack rubbed finish according to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

C.3 Staining Concrete Surfaces

Apply the concrete stain according to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

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The color of the staining shall produce a multi-color effect that consists of multiple colors replicating varying natural stone coloration. Stain the joints between stones produced by the form liner to create the appearance of grouted joints.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

C.4 Test Areas

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Submit color samples to the department prior to staining the sample panels. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between stones produced by the form liner. Do not apply stain to the structure until the department approves the test panels.

C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces according to the plan.

D Measurement

The department will measure Concrete Staining Multi-Color (Structure) in area by the square foot of surface, acceptably prepared and stained.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.1015.S.01 Concrete Staining Multi-Color B-3-2 SF

Payment is full compensation for furnishing and applying the coloring system; for preparing the concrete surface; and for constructing and staining the sample panels. stp-517-115 (20140630)

28. Architectural Surface Treatment B-3-2, Item 517.1050.S.01.

A Description

Construct a concrete masonry architectural surface treatment on the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

B Materials

Use form liners that attach easily to the forming system, and do not compress more than \(^1\)4-inch when poured at a rate of 10 vertical feet/hour.

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Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set "break-backs" at a minimum of ¾-inches from the finished concrete surface.

C Construction

C.1 Equipment

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

C.2 Form Liner Preparation

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

C.3 Form Liner Attachment

Place adjacent liners less than ¼-inch from each other, attach liner securely to forms according to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

C.4 Surface Finishing

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

D Measurement

The department will measure Architectural Surface Treatment (Structure) in area by the square foot of architectural surface, 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 517.1050.S.01 Architectural Surface Treatment B-3-2 SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

stp-517-150 (20110615)

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29. General Provisions for Storm Sewer Structures.

Modify standard spec 611.2 (3) by adding the following:

Provide high density polyethylene (HDPE) adjustment riser rings from the department's approved product list.

Modify standard spec 611.3.3 (1) by adding the following:

When HDPE adjustment riser rings are specified, set inlet or manhole cover on HDPE adjust riser rings. Use engineer-approved mastic adhesive between the ring and the inlet structure. Use an engineer-approved polyurethane adhesive with a flexible set between the ring and the inlet cover. Use two 5/16-inch beads of adhesive placed 1 inch and 2 inches in from the outside edge of the ring. Two 2-inch adjustment rings shall be used with a maximum of 4-inch adjustment allowed. Use polyurethane adhesive with a flexible set to join the two rings. If the adjustment rings must be cut, the joints must be staggered and a polyurethane adhesive used to reattach the cut ends. No concrete adjustment rings or mortar is to be placed between the top of the structure and the inlet cover.

Modify standard spec 611.3.3 by replacing paragraphs 3 and 4 with the following:

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

If the manhole frame is higher than the adjacent pavement, the casting shall be removed and reinstalled by sawcutting and patching the minimum amount of pavement necessary to bring the casting to an acceptable grade. No casting shall be higher than the adjacent pavement. The same criteria for acceptance and payment as above, shall apply.

30. Cover Plates Temporary, Item 611.8120.S.

A Description

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

B Materials

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

C (Vacant)

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The department will measure Cover Plates Temporary 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 NUMBERDESCRIPTIONUNIT611.8120.SCover Plates TemporaryEACH

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

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

stp-611-006 (20151210)

31. Temporary Curb Ramp, Item 644.1601.S.

A Description

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

B Materials

Furnish materials as follows:

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

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

C Construction

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

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

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

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT644.1601.STemporary Curb RampEACH

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

stp-644-020 (20150630)

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

A Description

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

B Materials

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

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements:

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening:
Resin/Construction:
High density polyethylene mesh
Avg. 2000 lb per 4-ft. width (ASTM D638)
Ultimate Tensile Strength:
Elongation at Break (%):
Chemical Resistance:

1-inch min to 3-inch max
High density polyethylene mesh
Avg. 2000 lb per 4-ft. width (ASTM D638)
Greater than 100% (ASTM D638)
Inert to most chemicals and acids

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

C Construction

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

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

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

E Payment

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

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

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence. stp-644-025 (20150630)

33. Seismograph, Item 999.1000.S.

A Description

This special provision describes furnishing a seismograph(s) 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 prior to construction activities to establish an ambient or background index.

During construction, place seismograph to monitor all vibration-inducing construction activities or as directed by the engineer. At a minimum utilize one seismograph. If more than one major construction activity per day is taking place, multiple seismographs may be required. Place the seismograph 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.

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- 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 NUMBERDESCRIPTIONUNIT999.1000.SSeismographLS

Payment is full compensation for furnishing and operating a seismograph(s), any operator(s), and for producing documentation reports stp-999-005 (20161130)

34. 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 Main Street and 34 South Main Street.

This Crack and Damage Survey shall consist of two parts. The first part, performed prior to 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

Prior to any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. 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. The report shall be in text form and submitted electronically.

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Take the images with a digital camera capable of producing sharp, grain free, high-contrast colored digital images with good shadow details. Each digital image shall be labeled with the following information:

D
Building Location
View looking
Date
hotographer

Prior to the start of any construction activities pertinent 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, obtain digital images, and submit another written report to the engineer electronically.

In lieu of digital images, a digital video camera capable of producing sharp, high contrast, colored digital video with good shadow detail may be utilized 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)

35. Connect to Existing Storm Structure, Item SPV.0060.01.

A Description

This special provision describes constructing a new pipe connection to an existing storm inlet or manhole as shown on the plans and as hereinafter provided.

B Materials

For annular space mortar, use materials conforming to the requirements for the class of material named and specified below:

Mortar standard spec 519.2.3

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C Construction

Make a hole in the existing inlet or manhole large enough to make pipe connection. Make connections between new pipe and existing inlet or manhole as described in standard spec 611.3.2 using annular space mortar to seal the connection.

D Measurement

The department will measure Connect to Existing Storm Structure 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 NUMBERDESCRIPTIONUNITSPV.0060.01Connect to Existing Storm StructureEACH

Payment is full compensation for furnishing and installing mortar materials, and for excavating, backfilling, making the required opening in the existing structure, disposing of surplus material, and restoring the work site; except the department will pay for the pipe separately.

36. Connect to Existing Storm Pipe, Item SPV.0060.02.

A Description

This special provision describes connecting new storm pipe to existing storm pipe as shown on the plans and as hereinafter provided.

B Materials

For connection of dissimilar pipe diameters or materials, furnish a gravity pipe coupling consisting of a rubber or elastomeric sleeve and stainless band assembly fabricated to mate with the outer diameters of the pipes to be joined and complying with ASTM C1173.

C Construction

Excavate as required to locate connection point. Comply with the requirements of standard spec 608.3.

Connect to existing pipe using one of the methods specified in standard spec 608.3.4 unless the pipes to be connected are dissimilar and require use of a gravity pipe coupling.

D Measurement

The department will measure Connect to Existing Storm Pipe 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 NUMBERDESCRIPTIONUNITSPV.0060.02Connect to Existing Storm PipeEACH

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Payment is full compensation for furnishing and installing materials including coupling if required, and for excavating, backfilling, disposing of surplus material, and restoring the work site; except the department will pay for the pipe separately.

37. Decorative Lighting and Pole Assembly Type B, Item SPV.0060.04.

A Description

This special provision describes furnishing and installing a decorative light and pole assembly as shown in the plans and as hereinafter provided.

B Materials

Obtain all fixtures provided for under this item from Commercial Lighting Sales of Wisconsin, contact: Paul Perri at (262) 367-8040. Light poles and assemblies are manufactured from The Stresscrete Group.

The following combination has been approved for proprietary use for this project. Deviations from the exact models specified will not be allowed. Provide all fixtures in color "black".

Pole: "Laguna" (KSB82-A-17)

Luminary Arms: "Falcon Ridge" (KA53-T-2)

Luminaries: "Marina" (K282-P4SH-III-60(SSL)-7030)

C Construction

Install and assemble anchor bolts and lighting components, including wiring connections and attachment to bridge anchor bolt circles, per manufacturer/supplier specifications.

D Measurement

The department will measure Decorative Lighting and Pole Assembly Type B as each individual light and pole assembly unit, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.04Decorative Lighting and Pole Assembly Type BEACH

Payment is full compensation for furnishing and installing the decorative light and pole assembly.

38. Moving Signs Park Sign, Item SPV.0060.05.

A Description

This special provision describes moving an existing park sign and supports as shown on the plan, standard spec 638 and provided by these specifications.

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B (Vacant)

C Construction

Contractor shall salvage existing park sign to the City of Rice Lake. Contact Jim Anderson, Rice Lake Streets Director, at (715) 234-7402.

D Measurement

The department will measure Moving Signs Park Sign by each unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.05 Moving Signs Park Sign EACH

Payment is full compensation for the work required under the bid item and for restoring the site. Payment does not include compensation for damages to the sign caused by the contractor including the sign and supports. If required, the contractor shall provide new materials at no cost to the department.

39. Remove Existing Sanitary Manhole, Item SPV.0060.10; Remove Existing Sanitary Vault, Item SPV.0060.11.

A Description

This special provision describes removal of existing sanitary manholes and vaults.

B Materials

Utilize materials and methods compatible with proposed sanitary manholes and pipe.

C Construction

Remove existing sanitary sewer manhole and vaults as directed in the plans. Dispose of all materials at a site determined by the contractor.

D Measurement

The department will measure Remove Sanitary Manhole and Remove Sanitary Vault by the unit 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.0060.10 Remove Sanitary Manhole EACH SPV.0060.11 Remove Sanitary Vault EACH

Payment is full compensation for removal and disposal of the structures.

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40. Standard Sanitary Manhole with Casting, Item SPV.0060.12; Waterproof Sanitary Manhole with Casting, Item SPV.0060.26.

A Description

This special provision describes furnishing and installing new sanitary sewer manholes and casting and connecting to sanitary sewer pipe, all as shown on the plans according to standard spec 611 and as provided by these specifications.

B Materials

Precast concrete riser sections and appurtenant units (top and base slab, special sections, etc.) used in the construction of manholes will conform with the requirements of ASTM C 478, subject to the following provisions.

Joints of riser sections are to be tongue and grove with gasketed joints. Joints shall include both non-lubricated gasket and butyl joint sealant in compliance with ASTM C990. Top cone shall be eccentric. Inlet and outlet pipes will be joined to the structure with flexible, watertight rubber boot arrangement that allows differential settlement of the pipe and manhole to take place. Connecting pipes to structures with grouting only is not acceptable.

Where manholes with additional waterproofing are called out in the plans, provide external rubber sleeve at barrel joints, in addition to gaskets and butyl sealant as described above. External sleeve shall be a band of stretchable, self-shrinking, intra-curing halogenated based rubber at least 12 inches wide, with a minimum thickness of 30 mils. The back side of the sleeve shall be coated with a cross-linked re-enforced butyl adhesive. The butyl adhesive shall be non-hardening sealant, with a minimum thickness of 30 mils. Physical properties of the rubber sleeve shall conform with the following: ASTM D816 Sheer Strength – 20 lb PSI min; ASTM D412 Tensile – 50 psi; ASTM D412 Elongation – 500%; ASTM D217 Penetration – 60/140 MM; D746 Low Temperature – Minus 49° F flexibility.

Base sections of all structures will consist of monolithic base and bottom section of barrel. No joints will be allowed between base and bottom of barrel. Monolithic section shall extend at least 32 inches above flowline of downstream invert.

Provide 12 inches wide step according to the following: Cast aluminum by Modern Metals Foundry (A-12), polypropylene coated steel by M.A. Industries, Inc., or approved equal. Sewer castings for sewer structures such as manhole frames and covers will conform to the requirements of ASTM A48 (gray iron castings). Lid-to-frame surfaces on round casting assemblies will be machine milled to provide true bearing around the entire circumference. Manhole castings shall be Neenah R-1642 with non-rocking lids and 2 concealed pick holes, and self-sealing gasket, or approved equal.

Adjusting rings shall be HDPE, flat or wedge design, according to ASTM 1248, installed per manufacturer's recommendations with butyl sealant conforming to ASTM 990. Where manholes with additional waterproofing are called out in the plans, provide external seamless rubber sleeve bonded over adjusting rings and between casting and manhole cone section. Sealing band shall be of high quality Ethylene Propylene Diene Monomer (EPDM)

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Rubber with a minimum thickness of 65 mils. An L-shaped corner of twice the nominal thickness shall be molded into the top of the seal to extend over the edge of the casting frame. Both the L-shaped top segment and the bottom of the sealing band shall have a strip of non-hardening butyl mastic integral with the rubber that shall be attached to the manhole and casting using an aerosol primer and applied pressure.

C Construction

Construct sanitary manholes according to plan details and elevations.

Provide trench excavation, foundations, and backfill according to the requirements as described under the item for sanitary sewer. Place precast manhole base on compacted granular subgrade.

All trench excavation and backfilling, backfill material, compaction, and minor dewatering shall be considered incidental.

Connect to sanitary sewer pipes. Any required coupling adaptors required will be included.

Locate steps within 1 inch of vertical alignment and within 1 inch of required vertical spacing. Maximum allowable deviation from staked and plan location is within 0.30 feet horizontal and 0.03 feet vertical.

Provide HDPE adjusting rings according to plan details to establish required casting elevations. Set lowest adjusting ring on a full mortar bed for leveling after dry stacking rings to check proper grade. Adjust new sanitary sewer manhole castings to final grade between paving lifts according to manhole adjustment item.

Remove all dirt and foreign material from the structure interiors.

D Measurement

The department will measure Standard Sanitary Manhole with Casting and Waterproof Sanitary Manhole with Casting as each unit, acceptably complete in place up to a maximum of 8.5 feet depth measured from top of casting to invert. Depths over 8.5 feet will be measured under the item of Waterproof Sanitary Manhole Extra Depth. Measurement includes the casting, manhole, invert, connection to new pipes, and all other materials and labor to produce a complete finished installation.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Standard Sanitary Manhole with Casting	EACH
SPV.0060.26	Waterproof Sanitary Manhole with Casting	EACH

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

41. Adjust Sanitary Manhole Casting, Item SPV.0060.13.

A Description

This special provision describes adjustment of new and existing sanitary manhole castings to match the finished pavement grades.

B Materials

Provide HDPE adjusting rings, flat or wedge design, according to ASTM 1248. Include mortar as required for installation of lowest ring and butyl sealant per ASTM 990 between rings matching manufacturer's recommendations.

C Construction

For existing manholes, remove existing sanitary sewer manhole castings, protecting casting, lid, manhole structure, and integrity of top section of manhole. Cut and clean manhole top surface to create a smooth transition for casting reinstallation.

Provide HDPE adjusting rings according to plan details to establish required casting elevations. Install according to manufacturer's recommendations. Set casting on a full mortar bed.

Manholes to be adjusted shall be protected, plated, and paved over during the first lift of paving without the casting. Once pavement has cooled, contractor shall then remove asphalt and install casting up to the final elevation before final paving layer. Removal of pavement for adjustments shall be with clean saw cut and patched prior to surface layer placement. Saw cuts shall be circular or diamond shaped. Asphalt shall be patched and compacted up to the level of the first paving lift.

All steps related to the installation and adjustment of castings are incidental to this item.

D Measurement

The department will measure Adjust Sanitary Manhole Casting by the unit 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.0060.13 Adjust Sanitary Manhole Casting EACH

Payment is full compensation for furnishing, installing, and adjusting casting, including adjusting rings, mortar, and butyl sealant.

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42. Connect to Existing Sanitary Sewer, Item SPV.0060.14; Connect to Existing Sanitary Service, Item SPV.0060.28.

A Description

This special provision describes connecting existing sanitary sewers, manholes, or services, to new sanitary sewers or manholes at the locations shown on the plans and provided for by these specifications.

B Materials

Provide materials consistent with those described in Items for different sizes and types of Sanitary Sewer, SPV.0090.11, SPV.0090.12, SPV.0090.16, SPV0090.17, and appropriate fittings and adaptors.

C Construction

When connecting a new sewer pipe to an existing sewer pipe, cut the ends of the existing sanitary sewer and connect to new sewer with pipe coupling adapters made specifically for such reconnections. Keep a record of all such connections, locations, and materials used.

When connecting to a service, use a wye appropriate for sewer main and service size and material. Cut pipe to produce a clean joint matching suitable connection point. Bends, reducers, caps, or other service fittings necessary to make a complete connection shall be considered incidental to sanitary sewer service connection.

When connecting an existing sanitary sewer to a new manhole, cut or extend existing pipe to fit into new manhole. Fit pipe with a watertight rubber gasket that is fabricated into the manhole. All fittings and masonry work will be supplied by the contractor.

D Measurement

The department will measure Connect to Existing Sanitary Sewer as each unit, acceptably completed, regardless of size, or pipe material, complete in place.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Connect to Existing Sanitary Sewer	EACH
SPV.0060.28	Connect to Existing Sanitary Service	EACH

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

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43. Remove Existing Gate Valve, Item SPV.0060.15.

A Description

This special provision describes removing an existing gate valve and box as shown on the plans and provided by these specifications.

B Materials

Contractor shall utilize materials and methods consistent with item Water Main Gate Valve and Box, 6-Inch.

C Construction

Existing gate valve and box shall be removed and disposed of as directed by the engineer.

D Measurement

The department will measure Remove Gate Valve as each unit, acceptably complete in place, including valve box and any necessary fittings, blocking, or appurtenant items.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.15Remove Gate ValveEACH

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

44. Connect to Existing Water Main, Item SPV.0060.16.

A Description

This special provision describes cutting into and connecting new water main to existing water main as shown on the plans and as provided by these specifications.

B Materials

Use materials consistent with Items SPV.0090.12, Water Main 6-Inch, SPV.0090.13 Water Main 8-Inch, and SPV.0085.10 Water Main Fittings.

C Construction

Connecting to Existing Water Main will conform to industry standards. Only representatives of the owner are permitted to operate valves on existing system. The contractor will give the owner at least 72-hour notice when it is necessary to take an existing water main out of service.

Disinfect all connection materials with a 50 parts per million chlorine solution.

Disruption of water service will be during a low usage period or when it is the least inconvenient to the user. The contractor will have all proper materials and equipment immediately on hand when a water main is taken out of service for connection.

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The department will measure Connect to Existing Water Main as a unit per each, acceptably completed, regardless of size, including all required labor and materials required for a complete installation.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.16Connect to Existing Water MainEACH

Payment is full compensation for cutting existing water main, removing any plugs or pipe, connecting to existing water main, furnishing and placing all materials, including any required connecting sleeves and fittings.

45. Water Main Gate Valve and Box 6-Inch, Item SPV.0060.17; Water Main Gate Valve and Box 8-Inch, Item SPV.0060.18.

A Description

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

B Materials

Gate valves are to be resilient-seated valves meeting the requirements of A.W.W.A. Standard C515 and shall be designed for 200 psi working pressure. The gate valves are to have mechanical joint end, conforming to ASTM A307 and A563 Carbon Steel bolts and nuts. Stem to be non-rising operating stem with "O" ring seals, and a 2 inch square operating nut, that opens left. An open indicating arrow, the manufacturer's name, pressure rating, size, and year of manufacture are to be cast on the body of the valve.

All valves are to be provided with vertical valve boxes, Buffalo type, with lid marked "WATER." Valve boxes are to be cast iron, 5-1/4-inch diameter shaft and adjustable. Valve boxes are to be provided with 8 feet of cover, except where greater depths are indicated on the profiles of the plans. Valve boxes are to be at least three pieces with sufficient adjustment to provide at least 6 inches of adjustment above and below grade. Install all extension sections in the middle of the box and not stacked on top.

Provide gate valve adapter with ½ inch rubber gasket installed between gate valve and gate valve adapter. The gate valve adapter shall be installed on the valve prior to placing bonnet section of valve box assembly, as manufactured by Adapter, Inc., or approved equal.

C Construction

Set valves with stems vertical and plumb on subgrade material adequate to support valve assembly. Firmly support valve boxes and maintain them center and plumb over the wrench nut of the valve utilizing adaptor. Verify that box remains plumb and centered during

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backfill, with box cover adjusted to the final surface or at such other level as may be directed.

D Measurement

The department will measure Water Main Gate Valve and Box (size), as each individual valve, 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.0060.17	Water Main Gate Valve and Box 6-Inch	EACH
SPV.0060.18	Water Main Gate Valve and Box 8-Inch	EACH

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

46. Fire Hydrant, Item SPV.0060.19.

A Description

This special provision describes furnishing and installing new fire hydrant, connecting couplings, crushed rock, concrete base, and blocking, all as shown on the plans and as provided by these specifications.

B Materials

Fire hydrants are to meet the requirements of AWWA Standard C502. Hydrants shall be Waterous Pacer WB-67 only. The hydrants shall have two 2½ inch hose connections and one 4 inch steamer connection with national standard threads. Hydrants shall have a 16-inch traffic breakoff. Hydrants shall open left and be provided with a drain to operate only when the hydrant is closed. Hydrants will have a 6 inch mechanical joint hub, a 5 inch valve opening, a 5 inch barrel, an "O" ring stem seal, and pentagon nut type nozzle cups complete with chains, and have 8.5 feet of cover above the top of the hydrant lead pipe to finished boulevard surface. Hydrants shall be painted red and include permanent markings with manufacturer's name, year of manufacture, and bury depth.

C Construction

Locate fire hydrants as directed by the engineer and place as shown on the details of the plans. Verify that subgrade material is adequate to support hydrant and place thrust block according to drawing details. Install and maintain hydrant in a plumb position. After each hydrant has been set, place around the base of the hydrant 1 cubic yard of 1 ½-inch washed rock. Place two layers of 10 mil polyethylene over the rock to prevent backfill material from entering voids in the rock. Disinfect and test hydrants in conjunction with and as part of the mainline disinfection and testing process.

Plug hydrant drain hole if hydrant is located where the groundwater is less than 8 feet. Also label hydrant with tag stating "Pump After Use."

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Where existing hydrants are to be salvaged, carefully excavate and disconnect hydrant, using care not to damage or contaminate hydrant base, barrel, and upper section. Clean hydrant and adjust as necessary in anticipation of reinstallation on project. Contractor will be required to replace any hydrant at their cost if damaged during removal operations. Schedule any shutdowns necessary for hydrant removal with city utility in coordination with other connections and valve operation.

Install any salvaged hydrants as denoted in plan in conformance to new hydrant installation details and specifications.

D Measurement

The department will measure Fire Hydrant as each unit, acceptably complete in place.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.19Fire HydrantEACH

Payment is full compensation for furnishing and placing all materials, including hydrant, crushed rock and concrete base.

47. Remove Existing Hydrant, Item SPV.0060.20.

A Description

This special provision describes removing an existing hydrant as shown on the plans and provided by these specifications.

B Materials

Contractor shall utilize materials and methods consistent with item Fire Hydrant.

C Construction

Existing hydrant shall be removed and disposed of as directed by the engineer.

D Measurement

The department will measure Remove Existing Hydrant as each unit, acceptably complete in place.

D Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.20Remove Existing HydrantEACH

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

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48. Replace Gate Valve Box, Item SPV.0060.21.

A Description

This special provision describes removing an existing valve box and furnishing and installing a new valve box as shown on the plans and provided by these specifications.

B Materials

Contractor shall provide valve box only according to Item Water Main Gate Valve and Box, 6-Inch.

C Construction

Existing valve box shall be removed and disposed of as directed by the engineer.

D Measurement

The department will measure Replace Valve Box as each unit, acceptably complete in place. New valve boxes installed under item Water Main Gate Valve, 6-Inch or 8-Inch will not be measured for payment under this item.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.21Replace Gate Valve BoxEACH

Payment is full compensation for removing existing valve box, and furnishing and installing new valve box.

49. Adjust Gate Valve Box, Item SPV.0060.22.

A Description

This special provision describes making final adjustments to new and existing gate valve boxes located in new pavements all as shown on the plans and provided by these specifications.

B Materials

Contractor shall install extensions as required to bring valve box to final grade. Valve boxes damaged by the contractor shall be replaced without cost according to Item Water Main Gate Valve and Box 6-inch.

C Construction

Gate valve boxes will be adjusted to be slightly below new pavement according to plan details, or to an elevation as directed by the engineer.

Existing gate valve boxes located in construction areas shall be lowered, covered, and protected to allow grading and base course installation. The base course shall remain in place until paving operations permit setting the valve box to finished grade.

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Boxes to be adjusted shall be protected and paved over during the first lift of paving. Once pavement has cooled, contractor shall then remove asphalt and adjust box up to the final elevation before final paving layer. Removal of pavement for adjustments shall be with clean saw cut and patched prior to surface layer placement. Saw cuts shall be circular or diamond shaped. Asphalt shall be patched and compacted up to the level of the first paving lift.

All steps of the adjusting valve box process are incidental to this item.

D Measurement

The department will measure Adjust Gate Valve Box as each unit, acceptably complete in place.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.22Adjust Gate Valve BoxEACH

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

50. Corporation Stop, 1-Inch, SPV.0060.23.

A Description

This special provision describes furnishing and installing water service corporation stops all as shown on the plans, as further directed by the engineer in the field and as provided by these specifications.

B Materials

Corporation stops are to be manufactured according to AWWA C-800 and ASTM B-62. Corporation stops are to be Ford FB1000 CTS-grip joint or approved equal, with Ford threaded inlet and with conductive compression copper service pipe outlet.

C Construction

Place a double wrap of Teflon tape on the corporation stop threads prior to installation in the main. Install corporation stops in the upper quadrant of the pipe. Provide watertight connection with approved tapping machine and install under main pressure.

Disinfect each corporation stop by immersing it into a 50 parts per million chlorine solution.

The contractor shall record the location and size of each corporation stop on a record drawing. Corporation stop locations are to be measured from the closest valve. Submit record drawings to the City of Rice Lake upon completion of the water main portion of the project.

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The department will measure Corporation Stop of each size as each unit, acceptably complete in place.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.23Corporation Stop, 1-InchEACH

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

51. Curb Stop and Box, 1-Inch, Item SPV.0060.24.

A Description

This special provision describes furnishing and installing water service curb stop valves and boxes all as shown on the plans, as further directed by the engineer in the field and as provided for by these specifications.

B Materials

Curb stops shall be equal, in all operating features, to Ford B44-M Grip Joint or approved equal. Curb stops will have copper service pipe inlet and outlet.

Curb boxes will be Minneapolis pattern base, have minimum 1 ¼ inch inside diameter upper section, and be adjustable six inches up and down for 8.0 feet of cover. Bottom threads of curb box will match top threads of curb stop. Lid marked "WATER" with pentagon threaded brass plug.

C Construction

Locate curb stop and box as shown on the plans. Verify that subgrade material is adequate to support the curb box assembly and install boxes plumb and centered over the tee head. Backfill to avoid displacement or bending of the curb box.

Disinfect each curb stop by immersing it into a 50 parts per million chlorine solution.

Adjust box cover to required grade and key all curb stops after backfilling to ensure proper location. Include cleaning the box top of all concrete splash.

D Measurement

The department will measure Curb Stop and Box of each size as each unit, acceptably complete in place.

E Payment

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

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ITEM NUMBERDESCRIPTIONUNITSPV.0060.24Curb Stop and Box, 1-InchEACH

Payment is full compensation for furnishing and placing all materials including curb stop, curb box, and stationary rod.

52. Abandon Water Service, Item SPV.0060.25.

A Description

This special provision describes abandoning an existing water service as shown on the plans and provided by these specifications.

B Materials

Contractor shall utilize materials and methods consistent with items Copper Water Service 1-Inch, Curb Stop and Box, 1-Inch, and Corporation Stop, 1-Inch.

C Construction

Existing water service pipe and curb box shall be removed and disposed of as directed by the engineer. Existing corporation stop shall be shut off at the main.

D Measurement

The department will measure Abandon Water Service as each unit, acceptably complete in place.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.25 Abandon Water Service EACH

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

53. Sanitary Sewer Service Wye, 15-Inch by 6-Inch, Item SPV.0060.27.

A Description

This special provision describes furnishing and installing new sanitary sewer sanitary service wye for connection between sewer main and sewer service pipe all as shown on the plans and provided by these specifications.

B Materials

Service wyes shall conform to materials specifications for adjacent pipe components. Provide fittings and pipe of each material type from the same manufacturer.

C Construction

The location and size of sanitary sewer services as shown on the plans are approximate. Actual locations and size may vary from what is shown.

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Installation of pipe shall conform to ASTM D 2321. There shall be no mixing of different manufacturer's pipe or fittings on a project. Compact haunching area to specified density required by ASTM D2321.

Pipes shall be fitted together and matched so when laid they will form a sewer with a smooth and uniform invert.

Install gaskets and forms according to manufacturer's recommendations for use of lubricants, cements, and other special installation requirements.

Trench Excavation Requirements shall conform to specifications listed within Sanitary Sewer special provisions.

All trench excavation and backfilling, including backfill material, compaction, and dewatering shall be considered incidental. All work shall be done by open trench excavation.

Record the location, size, length, and number of bends on services on a record drawing. Measure service locations from the closest downstream manhole. Submit sanitary record drawings to the engineer and utility upon completion of the sanitary portion of the project.

Reconnect services to the existing sewer and adjusting service without damage to the pipe. Proper watertight joints must be made.

D Measurement

The department will measure Sanitary Sewer Service Wye of each size as each unit, acceptably complete in place.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.27 Sanitary Sewer Service Wye, 15-Inch by 6-Inch EACH

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

54. Water Main Fittings, Item SPV.0085.10.

A Description

This special provision describes furnishing and installing the necessary joint fittings as shown on the plans, as directed by the engineer in the field, and as provided by these specifications.

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B Materials

The Water Main Fittings shall be AWWA C153, ANSI A21.53, cement-lined ductile iron fittings. Mechanical joints shall be according to ASTM A307 and A563 Carbon Steel bolts and nuts. Mechanical joint restraints shall be Megalug as provided by EBAA Iron Inc. only.

C Construction

Water Main Fittings shall be mechanical type. Joint conductivity shall be provided by means of external copper jumpers across all fitting connections, including Megalugs. Each joint shall be capable of carrying 500 amps for an extended period.

Anchorage of Bends, Tee's, Plugs, and Valves: Place concrete blocking at all plugs, bends, and tees and between the fitting and the undisturbed trench wall. Blocking shall be a minimum of 12 inches thick and the minimum area in square feet as follows:

				1/32
		1/4	1/8	1/16
Tee Pipe	or Plug	Bend	Bend	Bend
	Sq Ft	Sq Ft	Sq Ft	Sq Ft
6"	2.9	3.1	1.6	0.8
8"	3.7	5.3	2.9	1.4
10"	5.7	8.1	4.4	2.2
12"	8.1	13.4	6.6	3.2
16"	15.1	21.4	11.6	5.9
20"	23.2	30.2	18.1	9.3
24"	33.6	48.5	26.1	13.3

Size blocking based on larger main at junctions. Ductile Iron Retainer Glands, Mega Lug Brand only, place on all fittings.

Place on joints of all dead ends 6 inches through 12 inches commencing with the branch fitting.

May be used on ductile iron pipe 6 inches through 12 inches in lieu of tie rods.

Place on all joints as indicated on the details shown on the plans, including typical fire hydrant installation, bed detail and typical gate valve and box installation.

D Measurement

The department will measure Water Main Fittings, acceptably completed in place, by the pound, as listed for Fittings 3" to 16" in ANSI/AWWA C153/A21.53.88. The weight of the fittings shall be without joint accessories.

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E Payment

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

following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0085.10Water Main FittingsLB

Payment is full compensation for furnishing and placing all material.

55. PVC Sanitary Sewer, 8-Inch, SDR 35, Item SPV.0090.10; PVC Sanitary Sewer, 18-Inch, C900, Item SPV.0090.11, PVC Sanitary Sewer, 15-Inch, SDR 35, Item SPV.0090.16, PVC Sanitary Sewer, 8-Inch, C900, Item SPV.0090.17.

A Description

This special provision describes furnishing and installing new sanitary sewer main piping all as shown on the plans and provided by these specifications.

B Materials

Pipes shall conform to the following, with all related materials provided from the same manufacturer:

Description	Class or Type	Specification	Joint
PVC Sewer Pipe, 8- to 15-Inch	SDR 35	ASTM D3034	Elastomeric Gasket
PVC Sewer Pipe, 8- to 18-Inch	C900 DR 18	ASTM D1784	Elastomeric Gasket

C Construction

During the unloading process, all pipe and accessories shall be inspected by the contractor. Notify the engineer of all material found defective. The engineer shall inspect the material and have the right to reject any materials found unsatisfactory. Promptly remove all rejected material from the job site.

Removal of existing facilities, trench excavation and backfill and restoration shall be in accordance with the provisions of these specifications.

Lay and maintain all pipe to the lines and grades shown on the plans. Set pipe grades with a pipe laser.

Water mains crossing beneath sanitary or storm sewer mains or services shall be laid to provide a minimum separation of 18 inches between the top of the water main and the bottom of the sewer. When water mains pass above a sewer a minimum separation of 6 inches shall be provided.

Separate sewers and manholes at least 8 feet horizontally from any water main.

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When connecting to existing sewers, give the Municipal Utilities department 48 hours' notice prior to taking a sewer out of service. The contractor shall have approval from the utility and engineer prior to taking the sewer out of service. Disruption of service shall be during the time of day when the least inconvenience will be caused to the owner and kept to a minimum amount of time.

No pipe shall be laid in water or when the trench conditions are unsuitable for such work.

Removal and disposal of existing sanitary sewer, regardless of size or pipe material, shall be considered incidental to the work. Clay pipe may be crushed in place if remaining pieces are smaller than 3 inches. Keep clay pipe pieces away from new pipe.

Before lowering pipe into the trench and while suspended, the pipe shall be inspected for defects. Any defective, damaged, or unsound pipe shall be rejected and removed from the site.

Installation of pipe shall conform to ASTM D 2321. Adequate manhole water stops must be provided to prevent infiltration into the sewer system. There shall be no mixing of different manufacturer's pipe or fittings on a project.

Remove all foreign matter from the inside of the pipe before lowered into its position in the trench. Keep pipe clean by approved means during and after laying. Provide temporary plug in the end of incomplete piping at the end of day and when work stops.

Pipe laying shall proceed from the lowest end of the grade and bell ends of the pipe shall face upgrade. Provide watertight plugs at end of stubs installed for future connections. Maximum deviation from staked or plan grade shall be no more than 0.30 feet horizontal and grade slope variation of 0.02 percent.

Pipe shall be laid on solid subgrade material shaped to the contour of the pipe. All pipes shall be laid with ends abutting and true to line and grade. Pipe, which has in any way been disturbed or does not conform to said line and grade before final acceptance, shall be removed and relaid by the contractor at the contractor's expense.

Pipes shall be fitted together and matched so when laid they will form a sewer with a smooth and uniform invert.

Installation shall conform to ASTM D2321. Compact haunching area to specified density required by ASTM D2321.

Install gaskets and forms in accordance with manufacturer's recommendations for use of lubricants, cements, and other special installation requirements.

Maintain sanitary sewer flow at all times during construction. Maintaining sanitary sewer flow shall be considered incidental.

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Trench Excavation Requirements:

Alignment and Grade:

Excavate trench to alignment and grade as staked.

Excavate no more than 100 feet in advance of pipe laying operation.

Trench Width at Pipe Zone:

Center trench on pipe alignment.

Minimum Width: Pipe O.D. plus 12 inches.

Maximum Width: Pipe O.D. plus 24 inches (except rock excavation).

Excavated Materials:

Use stable material for backfill.

Waste unstable material as directed.

Do not place materials on sidewalk, driveways, or drainageways.

Drainage:

Provide drainage excavations when required.

Drain trench water into natural channels or storm sewer.

Do not drain trench water into sanitary sewer.

Rock Excavation:

Blasting shall conform to all local and state ordinances.

Submit blasting schedule for approval.

Minimum trench width: 36 inches.

Provide minimum 6-inch vertical clearance between pipe and rock trench bottom.

Provide minimum 12-inch horizontal clearance between pipe and rock trench walls.

Provide pipe foundation material for pipe in rock trenches.

Pipe Foundations:

Engineer to determine stability of the trench bottom.

Stable trench bottom:

Shape trench bottom to conform to bottom half of pipe.

Excavate bell holes to permit proper jointing.

Unstable trench bottom:

Excavate below pipe grade to specified depth.

Refill with specified foundation material in accordance with plan detail and the special provisions for Backfill Coarse Aggregate No. 2.

Contractor shall receive compensation for Backfill Coarse Aggregate only for bedding pipe. Aggregate volume will be calculated as the pipe diameter plus 2 feet multiplied by the pipe length and a maximum depth of 12 inches. Aggregate used to stabilize trench walls, install dewatering equipment, or provide stable foundation outside of the pipe zone shall not be measured. Excess Aggregate used because of insufficient dewatering shall not be measured.

Trench Backfill Requirements:

Pipe Zone:

Use native or specified foundation material free of rocks and other unsuitable debris.

Deposit material uniformly on both sides of pipe throughout entire trench width.

Place material in 6-inch lifts and mechanically compact.

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Above Pipe Zone:

Use native materials free of debris and rock, concrete or clay lumps with a volume greater than 1/3 cubic foot.

Place in uniform lifts no more than 1 foot thick.

Mechanically compact each lift of the upper 3 feet of the trench to a Standard Proctor. Density of 100 percent.

Mechanically compact each lift under the upper 3 feet of the trench to a Standard Proctor Density of 95 percent.

Do not backfill unless approved compaction equipment is operating.

Replacement Backfill:

Engineer to determine suitability of native material for backfill.

Use replacement backfill in lieu of native materials as directed.

Place in accordance with the above trench backfill requirements for "Above Pipe Zone".

Excess or Deficiency of Backfill Material:

Dispose of excess backfill material as directed after all trenches are backfilled.

Provide replacement backfill as required to establish required surface elevation.

Field Quality Control:

Density tests on backfill materials will be as directed by the engineer.

Contractor to recompact all areas represented by failed density tests.

Costs for initial test and first retest will be considered incidental.

Costs of subsequent retests to be deducted from contractor's payment.

All trench excavation and backfilling, including backfill material, compaction, and minor dewatering shall be considered incidental. All work shall be done by open trench excavation.

All dewatering of trenches as described in the special provisions for dewatering will be incidental to the construction.

Deflection Test

Deflection tests shall be performed on all sanitary sewer pipe. The test shall be conducted after the final backfill has been in place at least 30 days.

No pipe shall exceed a deflection of 5 percent. If the deflection test is to be run using a rigid ball or mandrel, it shall have a diameter equal to 95 percent of the inside diameter of the pipe. The test shall be performed without mechanical pulling devices. The line will be considered acceptable if mandrel can progress through line without binding. Provide corrective measures for lines not meeting these requirements.

Infiltration Test

Manholes shall be water tight with no leakage permitted. Passing air test will be considered acceptable for compliance with infiltration allowances, unless leakage is observed or pipe diameter is greater than 27 inches.

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For infiltration test, place 90 degree V-notch weirs in locations directed by the engineer to measure leakage in sewer lines. Allowable leakage rate shall be 100 gallons/day/inch diameter/mile of sewer between any adjacent manholes. Provide corrective measures for any line that exceeds the allowable leakage rate.

Air Test

Place inflatable sewer stoppers in manhole at each end of reach to be tested. Connect one end of an air hose to the plug used for the air inlet. Connect the other end of the hose to the portable air control equipment. This equipment consists of valves and pressure gages used to control the rate at which the air flows to the test section and to monitor the air pressure inside the pipe. Connect an air hose between the compressor (or other source of compressed air) and the control equipment. Add air to the pipe section. Monitor the air pressure so that the pressure inside the pipe does not exceed 5.0 psig.

When pressure reaches 4.0 psig, stop the air supply so that the internal pressure is maintained for 2 minutes. These two minutes allow time for the temperature of the air to come to equilibrium with the pipe walls. During this time, check all of the plugs with soap solution to detect any plug leakage. If plugs are found to leak, bleed off the air, tighten the plugs, and begin again by supply air. After the temperature has been allowed to stabilize for the 2-minute period, the air supply is disconnected, and the pressure is allowed to decrease to 3.5 psig. At the 3.5 psig the stopwatch is started to determine the time required for the pressure to drop to 2.5 psig.

The time shall be equal to or greater than the allowable time as follows:

1 Pipe Diameter (inches)	2 Mini Time (minutes:seconds)	3 Length for Minimum Time (feet)	4 Time for Longer Length (second	Specified Minimum for Length (L) Shown (minutes:seconds)							
			s)	100 feet	150 feet	200 feet	250 feet	300 feet	350 feet	400 feet	450 feet
4 6 8 10 12 15 18 21 24 27 30	1:53 2:50 3:47 4:43 5:40 7:05 8:30 9:55 11:20 12:45 14:10	597 398 298 239 199 159 133 114 99 88	.190 L .427 L .760 L 1.187 L 1.709 L 2.671 L 3.846 L 5.235 L 6.837 L 8.653 L 10.683 L	1:53 2:50 3:47 4:43 5:40 7:05 8:30 9:55 11:24 14:25 17:48	1:53 2:50 3:47 4:43 5:40 7:05 9:37 13:05 17:57 21:38 26:43	1:53 2:50 3:47 4:43 5:42 8:54 12:49 17:27 22:48 28:51 35:37	1:53 2:50 3:47 4:57 7:08 11:08 16:01 21:49 28:30 36:04 44:31	1:53 2:50 3:48 5:56 8:33 13:21 19:14 26:11 34:11 43:16 53:25	1:53 2:50 4:26 6:55 9:58 15:35 22:26 30:32 39:53 50:30 62:19	1:53 2:51 5:04 7:54 11:24 17:48 25:38 34:54 45:35 57:42 71:13	1:53 3:12 5:42 8:54 12:50 20:02 28:51 39:16 51:17 64:54 80:07
33 36 42 48	15:35 17:00 19:74 22:67	72 66 57 50	12.926 L 15.384 L 20.942 L 27.352 L	21:33 25:39 34:54 45:35	32:19 38:28 52:21 68:23	43:56 51:17 69:49 91:11	53:52 64:06 87:15 113:58	64:38 76:55 104:42 136:46	75:24 89:44 122:10 159:33	86:10 102:34 139:37 182:21	96:57 115:23 157:04 205:09

The contractor shall receive no additional compensation for tests or corrective work necessary to reduce leakage below the amount allowed by the specifications, correction of excess deflections, or correction of failing air test.

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Record the location, size, length, and number of bends on services on a record drawing. Measure service locations from the closest downstream manhole. Submit sanitary record drawings to Rice Lake Utilities upon completion of the sanitary portion of the project.

Reconnect services to the existing sewer and adjusting service without damage to the pipe. Proper watertight joints must be made.

D Measurement

The department will measure Sanitary Sewer of each size by length in linear feet from center manhole to center of manhole, acceptably complete in place.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.10	PVC Sanitary Sewer, 8-Inch, SDR 35	LF
SPV.0090.11	PVC Sanitary Sewer, 18-Inch, C900	LF
SPV.0090.16	PVC Sanitary Sewer, 15-Inch, SDR 35	LF
SPV.0090.17	PVC Sanitary Sewer, 8-Inch, C900	LF

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

56. Water Main 6-Inch, Item SPV.0090.12, Water Main 8-Inch, Item SPV.0090.13.

A Description

This work shall consist of excavating required trenches, furnishing and installing water mains and backfilling the trenches.

B Material

General – Water main shall be cement-lined ductile iron pipe Class 52 per AWWA C150 and C151.

Pipe Joints - Joints shall be push-on. Provide joint conductivity utilizing conductive gaskets or copper jumpers; minimum 1/16-inch by ½-inchwide flat copper strip, or annealed round copper wire conforming to ASTM B152, Type DHP. Nuts and bolts to be silicon bronze. Other conductivity connections by field weld applications.

	<u>Restrair</u>	ned Length (feet)	
Pipe Size (In)	45° Bend	90° Bend	Tee Hydrant or Dead End
6	11	20	14
8	19	34	24
10	28	51	36
12	39	73	51

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C Construction

Manipulation of existing valves required in order to construct work will be performed by the Rice Lake Utilities (RLU) Water Department only. Contact RLU at least 48 hours in advance to coordinate and schedule any required valve manipulation.

Where water main is being replaced, removal of existing water main shall be considered incidental to the work.

Inspect water main for defects before placing in trench. Lay pipe to the required alignment and grade. Locate hydrants, valves, and fittings according to plans. Remove all foreign matter from the inside of the pipe before installation.

Provide trench excavation, foundations, and backfill according to the requirements as described under the item for sanitary sewer.

All trench excavation and backfilling, including backfill material, compaction, and minor dewatering shall be considered incidental.

Provide a minimum of 8 feet of cover over the pipe. Greater depths of cover over pipe may be necessary to clear other utilities or provide for future finished grade above pipe. Laying pipe at greater depths than 8 feet shall be considered incidental.

Construct the pipe under the conflicting sewer, where water pipe is in direct conflict with sewers. Provide a minimum 18 inch space when the water main crosses beneath the sewer. Provide a minimum 6 inch space when the water main crosses above the sewer.

Water Main paralleling sanitary sewers shall be laid at least 8 feet horizontally from a sanitary sewer.

Connecting to existing water main: Only representatives of the owner are permitted to operate valves on existing system. Give the owner at least 48-hour notice when it is necessary to take an existing water main out of service. Disruption of water service shall be during a low usage period or when it is the least inconvenient to the user. Have all proper materials and equipment immediately on hand when a water main is taken out of service for connection.

No pipe shall be laid in water or on unsuitable foundation bedding except by permission of the engineer.

Perform the following test upon completion of the water main construction and prior to any external service connections.

Perform a pressure and leakage test on new water main according to the following test procedure according to AWWA C600:

Test Pressure: 150 psi. Test Duration: 2 hours.

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Test with valves open to include all stubs and DIP service laterals. Contractor is responsible for removal of air from dead ends by installing taps or corporation stops at locations as approved by engineer and owner. Upon completion of testing, corporation stops shall be removed and plugged or left in place at the direction of engineer and owner.

Gage requirements include: 4-1/2-inch dial size, 0 to 200 psi range, 2 psi gradation, ½ percent accuracy.

Do not allow pressure to vary more than 5 psi during the test. Do not allow pressure to vary more than 2 psi during the last hour of the test. Maximum length of main to be covered in any one test shall be 1400 feet.

Allowable Leakage: One-half of the volume allowed by AWWA C600 according to the following:

Leakage is determined by the following formula:

$$L = \frac{SD\sqrt{P}}{266,400}$$

L = Allowable Leakage in Gallons Per Hour

S = Length of Pipe Tested in Feet

D = Nominal Diameter of Pipe, in Inches

P = Average Test Pressure During Test, in psi (gauge)

Pressure Test Services: Service pipes may be tested at the time of the foregoing test, if installed, at the contractor's option. However, testing of service pipes may be completed as a separate operation from main testing and, if so, the test pressure shall be 100 psi. Service pipe testing, if done separately, shall be done with the corporation stop open.

Perform Electrical Conductivity Test:

Perform a conductivity test within one week after completion of pressure testing of the main on all iron pipe water mains to establish that electrical thawing may be carried out in the future.

Perform test after back-filling is completed and while line is at normal operating pressure. Test Current: 350 amperes DC plus or minus 10 percent. Test Duration: 5 minutes.

Test between hydrants in segments of convenient length.

Furnish DC current source, cable and all required equipment of adequate capacity to accomplish the test. Clamp cables to hydrant flange bolts. Conduct test with hydrant in the open position and caps on. Measure current continuously throughout the test with a DC

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ammeter hooked on a cable lead. Start test at minimum current level and increase to test level. Drain hydrant and tighten caps after test.

Failure of a segment shall be determined by current measurements that are insufficient, intermittent or unsteady. If failure occurs, isolate and correct defective contact points as indicated by failed tests. Retest failed segments after correction.

Bacteriological Tests and Disinfection of New Ductile Iron Pipe Water Mains and Water Services:

All water distribution system or extension to existing system or any valved section of such extension, or replacement, shall be disinfected prior to placing same in service. Disinfection of water main shall be done according to AWWA Standard C651.

Disinfection shall be by tablet or continuous feed method. Hold chlorine in pipe for a minimum period of 24 hours, with an initial dosage of 50 ppm minimum. Residual dosage after hold period shall be 10 ppm. Flush system within 24 hours after disinfection is completed.

Water utility will draw water samples with accommodations made by contractor. Provide 36 hours' notice of time when samples are to be taken.

After final flushing, obtain 2 sets of samples taken a minimum of 24 hours apart.

Each sample set shall include one sample for every 1,200 feet of main and one sample at each dead-end. Any stubs or DIP services which will be tapped in order torelease air from the system for pressure testing, shall be made available for testing. The Water utility will have the option of requiring safe water samples at these taps.

Ensure that 1 sample is obtained from each branch of main. A minimum of two samples are required.

Perform coliform tests on each sample. Two consecutive safe samples are required from each sample location.

Rechlorinate if any sample tests positive for coliform.

D Measurement

The department will measure Water Main for each size 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:

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ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.12	Water Main 6-Inch	LF
SPV.0090.13	Water Main 8-Inch	LF

Payment is full compensation for all excavating, backfilling, dewatering, sheeting, shoring, removing existing water main, for furnishing and installing water mains, pipe joints, tracer wire, bedding material, initial backfill, and all test procedures.

57. Copper Water Service, 1-Inch, Item SPV.0090.14.

A Description

This special provision describes furnishing and installing copper water service pipe as shown on the plans, as directed by Rice Lake Utilities or their engineer in the field, and as provided by these specifications.

B Materials

Water service pipe shall be ASTM B88 Type K copper with compression fittings.

C Construction

Coordinate with City of Rice Lake regarding temporary water service. Contact the City of Rice Lake Water Department at least 48 hours in advance to coordinate and schedule any water shut-offs.

Water services shall be one piece with no coupling between corporation stop and curb stop. Provide minimum 1-foot of slack in the pipe to allow for settlement and movement.

Water services shall have 7.5 feet minimum cover or require insulation. Backfill services according to the bid item Water Main.

Disinfect water services according to water main specifications and flush before connection or burying of final stub.

Furnish and install marker, accurately centered and vertical, over end of each lateral installed. Marker shall be 4 by 4 lumber. Place marker in backfill so bottom end touches end of lateral and top of marker is 2-feet above ground level. Depth of lateral, at end, shall be permanently written on marker. Paint marker blue.

Determine horizontal location of each lateral, at point of terminus, by measurement to nearest 0.1-feet, "tied" to minimum of 2, preferably 3, nearby permanent physical features. Note the horizontal location on the as-built plans provided to the City of Rice Lake.

D Measurement

The department will measure Copper Water Service, 1-Inch by the linear foot in place and the quantity measured for payment shall be the number of linear feet completed and accepted according to the contract measured along the centerline of the service piping. The length to be paid for shall be measured through the corporation stop and the curb stop.

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E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.14 Copper Water Service, 1-Inch LF

Payment is full compensation for furnishing all materials including tubing and fittings; for all end of piping marking; for all excavations; for removing existing water service; for sheeting and shoring, forming foundations, laying pipe, and making connections to all new or existing facilities, including couplings; for furnishing all bedding material; for backfilling and compaction, testing of backfill compaction, removing sheeting and shoring, cleanup, and restoring the site of the work.

58. PVC Sanitary Sewer Service, 6-Inch, Item SPV.0090.15.

A Description

This special provision describes furnishing and installing new sanitary sewer sanitary service and riser pipe all as shown on the plans and provided by these specifications.

B Materials

Pipes shall conform to the following:

Description Class or Type Specification Joint

PVC Sewer Service Pipe SDR 26 ASTM D3034 Elastomeric Gasket

Provide fittings and pipe of each material type from the same manufacturer.

C Construction

The location and size of sanitary sewer services as shown on the plans are approximate. Actual locations and size may vary from what is shown.

During the unloading process, all pipe and accessories shall be inspected by the contractor. Notify the engineer of all material found defective. The engineer shall inspect the material and have the right to reject any materials found unsatisfactory. Promptly remove all rejected material from the job site. Remove all foreign matter from the inside of the pipe before lowered into its position in the trench. Keep pipe clean by approved means during and after laying.

Removal of existing facilities, trench excavation and backfill and restoration shall be according to the provisions of these specifications.

Lay and maintain all pipe to the lines and grades shown on the plans. Install service pipe at a minimum of 1 percent to a maximum of 2 percent grade. No pipe shall be laid in water or when the trench conditions are unsuitable for such work, except by permission of the engineer. If service lateral is not being connected to an existing service pipe, place watertight plug at end of service pipe, and mark end of service pipe with a 4 by 4 timber set below grade.

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Riser pipes shall be extended from the service wye connection at 45-degrees above horizontal to an elevation as required to serve the surrounding property as directed by the engineer. Install riser pipe against undisturbed trench wall.

Removal and disposal of existing sanitary sewer service materials, regardless of size or pipe material, shall be considered incidental to the work.

Installation of pipe shall conform to ASTM D 2321. There shall be no mixing of different manufacturer's pipe or fittings on a project. Compact haunching area to specified density required by ASTM D2321.

Pipe laying shall proceed from the lowest end of the grade and bell ends of the pipe shall face upgrade. Pipe, which has in any way been disturbed or does not conform to said line and grade before final acceptance, shall be removed and relaid by the contractor at the contractor's expense.

Pipes shall be fitted together and matched so when laid they will form a sewer with a smooth and uniform invert.

Install gaskets and forms according to manufacturer's recommendations for use of lubricants, cements, and other special installation requirements.

Trench Excavation Requirements shall conform to specifications listed within Sanitary Sewer special provisions.

All trench excavation and backfilling, including backfill material, compaction, and dewatering shall be considered incidental. All work shall be done by open trench excavation.

Record the location, size, length, and number of bends on services on a record drawing. Measure service locations from the closest downstream manhole. Submit sanitary record drawings to the engineer and utility upon completion of the sanitary portion of the project.

Reconnect services to the existing sewer and adjusting service without damage to the pipe. Proper watertight joints must be made.

D Measurement

The department will measure PVC Sanitary Sewer Service of each size by length in linear feet from the center of the main to the end of the service, acceptably complete in place.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.15 PVC Sanitary Sewer Service, 6-Inch LF

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

59. Temporary River Access, Item SPV.0105.01.

A Description

This work includes constructing a temporary access to the Red Cedar River, such as temporary roads, barges, construction of causeways, or any other facility or equipment needed to transport materials and equipment to the construction site. Construction, maintenance, and removal or restoration of these facilities is incidental to the work.

B Materials

All materials used in the work shall be approved by the engineer and conform to the pertinent standard specifications.

C Construction

The following method of access has been discussed with the Wisconsin Department of Natural Resources (DNR) and included in the U.S. Army Corps of Engineers (COE) 404 Permit concerning temporary access.

A causeway may be used to obtain access to the pier and for removal of the existing bridge. Construct the causeway from either river bank immediately west of Structure B-3-2 at a height no more than 2 feet above the observed water elevation on August 10, 2015 of 1110.8. Construct the causeway using clean heavy riprap. Maintain a minimum waterway opening width of 60 feet. Install equalizing pipes, (Minimum of two 24 inch pipes) to avoid dewatering the riverbed on the downstream side of the causeway. Construct the causeway to maintain stability during times of high water and continuously fluctuating water levels. Submit a plan for approval showing proposed dimensions, materials, method and timetable for causeway construction and removal to the DNR at least 14 days prior to the preconstruction meeting.

Perform topographic survey of the existing stream bottom under the causeway prior to performing the work. Perform topographic survey of the stream bottom again after removal to confirm that materials have been removed and stream bottom is returned to preconstruction state. Provide the topographic survey information to the Wisconsin Department of Natural Resources.

It is not anticipated that dredging will be required for temporary access. The contractor shall be responsible to receive all necessary regulatory agency approvals should they deem dredging necessary.

An access road to reach the south river bank is included in the plans. Excavate/construct the access ramp to the north bank of the river to obtain a traversable slope for equipment and delivery vehicles. Address temporary and permanent erosion control requirements for the Temporary River Access in the erosion control implementation plan.

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Remove and restore the access point from Water Street (should the contractor choose to construct this access point) upon completion of the project. The area shall be restored as closely as possible to its natural state.

The contractor may choose alternate areas for their temporary access. The contractor is responsible for getting alternate locations approved by the appropriate regulatory agencies, and additional environmental studies that may be required. Obtain all required approvals from property owners to access the Red Cedar River. Submit a plan for approval showing proposed dimensions, materials, method, and timetable for access ramp and removal to the department at least 14 days prior to the pre-construction meeting.

No compensation or time extensions will be given for fluctuations in water levels.

D Measurement

The department will measure Temporary River Access 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
SPV.0105.01	Temporary River Access	LS

Payment for the Temporary River Access bid item is full compensation for any additional agency coordination and or permitting; pre-construction and post-construction stream bottom survey; installation, maintenance, and removal of erosion control devices; furnishing, hauling, placing, removing, dredging, excavating, disposing, maintaining access to the river; and restoring the access point as closely to its natural state as possible (or as otherwise specified within this article).

60. Sanitary Sewer Bypass Pumping, Item SPV.0105.10.

A Description

This special provision pertains to maintaining sanitary sewer flow on a continuous basis while construction is underway.

B Materials

Utilize materials consistent with other proposed sanitary sewer items.

C Construction

Coordinate with Rice Lake Utilities regarding temporary sanitary sewer bypass pumping. Contact the utility at least 48 hours in advance to coordinate and schedule any bypass pumping.

D Measurement

The department will measure Sanitary Sewer Bypass Pumping as a lump sum unit of work, acceptably completed.

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E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.10Sanitary Sewer Bypass PumpingLS

Payment is full compensation for maintaining sanitary sewer flow on a continuous basis and for furnishing all materials including pumps, portable generators, hoses, and related items appurtenant to the work.

61. Waterproof Sanitary Manhole Extra Depth, Item SPV.0200.10.

A Description

This special provision describes furnishing and installing sanitary manholes in excess of 8.5 feet in depth with waterproofing features as shown on the plans and provided by these specifications.

B Materials

The material for excess sanitary manhole depth shall conform to the requirements as listed in the item Standard Sanitary Manhole with Casting. Where manholes are planned with additional watertight features, extra manhole depth shall also include joint sealing as listed in the item Waterproof Sanitary Manhole with Casting.

C Construction

Construct Waterproof Sanitary Manhole Extra Depth according to requirements as listed in item Standard Sanitary Manhole with Casting.

D Measurement

The department will measure Waterproof Sanitary Manhole Extra Depth by height in vertical feet for all manhole depth in excess of 8.5 feet from finished top of casting to invert of the manhole, acceptably complete in place.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0200.10Waterproof Sanitary Manhole Extra DepthVF

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

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ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6 ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

104.10.1 General

Replace paragraph one with the following effective with the December 2017 letting:

(1) Subsection 104.10 specifies a 2-step process for contractors to follow in submitting a cost reduction incentive (CRI) for modifying the contract in order to reduce direct construction costs computed at contract bid prices. The initial submittal is referred to as a CRI concept and the second submittal is a CRI proposal. The contractor and the department will equally share all savings generated to the contract due to a CRI as specified in 104.10.4.2(1). The department encourages the contractor to submit CRI concepts.

104.10.4.2 Payment for the CRI Work

Replace paragraph one with the following effective with the December 2017 letting:

- (1) The department will pay for completed CRI work as specified for progress payments under 109.6. The department will pay for CRI's under the Cost Reduction Incentive administrative item. When all CRI costs are determined, the department will execute a contract change order that does the following:
 - 1. Adjusts the contract time, interim completion dates, or both.
 - 2. Pays the contractor for the unpaid balance of the CRI work.
 - 3. Pays the contractor 50 percent of the net savings resulting from the CRI, calculated as follows:

NS = CW - CRW - CC - DC

Where:

NS = Net Savings

CW = The cost of the work required by the original contract that is revised by the CRI. CW is computed at contract bid prices if applicable.^[1]

CRW = The cost of the revised work, computed at contract bid prices if applicable.^[1]

CC = The contractor's cost of developing the CRI proposal.

DC = The department's cost for investigating, evaluating, and implementing the CRI proposal.

108.11 Liquidated Damages

Replace paragraphs two and three with the following effective with the December 2017 letting:

- (2) This deducted sum is not a penalty but is a fixed, agreed, liquidated damage due the department from the contractor for the added cost of engineering and supervision resulting from the contractor's failure to complete the work within the contract time.
- (3) Unless enhanced in the special provisions, the department will assess the following daily liquidated damages

LIQUIDATED DAMAGES

ORIGINAL CONTRACT AMOUNT		DAILY C	HARGE
FROM MORE THAN	TO AND INCLUDING	CALENDAR DAY	WORKING DAY
\$0	\$250,000	\$850	\$1700
\$250,000	\$500,000	\$815	\$1630
\$500,000	\$1,000,000	\$1250	\$2500
\$1,000,000	\$2,000,000	\$1540	\$3080
\$2,000,000		\$2070	\$4140

^[1] The department may adjust contract bid prices that, in the engineer's judgement, do not represent the fair value of the work deleted or proposed.

203.3.2.2 Removal Operations

Replace the entire text with the following effective with the December 2017 letting:

203.3.2.2.1 General

- (1) Except as specified below for closing culverts, remove the entire top slab of box culverts and the entire superstructure of other culverts and bridges designated for removal. Completely remove existing piles, cribs, or other timber construction within the limits of new embankments, or remove these structures to an elevation at least 2 feet below finished ground line. Remove sidewalls or substructure units in water to an elevation no higher than the elevation of the natural stream or lake bed, or, if grading the channel is required under the contract or the plans, to the proposed finished grade of the stream or lake bed. Remove sidewalls or substructure units not in water down to at least 2 feet below natural or finished ground line.
- (2) If extending or incorporating existing culverts and bridges in the new work, remove only those parts of the existing structure as necessary to provide a proper connection to the new work. Saw, chip, or trim the connecting edges to the required lines and grades without weakening or damaging the remaining part of the structure. During concrete removal, do not damage reinforcing bars left in place as dowels or ties incorporated into the new work.
- (3) Remove pipe culverts designated for salvage in a way that prevents damage to the culverts.
- (4) Dismantle steel structures or parts of steel structures designated for salvage in a way that avoids damage to the members. If the contract specifies removing the structure in a way that leaves it in a condition suitable for re-erection, matchmark members with durable white paint before dismantling. Mark pins, bolts, nuts, loose plates, etc., similarly to indicate their proper location. Paint pins, bolts, pinholes, and machined surfaces with a department-approved rust preventative. Securely wire loose parts to adjacent members, or label and pack them in boxes.
- (5) Remove timber structures or parts of timber structures designated for salvage in a way that prevents damage to the members.
- (6) If the engineer approves, the contractor may temporarily use materials designated for salvage in falsework used to construct new work. Do not damage or reduce the value of those materials through temporary use.

203.3.2.2.2 Deck Removal

- (1) Protect the work as specified in 107.14 during deck removal. Minimize debris falling onto water surfaces and wetlands as the contract specifies in 107.18 or in the special provisions. Also, minimize debris falling on the ground and roadway.
- (2) Do not damage existing bar steel reinforcement, girders, or other components that will be incorporated in new work. Remove decks on prestressed concrete girders using a hydraulic shear or other engineer-approved equipment. Thoroughly clean, realign, and retie reinforcement as necessary.
- (3) After deck removal is complete, notify the engineer to request a damage survey. Point out damage to the engineer. Allow one business day for the engineer to complete the damage survey. If damage is identified, the department will determine if repairs or girder restoration will be allowed.
- (4) If the department allows girder restoration, have a professional engineer registered in the State of Wisconsin analyze the effect of the damage to the bridge, make recommendations, and prepare signed and sealed computations and structural details required to restore girders to their previous structural capacity. Submit the restoration proposal, including analysis and structural details, to the department and design engineer of record. The department will accept or reject the restoration proposal within 3 business days. Do not begin restoration work until the department allows in writing.
- (5) The engineer will not extend contract time to assess or remediate contractor caused damage.

203.5.1 General

Replace paragraph two with the following effective with the December 2017 letting:

(2) Payment is full compensation for breaking down and removing; costs associated with contractor-caused damage; required salvaging, storing, and disposing of materials; and, unless the contract specifies granular backfill, for backfilling.

415.2.3 Expansion Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

(1) Furnish expansion joint filler conforming to AASHTO M153, AASHTO M213, or ASTM D8139 in lengths equal to the pavement lane width and of the thickness and height the plans show. Where dowel bars are required, use filler with factory-punched holes at the dowel bar locations and with a diameter not greater than 1/8 inch larger than the nominal dowel bar diameter.

415.3.20 Filling Joints

Replace paragraph two with the following effective with the December 2017 letting:

(2) Clean joints of laitance, curing compound, and other contaminants before filling. Saw construction joints at least 3/4 inches deep before filling. Sawing is not required for tooled joints in curb and gutter. Sandblast or waterblast exposed joint faces using multiple passes as required to clean joints surfaces of material that might prevent bonding. Blow clean and dry with oil-free compressed air immediately before filling.

415.5.1 General

Replace paragraph six with the following effective with the December 2017 letting:

(6) Payment for Concrete Pavement Joint Filling is full compensation for filling concrete pavement joints; filling adjacent curb and gutter joints; and for sawing.

440.3.4.2 Contractor Testing

Replace paragraph two with the following effective with the December 2017 letting:

(2) Coordinate with the engineer at least 24 hours before making profile runs for acceptance unless the engineer approves otherwise. The department may require testing to accommodate staged construction or if corrective action is required.

455.5.3 Tack Coat

Replace paragraph two with the following effective with the December 2017 letting:

(2) The department will adjust pay for Tack Coat, under the Nonconforming Tack Coat administrative item, for nonconforming material the engineer allows to remain in place at a maximum of 75 percent of the contract unit price.

460.2.7 HMA Mixture Design

Replace paragraph one with the following effective with the December 2017 letting:

(1) For each HMA mixture type used under the contract, develop and submit an asphaltic mixture design according to CMM 8-66 and conforming to the requirements of table 460-1 and table 460-2. The values listed are design limits; production values may exceed those limits. The department will review mixture designs and report the results of that review to the designer according to CMM 8-66.

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
ESALs x 10 ⁶ (20 yr design life)	<2.0	2 - <8	>8	
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821) (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	43	45	45
Sand Equivalency (AASHTO T176, min)	40	40	45	50
Gyratory Compaction				
Gyrations for N _{ini}	6	7	8	8
Gyrations for N _{des}	40	75	100	65
Gyrations for N _{max}	60	115	160	160
Air Voids, %V _a (%G _{mm} N _{des})	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)
% G _{mm} N _{ini}	<= 91.5 ^[1]	<= 89.0 ^[1]	<= 89.0	
% G _{mm} N _{max}	<= 98.0	<= 98.0	<= 98.0	
Dust to Binder Ratio ^[2] (% passing 0.075/P _{be})	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 ^{[4] [5]}	65 - 75 ^{[3] [5]}	65 - 75 ^{[3] [5]}	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283) ^{[6] [7]}				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.75 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)				0.30

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

^[2] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

^[3] For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

^[4] For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[5] For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[6] WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

^[7] Run TSR at asphalt content corresponding to 3.0% air void regressed design using distilled water for testing.

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph six with the following:

(6) Conduct TSR tests during mixture production according to CMM 8-36.6.14. Test each full 50,000 ton production increment, or fraction of an increment, after the first 5000 tons of production. Perform required increment testing in the first week of production of that increment. If production TSR values are below the limit specified in CMM 8-36.6.14, notify the engineer. The engineer and contractor will jointly determine a corrective action.

502.2.7 Preformed Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

(1) Use preformed joint filler conforming to AASHTO M153, AASHTO M213, or ASTM D8139.

502.3.7.8 Floors

Replace paragraph fourteen with the following effective with the December 2017 letting:

(14) Unless specified otherwise, transversely tine finish the floors of structures with approach pavements designed for speeds of 40 mph or greater as specified in 415.3.8.3, except make the tining 1/8 inch in depth and do not perform tining within 12 inches of gutters. The contractor may apply a broom finish, described below, instead of the artificial turf drag finish required before tining. The contractor may perform tining manually, if it obtains a finish satisfactory to the engineer. Perform tining within 20 degrees of the centerline of bearing of the substructure units on bridge decks having skew angles of 20 degrees or greater.

505.2.6 Dowel Bars and Tie Bars

Replace the entire text with the following effective with the March 2018 letting:

505.2.6.1 General

- (1) Furnish bars coated in a plant certified by the Concrete Reinforcing Steel Institute. For dowel bars and straight tie bars, there is no requirement for bend tests. Ensure that the bars are the specified diameter and length the plans show.
- (2) The contractor need not coat or patch sawed ends, sheared ends, cut ends, ends left bare during the coating process, or ends with damaged coating.
- (3) The contractor need not repair circumferential coating damage from shipping, handling, or installation, if the following conditions are met:
 - 1. The damaged area is 1/4 inch square or smaller.
 - 2. The total damaged area in any one-foot length does not exceed 2 percent of the circumferential area in that length.
- (4) Repair areas of damaged circumferential coating larger than 1/4 inch square. Reject bars with total damage greater than 2 percent of the bar's circumferential area.

505.2.6.2 Dowel Bars

505.2.6.2.1 General

- (1) Ensure that the bars are straight, round, smooth, and free from burrs or other deformations detrimental to the free movement of the bar in the concrete.
- (2) Saw bars to the required length. For solid bars, the department will allow shearing if no damage occurs to the coating and shearing distortions do not exceed the following:
 - 1. No distorted diameter is more than 0.04 inches greater than the true diameter.
 - 2. No distortion extends more than 0.40 inches from the sheared end.
- (3) Apply a surface treatment to loose dowels, or furnish manufacturer-treated bars in dowel bar baskets, capable of preventing bond between the epoxy-coated bars and the concrete. Apply field surface treatments when loading bars in the dowel bar magazine.

505.2.6.2.2 Solid Dowel Bars

(1) Furnish coated bars conforming to AASHTO M31 grade 40 or 60. Alternatively the contractor may furnish dowel bars conforming to AASHTO M227 grade 70-80. Coat with a thermosetting epoxy conforming to AASHTO M254, type B.

505.2.6.2.3 Tubular Dowel Bars

(1) Furnish welded steel tubular bars conforming to ASTM A513 fabricated from plain carbon steel with a minimum tensile yield strength of 60 ksi and sized as follows:

SOLID BAR	MINIMUM REQUIRED	MINIMUM BASE METAL
SPECIFIED DIAMETER	OUTSIDE DIAMETER	WALL THICKNESS
1 1/4-inch	1 5/16 inches	0.120 inch
1 1/2-inch	1 5/8 inches	0.120 inch

(2) Cap bar ends to prevent intrusion of concrete or other materials. Ensure that tubing is galvanized on the exterior and interior according to ASTM A653 with a G40 zinc coating and apply 7-13 mils of epoxy to the galvanized exterior according to AASHTO M254, Type B.

505.2.6.2.4 High Performance Dowel Bars

(1) As an alternate the contractor may furnish high performance dowel bars from the department's APL.

505.2.6.3 Tie Bars

- (1) Furnish coated bars conforming to AASHTO M31 grade 40 or 60. Coat tie bars as specified in 505.2.4 for coated high-strength steel reinforcement. Ensure that the tie bars are the shape the plans show.
- (2) Repair, with compatible coating material, the bend location of field-straightened coated tie bars.

614.2.1 General

Add the following as paragraph ten effective with the December 2017 letting:

(10) Furnish guardrail reflectors from the department's APL.

614.3.2.1 Installing Posts

Add the following as paragraph five effective with the December 2017 letting:

(5) Provide post-mounted reflectors every 100 feet with one at the beginning and end of each run and a minimum of three reflectors per run.

614.5 Payment

Replace paragraph four with the following effective with the December 2017 letting:

(4) Payment for the Steel Thrie Beam, Steel Plate Beam Guard, Guardrail Stiffened, MGS Guardrail, Short Radius, and various transition bid items is full compensation for providing guardrail and transitions including post-mounted reflectors; for repairing damaged zinc coatings; and for excavating, backfilling, and disposing of surplus material.

641.2.9 Overhead Sign Supports

Replace paragraph three with the following effective with the December 2017 letting:

(3) Provide steel pole shafts, mast arms or trusses, and luminaire arms zinc coated according to ASTM A123. The contractor may provide either straight or tapered pole and arm shafts unless the plans specify otherwise. Provide bolts and other hardware conforming to 641.2.2.

642.2.2.1 General

Replace the entire text with the following effective with the December 2017 letting:

- (1) Provide each field office with two rooms, separated by an interior door with a padlock. Ensure that each room has a separate exterior door and its own air conditioner. Locate the office where a quality internet connection can be achieved.
- (2) Provide long distance telephone service via a land line for exclusive department use that has the following:
 - Two programmable touch-tone phones, one of which is cordless. Ensure that phone operations will not interfere with other telecommunications equipment.
 - Voice mail service or an answering machine.
- (3) Provide high-speed internet service for exclusive department use via cable or DSL connection with a modem/router and capable of supporting cloud enabled file sharing, voice over internet protocol (VoIP), video conferencing, and web based applications. Ensure that system meets the following:
 - Includes a wireless network for the field office.
 - Can accommodate IPSec based VPN products.
 - Has a bandwidth range as follows:

Field office with 1-5 staff: A minimum connection speed of 5 Mbps download and 1 Mbps

upload. If a cable or DSL option is not available the contractor may provide a personal hotspot using cell phone tethering or other device able to achieve the specified minimum speeds inside the field office.

Field office with 6 or more staff: A minimum connection speed of 10 Mbps + 1/2 Mbps per user

download and 5 Mbps upload.

Projects over 500 million dollars: A minimum connection speed of 20 Mbps + 1/2 Mbps per user

download and 10 Mbps upload. Coordinate network setup at the

leased office with the WisDOT network team.

- (4) Provide and maintain a Windows 7 and Windows 10 compliant multi-function device with copy, print, and scan capabilities that can accommodate both 8 1/2" x 11" and 11" x 17" paper. Replenish paper, toner cartridges, and other supplies before fully expended. Ensure that department staff can connect to the device either directly or through the field office wireless network.
- (5) Equip with a drafting table with a drafter's stool. Except as specified in 642.2.2.4, provide 2 ergonomically correct office chairs in working condition with, at a minimum, the following:
 - 1. Five-legged base with casters.
 - 2. Seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge.
 - 3. High backrest with no arms or adjustable arms.

643.3.1 General

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Provide and maintain traffic control devices located where the plans show or engineer directs to maintain a safe work zone throughout the contract duration. Relocate as required to accommodate changing work operations. When not in use, place devices away from traffic outside of paved and gravel shoulder surfaces. Where there is barrier on the shoulder, the contractor may place devices not in use on the shoulder as close as possible to the barrier and delineated with drums. Lay signs and supports flat on the grade with uprights oriented parallel to and downstream from traffic. Do not stack devices or equipment. Promptly remove temporary devices from within the project limits as follows:
 - That will not be used within 14 consecutive calendar days.
 - Within 5 business days of substantial completion unless the engineer allows otherwise.

645.2.2.2 Geotextile, Type SAS (Subgrade Aggregate Separation)

Replace paragraph one with the following effective with the December 2017 letting:

(1) Furnish fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	170 lb
Minimum puncture strength	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 70
Minimum permittivity	ASTM D4491	0.35 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.4 Geotextile, Type DF (Drainage Filtration)

Replace paragraph one with the following effective with the December 2017 letting:

(1) Furnish fabric conforming with the physical requirements of either schedule A, schedule B, or schedule C as the contract specifies.

c as the contract specifies.		
SCHEDULE A TEST	METHOD	VALUE[1]
Minimum grab tensile strength	ASTM D4632	110 lb
Minimum puncture strength	ASTM D6241	200 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 μm
Minimum permittivity	ASTM D4491	0.70 s^{-1}
SCHEDULE B TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 μm
Minimum permittivity	ASTM D4491	1.35 s ⁻¹
SCHEDULE C TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	600 µm
Minimum permittivity	ASTM D4491	1.00 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.6 Geotextile, Type R (Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

(1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	205 lb
Minimum puncture strength	ASTM D6241	400 lb
Minimum apparent breaking elongation	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.7 Geotextile, Type HR (Heavy Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

(1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength, lb	ASTM D4632	305 lb
Minimum puncture strength, lb	ASTM D6241	500 lb
Minimum apparent breaking elongation, %	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.40, s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.8 Geotextile, Type C (Modified SAS)

Replace paragraph one with the following effective with the December 2017 letting:

(1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Grab tensile strength, lb	ASTM D4632	205 lb
Puncture strength, lb	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 50
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

646.3.1.1 General Marking

Replace paragraph one with the following effective with the December 2017 letting:

(1) Prepare the surface and apply marking as the manufacturer specifies. Provide manufacturer specifications as the engineer requests. Do not mark over a marking product with less adherence or over chipped or peeled marking. Do not remove polymer overlay materials in areas receiving pavement marking. Use only epoxy pavement marking where the contract requires marking placed on polymer overlays.

Replace paragraph five with the following effective with the December 2017 letting:

(5) After the marking can sustain exposure to traffic, re-apply clear protective surface treatment conforming to 502.2.11 where removed from structures during marking surface preparation. Seal exposed concrete including grooves for tape. Cover marking during resealing with a system that will not degrade the marking's retroreflectivity when removed. Uncover marking before opening to traffic.

701.3 Contractor Testing

Replace paragraph one with the following effective with the December 2017 letting:

(1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Also perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Use test methods as follows:

TABLE 701-2 TESTING STANDARDS

TEST	TEST STANDARD
Washed P 200 analysis	AASHTO T11 ^[1]
Sieve analysis of fine and coarse aggregate	AASHTO T27 ^[1]
Aggregate moisture	AASHTO T255 ^[1]
Sampling freshly mixed concrete	AASHTO R60
Air content of fresh concrete	AASHTO T152 ^[2]
Air void system of fresh concrete	AASHTO Provisional Standard TP118
Concrete slump	AASHTO T119 ^[2]
Concrete temperature	ASTM C1064
Concrete compressive strength	AASHTO T22
Making and curing concrete cylinders	AASHTO T23
Standard moist curing for concrete cylinders	AASHTO M201

^[1] As modified in CMM 8-60.

715.2.3.1 Pavements

Add the following as paragraph six effective with the December 2017 letting:

(6) For new lab-qualified mixes, test the air void system of the proposed concrete mix conforming to AASHTO provisional standard TP 118. Include the SAM number as a part of the mix design submittal.

715.3.1.1 General

Replace paragraph one with the following effective with the December 2017 letting:

(1) Provide slump, air content, concrete temperature and compressive strength test results as specified in 710.5. Provide a battery of QC tests, consisting of results for each specified property, using a single sample randomly located within each sublot. Cast three cylinders for strength evaluation. For pavement concrete, also test the air void system conforming to AASHTO provisional standard TP118 at least once per lot and enter the SAM number in the MRS for information only.

715.3.1.3 Department Verification Testing

Replace paragraph one with the following effective with the December 2017 letting:

(1) The department will perform verification testing as specified in 701.4.2 with additional testing as required to obtain at least 1 verification test per lot for air content, slump, temperature, and compressive strength.

^[2] As modified in CMM 8-70.

Errata

Make the following corrections to the standard specifications:

106.3.3.1 General

Correct errata by changing "acceptance" to "approval".

(1) For manufactured products or assemblies, the department may base approval on a product certification or require both a product certification and production plant certification.

205.3.1 General

Correct errata by replacing paragraphs three and four with the following to reflect current practice to incorporate suitable materials.

(3) Replace unsuitable material with satisfactory material. Trim and finish the roadway. Maintain the work done under 205 in a finished condition until acceptance.

305.1 Description

Correct errata to clarify that the contractor may use more than one material under a single contract.

(1) This section describes constructing a dense graded base using one or more of the following aggregates at the contractor's option:

Crushed stone Reclaimed asphalt
Crushed gravel Reprocessed material
Crushed concrete Blended material

521.2 Materials

Correct errata by deleting bullet three and including aluminum coated pipe in bullet one.

- (1) Furnish corrugated steel pipe and steel apron end walls as follows:
 - Corrugated steel culvert pipe, steel apron endwalls, aluminum coated corrugated steel culvert pipe, and other components conforming to AASHTO M36.
 - Polymer coated corrugated steel culvert pipe and pipe arch fabricated from zinc coated sheet steel
 conforming to AASHTO M218. Before fabrication, coat the sheets on both sides with polymer
 protective coating grade 250/250 according to AASHTO M246. Fabricate the pipe according to
 AASHTO M245.

614.3.2.2 Installing Rail

Correct errata for splice location and allow punching or drilling holes and slots.

- (1) Install rail with lap splices in the direction of traffic. Ensure that the number and dimensions of holes and bolts conforms to the plan details for new splices. Place the round head of bolts on the traffic side.
- (2) Cut rails to length by shearing or sawing; do not use cutting torches. Drill or punch bolt holes and slots; ensure that they are burr free. After installation, cut anchor bolts that project more than one inch from the nut to 1/2 inch from the nut; deburr the threaded end of cut bolts.

618.1 Description

Correct errata by deleting designated detours from the scope of Maintenance and Repair of Haul Roads.

(1) This section describes maintaining, repairing, and restoring all public roads, streets, drainage facilities, and other components used for hauling by contractor, subcontractor, or supplier to support work for a department contract to its pre-haul condition. Public roads and streets shall be limited to those not a part of the State Trunk Highway System and from now on called haul roads.

643.3.5.2 Cellular Communication

Correct errata by changing State Traffic Operations Center to Traffic Management Center.

(2) A minimum of 14 days before deployment, demonstrate to the department that the cellular modem is capable of communications with the Traffic Management Center. If remote communications are interrupted or temporarily unavailable, the department will notify the contractor to change messages manually. Update messages within 2 hours of receiving notification.

646.3.1.2 Liquid Marking

Correct errata by changing "epoxy overlays" to "polymer overlays".

(5) Apply liquid marking and glass beads across the line at or exceeding the following:

QUID MARKING	PAVEMENT TYPE	THICKNESS	BEAD APPLICATION
		(mils)	(pounds per gallon)
Paint	all	16	8-10
Ероху	SMA, seal coats, and polymer overlays	25	25
Epoxy	all other	20	22.5

654.5 Payment

Correct errata to clarify that contractor-provided anchor rods and associated hardware are incidental.

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

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:

 $\underline{\text{http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-} \underline{\text{manual.pdf}}$

ADDITIONAL SPECIAL PROVISION 9-S Electronic Labor Data Submittal for State Funded Only Projects

(1) Use the Workforce Utilization Report Microsoft Excel spread sheet, or other compatible spread sheet (i.e., Google Spread Sheet), to report required labor data. Details and the Excel spreadsheet are available online through the department's highway construction contract information (HCCI) site on the Labor, Wages, and EEO Information page at:

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

- (2) Ensure that all tiers of subcontractors, including all trucking firms, submit their labor data electronically via the Excel spread sheet to the prime contractor within 14 calendar days of the end of each quarter (quarters are defined as January-March, April-June, July-September, and October-December). The prime contractor shall coordinate collection of their subcontractors' spread sheets and forward them to the Regional Labor Compliance Specialist within 21 calendar days of the end of each quarter. Every company or contractor providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected companies or contractors aware of the requirements under this special provision and arrange for them to receive an Excel spreadsheet as part of their subcontract documents.
- (4) The department will reject all paper submittals of information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

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 August 2015 letting

BUY AMERICA PROVISION

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

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

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

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March 2017

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, <u>per se</u>, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.





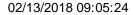
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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0115 Clearing	0.170 ACRE		
0004	201.0215 Grubbing	0.170 ACRE		
0006	203.0210.S Abatement of Asbestos Containing Material (structure) 01. B-3-2	LS	LUMP SUM	·
8000	203.0500.S Removing Old Structure Over Waterway (station) 02. 19+76.30	LS	LUMP SUM	
0010	203.0600.S Removing Old Structure Over Waterway With Minimal Debris (station) 02. 19+76.30	LS	LUMP SUM	·
0012	204.0100 Removing Pavement	2,280.000 SY		
0014	204.0110 Removing Asphaltic Surface	764.000 SY		
0016	204.0150 Removing Curb & Gutter	815.000 LF		
0018	204.0155 Removing Concrete Sidewalk	581.000 SY		
0020	204.0210 Removing Manholes	6.000 EACH	·	
0022	204.0220 Removing Inlets	7.000 EACH	·	
0024	204.0245 Removing Storm Sewer (size) 24. Various	740.000 LF		
0026	204.0270 Abandoning Culvert Pipes	1.000 EACH		
0028	205.0100 Excavation Common	3,348.000 CY		
0030	206.1000 Excavation for Structures Bridges (structure) 01. B-3-2	LS	LUMP SUM	







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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	206.5000 Cofferdams (structure) 01. B-3-2	LS	LUMP SUM	
0034	209.0200.S Backfill Controlled Low Strength	21.000 CY		
0036	210.1500 Backfill Structure Type A	750.000 TON		
0038	213.0100 Finishing Roadway (project) 01. 8997- 00-40	1.000 EACH		
0040	305.0120 Base Aggregate Dense 1 1/4-Inch	1,425.000 TON		
0042	415.0090 Concrete Pavement 9-Inch	2,455.000 SY		
0044	415.0410 Concrete Pavement Approach Slab	169.000 SY		
0046	415.5110.S Concrete Pavement Joint Layout	1.000 LS		
0048	416.0160 Concrete Driveway 6-Inch	76.000 SY		
0050	455.0605 Tack Coat	23.000 GAL		
0052	465.0105 Asphaltic Surface	72.000 TON		
0054	465.0125 Asphaltic Surface Temporary	19.000 TON		
0056	502.0100 Concrete Masonry Bridges	943.000 CY		
0058	502.1100 Concrete Masonry Seal	91.000 CY		
0060	502.3200 Protective Surface Treatment	2,130.000 SY		
0062	502.3210 Pigmented Surface Sealer	280.000 SY		·





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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	502.4204 Adhesive Anchors No. 4 Bar	1,148.000 EACH		
0066	502.4205 Adhesive Anchors No. 5 Bar	84.000 EACH		
0068	502.4206 Adhesive Anchors No. 6 Bar	24.000 EACH		
0070	503.0172 Prestressed Girder Type I 72W-Inch	804.000 LF		
0072	505.0400 Bar Steel Reinforcement HS Structures	13,520.000 LB		
0074	505.0600 Bar Steel Reinforcement HS Coated Structures	161,540.000 LB		
0076	505.0905 Bar Couplers No. 5	809.000 EACH		
0078	506.2605 Bearing Pads Elastomeric Non- Laminated	12.000 EACH		·
0800	506.4000 Steel Diaphragms (structure) 01. B-3-2	32.000 EACH		
0082	509.1500 Concrete Surface Repair	100.000 SF		
0084	509.9020.S Epoxy Crack Sealing	50.000 LF		
0086	511.1200 Temporary Shoring (structure) 01. B-3-2	600.000 SF		
0088	513.7016 Railing Steel Type C3 (structure) 01. B-3-2	614.000 LF	·	
0090	514.0445 Floor Drains Type GC	12.000 EACH	<u> </u>	
0092	514.2625 Downspout 6-Inch	85.000 LF		
0094	516.0500 Rubberized Membrane Waterproofing	40.000 SY	·	







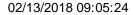
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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0096	517.1015.S Concrete Staining Multi-Color (structure) 01. B-3-2	1,950.000 SF	·	·
0098	517.1050.S Architectural Surface Treatment (structure) 01. B-3-2	1,950.000 SF	·	·
0100	520.8000 Concrete Collars for Pipe	3.000 EACH	·	
0102	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	1.000 EACH		
0104	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	1.000 EACH	·	·
0106	550.0500 Pile Points	32.000 EACH	·	·
0108	550.1120 Piling Steel HP 12-Inch X 53 Lb	1,680.000 LF		
0110	601.0409 Concrete Curb & Gutter 30-Inch Type A	749.000 LF	·	·
0112	601.0411 Concrete Curb & Gutter 30-Inch Type D	82.000 LF		·
0114	601.0600 Concrete Curb Pedestrian	22.000 LF	·	·
0116	602.0410 Concrete Sidewalk 5-Inch	5,093.000 SF		
0118	602.0505 Curb Ramp Detectable Warning Field Yellow	50.000 SF		·
0120	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	22.000 SF	·	·
0122	603.8000 Concrete Barrier Temporary Precast Delivered	960.000 LF	·	
0124	603.8125 Concrete Barrier Temporary Precast Installed	960.000 LF		·







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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0126	604.0400 Slope Paving Concrete	170.000 SY	·	
0128	606.0300 Riprap Heavy	250.000 CY		
0130	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	190.000 LF		
0132	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	62.000 LF	·	
0134	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	174.000 LF		
0136	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	76.000 LF	<u></u>	·
0138	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	254.000 LF	<u></u>	
0140	611.0530 Manhole Covers Type J	4.000 EACH		
0142	611.0624 Inlet Covers Type H	7.000 EACH		
0144	611.2004 Manholes 4-FT Diameter	2.000 EACH		
0146	611.2006 Manholes 6-FT Diameter	2.000 EACH		
0148	611.3004 Inlets 4-FT Diameter	4.000 EACH		
0150	611.3230 Inlets 2x3-FT	3.000 EACH		
0152	611.8120.S Cover Plates Temporary	1.000 EACH		
0154	612.0406 Pipe Underdrain Wrapped 6-Inch	110.000 LF	·	



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Proposal Schedule of Items

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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0156	618.0100 Maintenance And Repair of Haul Roads (project) 01.8997-00-40	1.000 EACH		
0158	619.1000 Mobilization	1.000 EACH		
0160	624.0100 Water	21.000 MGAL		·
0162	625.0500 Salvaged Topsoil	2,018.000 SY		
0164	627.0200 Mulching	2,220.000 SY		
0166	628.1504 Silt Fence	858.000 LF	·	
0168	628.1520 Silt Fence Maintenance	858.000 LF		
0170	628.1905 Mobilizations Erosion Control	9.000 EACH	<u></u>	
0172	628.1910 Mobilizations Emergency Erosion Control	6.000 EACH		
0174	628.2002 Erosion Mat Class I Type A	1,324.000 SY		
0176	628.7020 Inlet Protection Type D	11.000 EACH		
0178	629.0205 Fertilizer Type A	1.400 CWT		
0180	630.0140 Seeding Mixture No. 40	40.000 LB		
0182	630.0200 Seeding Temporary	60.000 LB		
0184	634.0811 Posts Tubular Steel 2x2-Inch X 11-FT	7.000 EACH		
0186	637.2210 Signs Type II Reflective H	28.500 SF	·	







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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0188	637.2230 Signs Type II Reflective F	6.250 SF		
0190	638.2102 Moving Signs Type II	2.000 EACH		
0192	642.5001 Field Office Type B	1.000 EACH		
0194	643.0300 Traffic Control Drums	19,146.000 DAY		
0196	643.0410 Traffic Control Barricades Type II	1,496.000 DAY	·	
0198	643.0420 Traffic Control Barricades Type III	3,854.000 DAY	·	
0200	643.0500 Traffic Control Flexible Tubular Marker Posts	150.000 EACH		
0202	643.0600 Traffic Control Flexible Tubular Marker Bases	150.000 EACH		
0204	643.0705 Traffic Control Warning Lights Type A	1,712.000 DAY		
0206	643.0715 Traffic Control Warning Lights Type C	4,814.000 DAY		
0208	643.0800 Traffic Control Arrow Boards	588.000 DAY		
0210	643.0900 Traffic Control Signs	11,598.000 DAY	·	
0212	643.5000 Traffic Control	1.000 EACH		
0214	644.1601.S Temporary Curb Ramp	12.000 EACH	·	
0216	644.1616.S Temporary Pedestrian Safety Fence	1,153.000 LF		
0218	645.0111 Geotextile Type DF Schedule A	150.000 SY	·	



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Proposal Schedule of Items

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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0220	645.0120 Geotextile Type HR	213.000 SY		
0222	646.1020 Marking Line Epoxy 4-Inch	1,658.000 LF		
0224	646.6120 Marking Stop Line Epoxy 18-Inch	43.000 LF	·	·
0226	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	441.000 LF	·	
0228	646.9000 Marking Removal Line 4-Inch	729.000 LF		
0230	649.0105 Temporary Marking Line Paint 4-Inch	2,271.000 LF		
0232	649.0150 Temporary Marking Line Removable Tape 4-Inch	9,189.000 LF		·
0234	649.0250 Temporary Marking Line Removable Tape 8-Inch	300.000 LF	·	
0236	650.4000 Construction Staking Storm Sewer	13.000 EACH		
0238	650.4500 Construction Staking Subgrade	537.000 LF		
0240	650.5000 Construction Staking Base	537.000 LF	·	·
0242	650.5500 Construction Staking Curb Gutter and Curb & Gutter	831.000 LF		·
0244	650.6500 Construction Staking Structure Layout (structure) 01. B-3-2	LS	LUMP SUM	
0246	650.8500 Construction Staking Electrical Installations (project) 01.8997-00-40	LS	LUMP SUM	
0248	650.9000 Construction Staking Curb Ramps	6.000 EACH		





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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0250	650.9910 Construction Staking Supplemental Control (project) 01. 8997-00-40	LS	LUMP SUM	·
0252	650.9920 Construction Staking Slope Stakes	537.000 LF		
0254	652.0125 Conduit Rigid Metallic 2-Inch	24.000 LF		
0256	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	728.000 LF		
0258	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	14.000 LF		·
0260	653.0140 Pull Boxes Steel 24x42-Inch	2.000 EACH		
0262	653.0222 Junction Boxes 18x12x6-Inch	3.000 EACH	·	
0264	654.0224 Concrete Control Cabinet Bases Type L24	1.000 EACH		·
0266	655.0610 Electrical Wire Lighting 12 AWG	525.000 LF		
0268	655.0620 Electrical Wire Lighting 8 AWG	574.000 LF	·	
0270	656.0100 Electrical Service Meter Socket (location) 01. 8997-00-40	LS	LUMP SUM	
0272	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. LCCA	LS	LUMP SUM	·
0274	657.6005 Anchor Assemblies Light Poles on Structures	3.000 EACH	·	
0276	659.2124 Lighting Control Cabinets 120/240 24- Inch	1.000 EACH	·	·
0278	690.0150 Sawing Asphalt	161.000 LF		



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Proposal Schedule of Items

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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0280	690.0250 Sawing Concrete	181.000 LF		
0282	715.0415 Incentive Strength Concrete Pavement	810.000 DOL	1.00000	810.00
0284	715.0502 Incentive Strength Concrete Structures	5,658.000 DOL	1.00000	5,658.00
0286	999.1000.S Seismograph	LS	LUMP SUM	
0288	999.1500.S Crack and Damage Survey	LS	LUMP SUM	
0290	SPV.0060 Special 01. Connect to Existing Storm Structure	1.000 EACH		
0292	SPV.0060 Special 02. Connect to Existing Storm Pipe	3.000 EACH		·
0294	SPV.0060 Special 04. Decorative Lighting and Pole Assembly Type B	3.000 EACH	<u>-</u>	
0296	SPV.0060 Special 05. Moving Signs Park Sign	1.000 EACH		
0298	SPV.0060 Special 10. REMOVE EXISTING SANITARY MANHOLE	2.000 EACH		·
0300	SPV.0060 Special 11. REMOVE EXISTING SANITARY VAULT	1.000 EACH		
0302	SPV.0060 Special 12. STANDARD SANITARY MANHOLE WITH CASTING	1.000 EACH		·
0304	SPV.0060 Special 13. ADJUST SANITARY MANHOLE CASTING	5.000 EACH		
0306	SPV.0060 Special 14. CONNECT TO EXISTING SANITARY SEWER	5.000 EACH		



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Proposal Schedule of Items

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Federal ID(s): N/A

SECTION: 0001 Contract Items

Proposal		A		
Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	SPV.0060 Special 15. REMOVE EXISTING GATE VALVE	2.000 EACH		
0310	SPV.0060 Special 16. CONNECT TO EXISTING WATER MAIN	4.000 EACH		·
0312	SPV.0060 Special 17. WATER MAIN GATE VALVE AND BOX 6-INCH	1.000 EACH		
0314	SPV.0060 Special 18. WATER MAIN GATE VALVE AND BOX 8-INCH	2.000 EACH		
0316	SPV.0060 Special 19. FIRE HYDRANT	1.000 EACH		·
0318	SPV.0060 Special 20. REMOVE EXISTING HYDRANT	1.000 EACH		
0320	SPV.0060 Special 21. REPLACE GATE VALVE BOX	1.000 EACH	·	·
0322	SPV.0060 Special 22. ADJUST GATE VALVE BOX	4.000 EACH		
0324	SPV.0060 Special 23. CORPORATION STOP 1-INCH	1.000 EACH		
0326	SPV.0060 Special 24. CURB STOP AND BOX 1-INCH	1.000 EACH	·	·
0328	SPV.0060 Special 25. ABANDON WATER SERVICE	3.000 EACH		
0330	SPV.0060 Special 26. WATERPROOF SANITARY MANHOLE WITH CASTING	3.000 EACH	·	·
0332	SPV.0060 Special 27. SANITARY SEWER SERVICE WYE, 15-INCH BY 6-INCH	3.000 EACH		



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Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0334	SPV.0060 Special 28. CONNECT TO EXISTING SANITARY SERVICE	3.000 EACH		
0336	SPV.0085 Special 10. Water Main Fittings	323.000 LB		
0338	SPV.0090 Special 10. PVC SANITARY SEWER 8- INCH, SDR35	66.000 LF		
0340	SPV.0090 Special 11. PVC SANITARY SEWER 18- INCH, C900	138.000 LF		
0342	SPV.0090 Special 12. WATER MAIN 6-INCH	33.000 LF		
0344	SPV.0090 Special 13. WATER MAIN 8-INCH	163.000 LF		
0346	SPV.0090 Special 14. COPPER WATER SERVICE 1-INCH	35.000 LF	<u></u>	
0348	SPV.0090 Special 15. PVC SANITARY SEWER SERVICE, 6-INCH	152.000 LF	<u></u>	
0350	SPV.0090 Special 16.PVC SANITARY SEWER 15- INCH, SDR 35	153.000 LF		
0352	SPV.0090 Special 17. PVC Sanitary Sewer 8-Inch, C900	100.000 LF	·	
0354	SPV.0105 Special 01. Temporary River Access	LS	LUMP SUM	
0356	SPV.0105 Special 10. SANITARY SEWER BYPASS PUMPING	LS	LUMP SUM	
0358	SPV.0200 Special 10. WATERPROOF SANITARY MANHOLE EXTRA DEPTH	7.200 VF		
	Section: 000	11	Total:	<u> </u>

Total Bid:

PLEASE ATTACH SCHEDULE OF ITEMS HERE