

HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
DT1502 01/2020 s.66.0901(7) Wis. Stats

Proposal Number: **037**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Burnett	8560-01-73	N/A	St Croix River - Danbury; St Croix River Bridge B-07-0006	STH 077

ADDENDUM REQUIRED ATTACHED AT BACK

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

Proposal Guaranty Required: \$40,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: May 10, 2022 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time 55 Working Days	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work: Concrete Deck Overlay, MGS Guardrail, Base Aggregate Dense, Asphaltic Surface, Concrete Curb and Gutter, Epoxy Pavement Marking	For Department Use Only
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

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

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

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

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

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

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

B Submitting Electronic Bids

B.1 On the Internet

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

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

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

NOTARY FOR SURETY

(Date)

(Date)

State of Wisconsin)
) ss.
_____ County)

State of Wisconsin)
) ss.
_____ County)

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

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

(Signature, Notary Public, State of Wisconsin)

(Signature, Notary Public, State of Wisconsin)

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

(Print or Type Name, Notary Public, 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 Contractor
Certificate Holder Wisconsin Department of Transportation

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

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STSP'S Revised January 7, 2022

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 8560-01-73, St Croix River – Danbury, St Croix River Bridge B-07-0006, STH 77, Burnett 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, 2022 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 (20220107)

2. Scope of Work.

The work under this contract shall consist of Structure B-07-0006, concrete masonry, concrete pavement approach slabs, excavation common, base aggregate dense, asphaltic surface, riprap, guardrail, marking, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2022 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

The Notice to Proceed will be issued such that work shall start no earlier than 6:00 AM July 5, 2022.

Roadway Names

Minnesota Highway 48 (MN 48) runs concurrent with Wisconsin State Trunk Highway (STH) 77 on the border bridge. These special provisions refer to the roadway as STH 77. All provisions denoting STH 77 shall also apply to MN 48 and the approach work within Minnesota.

National Park Service Coordination

The National Park Service (NPS) owns lands along the St. Croix River and they responsible for managing recreational uses within the St. Croix National Scenic Riverway (Riverway) which includes the adjoining lands and the St. Croix River.

Maintain access to NPS lands at all times including Thayers Landing entrance (Station 196+75, RT) and the NPS Thayers Landing providing public access to the St. Croix River. Control work operations and do not complete work outside the existing highway right-of-way on NPS lands or within NPS facilities. NPS facilities within or adjacent to the project area should not be used for contractor staging of equipment or project materials, parking of vehicles, and/or portable sanitary facilities for the workers. If any NPS lands are desired for use by the contractor (not anticipated or required by the department), the contractor would be required to coordinate directly with NPS and obtain a Special Use Permit from NPS (typically requires minimum 90-day lead time).

Finish all areas on the project with native seeding (No. 70) and non-netted erosion mats. Netted erosion mats are not allowed. No mulching items are included in the contract, however if mulch is placed for any reason by the contractor, all mulch shall be certified weed-free mulch.

Coordinate with the local NPS representative throughout construction to coordinate activities over and within the St. Croix River. Establish clear lines of communication during the preconstruction meeting. The NPS construction contact will be Facility Manager, Mark Denker, (715) 483-2250, mark_denker@nps.gov. Confirm the NPS representative during the preconstruction meeting.

For all emergencies within the NPS Riverway:

- In case of injury or other situation requiring emergency response, dial 9-1-1.
- For all other emergencies within the Riverway or to report resource damage or issues; please call the NPS Riverway Dispatch at 1-800-PARK-TIP.

WDNR State Forest Coordination

WDNR Governor Knowles State Forest is located adjacent to the project. Maintain access to the state forest lands at all times. Control work operations and do not complete work outside the existing highway right-of-way.

Minnesota State Water Trail Coordination

The St. Croix River is also managed as a State Water Trail by MnDNR. Post any applicable construction warnings at nearby public access points.

Prior to construction, contact Mary Straka, MnDNR, Parks and Trails Division Supervisor at (218) 460-7024, mary.straka@state.mn.us, to post information regarding the construction on the St. Croix River State Water Trails webpage and map.

Small Animal Protection

Install all silt fence with small animal turnarounds as shown on the plans. Monitor the work area for any nesting turtles and remove turtles outside the work area.

Scour Repair in the St. Croix River

Provide riprap materials according to standard spec 606.2.1 to complete the scour repair at the piers and abutments in the St. Croix River except that waste concrete material per standard spec 606.2.1(3) will not be allowed.

Clean all riprap and select crushed materials of all dirt, debris, and dust prior to placement in the St. Croix River.

Place materials from the bridge deck, from a barge, or the abutment slopes under bridge. Place riprap and select crushed materials in a manner to minimize disturbance of the streambed and siltation within the river. Address the proposed method of placement in the ECIP.

Turbidity barrier is provided in the plans for containment of sedimentation that may occur during scour repair. If water conditions do not allow for placement of turbidity barrier, coordinate any changes in proposed erosion control with the department, WDNR, and MnDNR. Address any proposed method(s) of containment in the ECIP.

Do not operate machinery within adjacent wetlands or on the streambed of the St. Croix River.

Mussel Relocation by Others

Endangered and protected mussels are present within the St. Croix River. The construction area of the scour repair in the St. Croix River will be cleared by others prior to August 15, 2022.

If streambed impacts are proposed by the contractor beyond the limits of work shown in the plan, notify the department and Wisconsin DNR contact shown in the plans two months prior to construction to review the proposal requiring additional mussel relocation. A review does not constitute approval. A copy of the original mussel relocation documentation is available from Regional office by contacting Jeff Saxby at (920) 380-2805.

Fish Spawning – In-Water Working Restriction

There shall be no instream disturbance of St. Croix River at Station 191+00 as a result of construction activity under or for this contract, from March 15 to July 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of various fish species.

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.

River Navigation – In-Water Working Restriction

To avoid impacts to St. Croix River users during peak summer recreational periods, do not begin the scour repair work (select crushed materials and riprap) in the St. Croix River prior to 6:00 AM September 6, 2022.

Migratory Birds

Swallow or other migratory bird nests have not been observed on or under the existing structure(s). All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from May 1 to August 31.

During construction if active nests are determined to be present, complete any concrete surface repair work or other work on the underside or interior of the bridge that may impact nests after August 31 to avoid impact to the occupied nests. As a last resort, apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests.

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.

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.

4. Traffic.

General

Maintain at least one lane of traffic with a minimum clear width of 13 feet at all times. Control and reduce traffic to one lane with the use of flagging operations or temporary traffic signals to complete the work. One lane conditions may remain in place during the period identified in the Holiday and Special Event Work Restrictions.

Traffic staging during work operations on Structure B-7-6 is as follows:

- Stage 1 – Locate traffic partially on the eastbound travel lane/shoulder and complete work on the left side of the roadway centerline.
- Stage 2 – Locate traffic partially on the westbound travel lane/shoulder and complete work on the right side of the roadway centerline.

Do not close shoulders on both sides of the roadway at the same time.

Maintain local and emergency traffic at all times.

Maintain access to all private and public entrances within the work zone at all times.

Portable Changeable Message Signs

Install PCMS approaching the project limits as shown in the plans or as directed by the engineer seven calendar days prior to the beginning of project work.

Coordinate with the engineer three business days prior to deploying or changing a message on a PCMS to obtain approval of the proposed message. The engineer will review the proposed message and either approve the message or make necessary changes.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥ 16 feet)	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 77 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, September 2, 2022 to 6:00 AM Tuesday, September 6, 2022 for Labor Day.
stp-107-005 (20210113)

6. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

stp-107-065 (20080501)

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 14 to 16 calendar days in advance of when the prior work will be completed, and the site will be available to the utility owner. Follow-up with a confirmation notice to the engineer and the utility owner not less than three working days before the site will be ready for the utility owner to begin its work.

CenturyLink (aka Lumen) (communications) has existing underground communication facilities along the left side of STH 77 throughout the project limits. The facilities cross the St. Croix River and are attached to the underside of Structure B-07-0006.

CenturyLink will support and protect underground communications facilities at the following locations during construction:

- Station 189+60 to Station 189+90, LT during guardrail post installation, temporary shoring, and wing wall replacement
- Station 192+10 to Station 192+45, LT during guardrail post installation, temporary shoring, and wing wall replacement

Lumen will support and protect the existing communications facility by hand methods. Lumen anticipates the support and protection will be less than one working day at each location.

Northwestern Wisconsin Electric Co. (electricity) has existing overhead electric facilities along the right side of STH 77 from Station 196+80 to the east. No conflicts are anticipated.

7. Other Contracts.

MnDOT is undertaking an asphalt chip sealing project (SP 8821-324) on MN 48 and MN 70 between May and August 2022. The work on MN 48 will extend to the proposed STH 77 bridge approach. Work is planned under flagging conditions.

Coordinate work on the west bridge approach with the MnDOT contractor and MnDOT engineer. Contact Josie Olson, MnDOT Project Manager District 1, (218) 725-2808, josie.olson@state.mn.us to determine assigned construction contacts for the MnDOT project.

8. Work by Others.

Permanent signs are designated for installation or re-installation by MnDOT on the Minnesota approach of the St. Croix River. Coordinate schedules for work at the preconstruction meeting with the following contacts:

Office Contact:

Christian Lawien, PE
Assistant District Traffic Engineer – Operations and Project Manager | District 1
Minnesota Department of Transportation (MnDOT)
1123 Mesaba Ave
Duluth, MN 55811
Office: (218) 725-2816

Field Contact:

Roger Kachelmyer
Office: (218) 729-3945
Mobile: (218) 393-3014

9. 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 Saxby at (608)-380-2805.

stp-107-054 (20210708)

10. Information to Bidders, MnDNR Public Waters Permit.

The department has obtained a Public Waters Permit from MnDNR. 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 Saxby at (608)-380-2805.

11. Environmental Protection, Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice prior to discharge. Submit the proposed means and methods of dewatering for each required location for approval as part of the Erosion Control Implementation Plan (ECIP). Include details of how the intake will be managed to not cause an increase in the background level turbidity prior to treatment and any additional measures necessary to prevent sediments from reaching the project limits or wetlands and waterways.

Guidance on Dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061. This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material and removal of the dewatering system and is incidental to contract work.

12. Environmental Protection, Aquatic Exotic Species Control.

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before 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. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

<http://dnr.wi.gov/topic/invasives/disinfection.html>

Use the following inspection and removal procedures:

1. Before 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 before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
 - 4.1. Washing with ~212 F water (steam clean), or
 - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - 4.3. 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)

13. Erosion Control.

Add the following to standard spec 107.20:

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

Replace topsoil on disturbed areas immediately after grading is completed within those areas. Complete finishing operations, which includes native seed, fertilizer, erosion mat, and any other permanent erosion control measures required, within seven calendar days after the placement of topsoil.

Delineated wetlands are shown on the plans. No work will occur within any delineated wetlands. Protect wetlands adjacent project with silt fence and other erosion control measures designated in the plans. Place any waste or borrow piles adequate distances from wetlands with proper erosion control.

14. Erosion Control Structures.

Within three calendar days after completing the excavation for a substructure unit, place riprap or other permanent erosion control items required by the contract or deemed necessary by the engineer around the unit at a minimum 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 the engineer directs.

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 (20191121)

15. Notice to Contractor, MnDOT Materials Coordination.

Materials selected for the scour repair in the St. Croix River were coordinated with MnDOT. Do not make any material changes without approval of the engineer. Gradations in standard spec 312 and standard spec 606 for the following materials will also meet standard MnDOT requirements.

- Select Crushed Material
- Riprap Heavy
- Riprap Extra-Heavy
- Grouted Riprap Heavy

Materials and installation details for guardrails were coordinated with MnDOT for the Minnesota roadway approach. Provide WisDOT approved materials and hardware for MGS guardrail items and WisDOT approved MGS terminals (MSKT). Install guardrails according to standard spec 614, the plans, and the following on the Minnesota approach:

- Use all steel posts and plastic blockouts
- Use the post spacing shown on the current MnDOT thrie beam transition detail provided at the following link:

https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=12265804)

Submit all material specifications to the engineer for approval prior to delivering and installing these items.

16. Notice to Contractor, NGS Monument.

There is an existing NGS monument located at approximately Station 189+50, RT. There is no proposed grade change over the monument. Protect the monument during construction activities.

If access to the monument will be interrupted during construction or the monument is disturbed by the contractor, contact the following:

Dave Zenk, PE, LS
NOAA/NOS/National Geodetic Survey
University of Minnesota, Geography Department
414A Social Sciences Building
267 19th Ave S
Minneapolis, MN 55455
Office: (612) 626-6175
Mobile: (612) 414-9522

17. Construction Over or Adjacent to Navigable Waters.

The St. Croix River is classified as a federal navigable waterway under standard spec 107.19.

stp-107-060 (20171130)

Waterway Marker Application

Complete bridge repair activities to maintain the existing navigation on the St. Croix River. Place navigational aids to ensure safe passage of watercraft through the work area.

Add the following to standard spec 107.19(3):

A waterway marker permit (Form 8700-058) is required for placing advanced warning signs in the St. Croix River. Additional information on waterway markers and instructions to complete the permit can be found on the Wisconsin DNR website:

<http://dnr.wi.gov/topic/boat/ordinances.html>.

Share a copy of the permit with the designated MnDNR and NPS representatives for informational purposes.

18. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

Notify the following organizations and departments at least 2 business days before road closures, lane closures, or detours are put into effect:

- Burnett County Sheriff's Department, Wisconsin
- Pine County Sheriff's Department, Minnesota
- Wisconsin State Patrol

- Minnesota State Patrol
- Burnett County Highway Department, Wisconsin
- Pine County Public Works Department, Minnesota
- Town of Swiss, Burnett County, Wisconsin
- Town of Ogema, Pine County, Minnesota
- Webster School District, Wisconsin
- Hinckley-Finlayson School District, Minnesota

The Burnett County and Pine County Sheriff's Departments 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor.

19. Abatement of Asbestos Containing Material B-7-6, Item 203.0211.S.01.

A Description

This special provision describes abating asbestos containing material on structures.

B (Vacant)

C Construction

John Roelke, License Number All-119523, inspected Structure B-7-6 for asbestos on May 23, 2018 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: caulk in parapet expansion joints (11 square feet), caulk in abutment joints (8 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 Saxby at (608)-380-2805. 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 before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Jeff Saxby at (608)-380-2805 and DOT BTS-ESS attn: Hazardous Materials Specialist, 5 South S513.12, 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-7-6, STH 77 over St. Croix River
- Site Address: 3.2M W JCT CTH F
- Ownership Information: WisDOT Northwest Region, Superior, 1701 North 4th Street, Superior, WI 54880
- Contact: Jeff Saxby
- Phone: (608)-380-2805
- Age: 38 years. This structure was constructed in 1984.
- Area: 8,272 SF of deck

Insert the following paragraph in Section 6.g.:

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

D Measurement

The department will measure Abatement of Asbestos Containing Material (Structure #) by each structure, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
203.0211.S.01	Abatement of Asbestos Containing Material B-7-6	EACH

Payment is full compensation for submitting necessary forms; removing all asbestos; and for properly disposing of all waste materials.

stp-203-005 (20210708)

20. 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.

TEST	METHOD	VALUE
Flow (inch)	ASTM D-6103	9 min
Compressive Strength (psi)	ASTM D-6024	20-40 @ 14 days 40-80 @ 28 days 80-120 @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days before placement, furnish the engineer with a design mix detailing all components and their proportions in the mix.

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 NUMBER	DESCRIPTION	UNIT
209.0200.S	Backfill Controlled Low Strength	CY

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 (20191121)

21. Asphaltic Surface.

Replace standard spec 465.2 (1) with the following:

Under the Asphaltic Surface bid item submit a mix design. Furnish asphaltic mixture meeting the requirements specified for HMA Pavement Type MT under standard spec 460.2; except the engineer will not require the contractor to conform to the quality management program specified under standard spec 460.2.8.

22. Cleaning Parapets, Item 509.9050.S.

A Description

This special provision describes cleaning the inside faces and top surface of the concrete parapet as the plans show and as the engineer directs.

B (Vacant)

C Construction

C.1 Blast Cleaning Operation

Blast clean the inside face and top surface of the concrete parapet according to SSPC SP-13 and ASTM D4259 for an abrasive blast cleaning to a surface roughness and finish as the engineer directs. Before abrasive blast cleaning operations are to begin for the entire bridge parapet, prepare a representative trial area on the parapet concrete surface, and have the method of blast cleaning approved by the engineer.

C.2 Water Cleaning Operation

After abrasive blast cleaning operations are completed, clean the prepared parapet surface with water according to ASTM D4258. Remove with this water cleaning all dust and loose material from the parapet inside face and top that is to be coated with pigmented surface sealer. Provide an adequate drying time of the parapet inside face and top surface of at least 24 hours before coating with the pigmented surface sealer. Remove all loose concrete, dirt, dust, or blast material that remains on the bridge deck, as the engineer directs.

D Measurement

The department will measure Cleaning Parapets in length by the linear foot of parapet, acceptably cleaned.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.9050.S	Cleaning Parapets	LF

Payment is full compensation for abrasive blast cleaning; for water cleaning; and for all additional clean up of the concrete surface and surrounding bridge deck area.

stp-509-050 (20151210)

23. Seed Mixtures.

Supplement standard spec 630.2.1.5.1.1 (2) 1. as follows:

Provide No. 70 seed grown in western Wisconsin or one of the counties in eastern Minnesota within 60 miles of the project site unless otherwise approved by the department.

24. Temporary Traffic Signals for Bridges (B-7-6).

Supplement standard spec 661.2.3 as follows:

Furnish and install vehicle detection equipment, including connections and accessories inside the contractor-supplied control cabinet, for traffic-actuated operation of the temporary traffic signal. Do not

install the detectors in or on the pavement structure. The controller shall be a "volume-density" type controller, capable of programming the following values:

1. Minimum green time.
2. Maximum passage during green phase.
3. Minimum passage during green phase.
4. Start of reduction of passage from maximum to minimum during green phase.
5. Time to reduce passage from maximum to minimum during green phase.
6. Maximum green time.

Supplement standard spec 661.3.3 as follows:

The contractor shall review signals after programming to assure there are no conflicting movements. Once the temporary signal has been activated, the contractor shall review the timings during the peak hours and notify the department of any recommended timing changes to optimize the traffic signal, if needed.

25. Moving Delineators and Markers, Item SPV.0060.01.

A Description

This special provision describes salvaging existing steel channel delineator posts and reflective markers at the existing guardrail systems and reinstalling.

C Construction

Complete reinstallation of the delineators and markers according to standard spec 633 and as directed by the engineer.

D Measurement

The department will measure Moving Delineators and Markers by each, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Moving Delineators and Markers	EACH

Payment is full compensation for removing and stockpiling existing delineators and markers, reinstalling existing delineators and markers in areas of guardrail.

26. Concrete Curb & Gutter Cure and Seal Treatment, Item SPV.0090.01.

A Description

This work includes treating all newly constructed concrete curb and gutter with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

B Materials

Furnish materials that conform to a clear treating material listed on the current approved WISDOT product list for "Cure and Seal Compounds for Non-Trafficked Surfaces on Structural Masonry".

C Construction

Apply the treating material at the rate as specified in the manufacturer's specifications.

D Measurement

The department will measure the Concrete Curb and Gutter Cure and Seal Treatment by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb & Gutter Cure and Seal Treatment	LF

Payment is full compensation for providing and applying the seal treatment.

27. Select Crushed Material for Travel Corridor, Item SPV.0195.01.

A Description

This special provision describes furnishing and placing select crushed material to fill voids to create a wildlife travel corridor.

B Materials

Furnish select crushed material according to the pertinent requirements of standard spec 312. Material shall be clean and substantially free from material passing the No. 4 (4.75mm) sieve.

C Construction

Place the material after the heavy riprap has been completed. Place material such that voids in the finished surface are three inches or less in any dimension.

D Measurement

The department will measure Select Crushed Material for Travel Corridor by the ton, 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.0195.01	Select Crushed Material for Travel Corridor	TON

Payment for Select Crushed Material for Travel Corridor is full compensation for providing, placing, and shaping the material.

ADDITIONAL SPECIAL PROVISION 4

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

Payment to First-Tier Subcontractors

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

The prime contractor is not allowed to withhold retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

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

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

Make the following revisions to the standard specifications:

415.3.16 Tolerance in Pavement Thickness

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

415.3.16.1 General

- (1) Construct the plan thickness or thicker. The department will accept pavement thickness based on the results of department-performed acceptance testing conforming to:

Magnetic Pulse Induction	CMM 870: ASTM E3209 WTM
Probing.....	CMM 870: WTP C-002
Preplacement Measurement	CMM 870: WTP C-003

415.3.16.2 Pavement Units**415.3.16.2.1 Basic Units**

- (1) Basic unit is defined as a slip formed, single lane, with a minimum lane width of 10 feet, measured, from the pavement edge to the adjacent longitudinal joint; from one longitudinal joint to the next; or between pavement edges if there is no longitudinal joint.

415.3.16.2.2 Special Units

- (2) Establish special units for areas of fillets, intersections, gaps, gores, shoulders, ramps, pavement lanes less than 10 feet wide and other areas not included in basic units.

415.3.16.3 Test Plate Locations

- (1) Place department-furnished test plates. Within 5 business days after paving, enter the sequential number and associated position data into MRS available at:

<http://www.atwoodsystems.com/>

- (2) Contractor will maintain plate location markings for 10 business days after paving.

415.3.16.4 Acceptance Testing**415.3.16.4.1 Basic Units****415.3.16.4.1.2 Magnetic Pulse Induction**

- (1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before testing.
- (3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings falls within the 80 to 50 percent pay range.
- (4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable. Department will determine limits of unacceptable pavement by performing the following:
- The engineer will test each consecutive plate stationed ahead and behind until the thickness test result is plan thickness or greater.
 - The engineer will direct the contractor to core the hardened concrete to determine the extent of the unacceptable area. In each direction, the contractor shall take cores at points approximately 20 feet from the furthest out of specification plate towards the plate that is plan thickness of greater. Once a core is within 80 to 100 percent pay range, the coring is complete and the limits of unacceptable pavement extend from the stationing between the core test results of 80 to 100 percent payment, inclusive of all unacceptable core and plate test results.
 - The contractor shall perform coring according to AASHTO T24. The department will evaluate the results according to AASHTO T148
 - The contractor shall fill core holes with concrete or mortar.

415.3.16.4.2 Special Units**415.3.16.4.2.1 Magnetic Pulse Induction**

- (1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before testing.
- (3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings falls within the 80 to 50 percent pay range.
- (4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the department will measure the second plate in that unit. If both plates are required to be measured, then all six thickness measurements will be averaged for that unit. If the average of the six measurements is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable.

415.3.16.4.2.2 Probing

- (1) The department will measure slip form special units during concrete placement. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will probe 2 random locations within the special unit. The average of the two readings will be the reported measurement for the special unit.

415.3.16.4.2.3 Preplacement Measurement

- (1) The department will measure non-slip form special units before concrete placement.
- (2) Thickness corrections will be made to a conforming thickness by reshaping the base aggregate before the pavement is placed.

415.5.2 Adjusting Pay for Thickness

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

- (1) The department will adjust pay for pavement thickness under the Nonconforming Thickness Concrete Pavement administrative item as follows:

FOR PAVEMENT THINNER THAN PLAN THICKNESS BY:	PERCENT OF THE CONTRACT UNIT PRICE
> 1/4 inch but <= 1/2 inch	80
> 1/2 inch but <= 3/4 inch	60
> 3/4 inch but <= 1 inch	50

- (2) When pavement of unacceptable final thickness is determined, as specified in 415.3.16.4, the department will direct the contractor to either:
 1. Remove and replace unacceptable concrete pavement to the nearest joint with new concrete pavement of conforming thickness. The department will pay once for the area at the full contract price.
 2. If the unacceptable pavement is less than 100 LF, the department may allow the concrete to remain in place without payment for the unacceptable area.

460.2.6 Recovered Asphaltic Binders

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

- (2) The contractor may replace virgin binder with recovered binder up to the maximum percentage allowed under 460.2.5 without further testing. When the design percent asphalt binder replaced exceeds the allowable limits in 460.2.5, the contractor must:
 - Document adjustments made to the mix design in the mix design submittal.
 - Submit test results that indicate the mixture's asphaltic binder meets or exceeds the upper and lower temperature grade requirements the bid item designates.
 - If only one recycled asphaltic material source is used, furnish one of the following:
 - Test results from extracted and recovered binder from the resultant mixture.
 - Blending charts that indicate the resultant mixture's high and low temperature PG as an interpolation of the percent binder replaced between the virgin binder's and the recycled asphaltic material source binder's high and low temperature PG.
 - If two or more recycled asphaltic material sources are used, furnish test results from extracted and

recovered binder from the resultant mixture.

501.2.6 Water

Retitle with the following effective with the November 2021 letting:

501.2.6 Mixing Water

501.2.6.2 Requirements

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

(2) Water from other sources must comply with the following:

Acidity, maximum of 0.1N NaOH to neutralize 200 mL of water; CMM 870: WTP C-001.....	2 mL
Alkalinity, maximum of 0.1N HCL to neutralize 200 mL of water; CMM 870: WTP C-001.....	15 mL
Maximum sulphate (SO ₄); CMM 870: WTP C-001.....	0.05 percent
Maximum chloride; CMM 870: WTP C-001.....	0.10 percent
Maximum total solids; CMM 870: WTP C-001	
Organic.....	0.04 percent
Inorganic.....	0.15 percent

501.3.2.4.2 Air Entrainment

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

(2) Test fresh concrete air content according to AASHTO T152 or AASHTO TP118 at the contract-required frequency and as the engineer directs. Test concrete placed by pumping or belting at the point of discharge from the pump line or belt.

501.3.7.1 Slump

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

- (1) Use a 1-inch to 4-inch slump for concrete used in structures or placed in forms, except as follows:
- Do not exceed a slump of 2 inches for grade E concrete.
 - Increase slump as specified in 502.3.5.3 for concrete placed underwater.
 - If BTS approves a concrete mixture using a superplasticizer, the contractor may increase slump for that mixture to a maximum of 9 inches without exceeding the maximum mix water allowed for that grade.

531.5 Payment

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

(2) Payment for Concrete Masonry Ancillary Structures Type NS is full compensation for providing concrete for non-standard sign structure foundations; and for anchor rod assemblies. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

Replace paragraph five with the following effective with the November 2021 letting:

(5) Payment for the Foundation bid items is full compensation for providing concrete foundations; for anchor rod assemblies; for reinforcing steel; and for embedded conduit and electrical components. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

642.2.2.1 General

Replace paragraph one with the following effective with the November 2021 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. Ensure quality cell phone reception is achievable inside the field office.

701.3.1 General

Replace table 701-1 with the following effective with the November 2021 letting:

TABLE 701-1 TESTING AND CERTIFICATION STANDARDS

TEST	TEST STANDARD	MINIMUM REQUIRED CERTIFICATION (any one of the certifications listed for each test)
Random Sampling	CMM 830.9.2	Transportation Materials Sampling Technician (TMS) TMS Assistant Certified Technician (ACT-TMS) Aggregate Technician I (AGGTEC-I) AGGTEC-I Assistant Certified Technician (ACT-AGG) PCC Technician I (PCCTEC-I) PCCTEC-I Assistant Certified Technician (ACT-PCC) Grading Technician I (GRADINGTEC-I) Grading Assistant Certified Technician (ACT-GRADING)
Sampling Aggregates	AASHTO T2 ^[1] ^[4]	TMS, ACT-TMS, AGGTEC-1, ACT-AGG
Percent passing the No. 200 sieve	AASHTO T11 ^[1]	AGGTEC-I, ACT-AGG
Fine & coarse aggregate gradation	AASHTO T27 ^[1]	
Aggregate moisture content	AASHTO T255 ^[1]	
Fractured faces	ASTM D5821 ^[1]	
Liquid limit	AASHTO T89	
Plasticity index	AASHTO T90 ^[3]	Aggregate Testing for Transportation Systems (ATTS) GRADINGTEC-I, or ACT-GRADING
Sampling freshly mixed concrete	AASHTO R60	PCCTEC-1 ACT-PCC
Air content of fresh concrete	AASHTO T152 ^[2] AASHTO TP118 ^[5]	
Air void system of fresh concrete	AASHTO TP118 ^[5]	
Concrete slump	AASHTO T119 ^[2]	
Concrete temperature	ASTM C1064	
Making and curing concrete specimens	AASHTO T23	
Moist curing for concrete specimens	AASHTO M201	
Concrete compressive strength	AASHTO T22	
Concrete flexural strength	AASHTO T97	
Concrete surface resistivity ^[2]	AASHTO T358	
Voids in aggregate	AASHTO T19	Concrete Strength Tester (CST) CST Assistant Certified Technician (ACT-CST)
Profiling	—	PCCTEC-II PROFILER

^[1] As modified in CMM 860.

^[2] As modified in CMM 870.

^[3] A plasticity check, if required under individual QMP specifications, may be performed by an AGGTEC-I in addition to the certifications listed for liquid limit and plasticity index tests.

^[4] Plant personnel may operate equipment to obtain samples under the direct observation of a TMS or higher.

^[5] Consolidate by rodding.

710.2 Small Quantities

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

- (1) The department defines small quantities as follows:
 - As specified in 715.1.1.2 for class I concrete.
 - Less than 50 cubic yards of class II ancillary concrete placed under a single bid item.
- (2) For contracts with only small quantities of material subject to testing, modify the requirements of 710 as follows:
 1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
 2. Provide one of the following for aggregate process control:
 - Documented previous testing dated within 120 calendar days. Provide gradation test results to the engineer before placing material.
 - Non-random start-up gradation testing.

710.4 Concrete Mixes

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

- (2) At least 7 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:

1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, air content, and SAM number.
2. For cementitious materials and admixtures: type, brand, and source.
3. For aggregates: absorption, SSD bulk specific gravity, wear, soundness, freeze thaw test results if required, and air correction factor. Also include aggregate production records dated within 2 years if using those results in the design. Submit component aggregate gradations, aggregate proportions, and target combined blended aggregate gradations using the following:
 - DT2220 for combined aggregate gradations.
 - DT2221 for optimized aggregate gradations.
4. For optimized concrete mixtures:
 - Complete the worksheets within DT2221 according to the directions.
 - Ensure the optimized aggregate gradations and the optimized mix design conform to WisDOT specifications and pass the built-in tests within DT2221.
 - Verify slip-form mixture workability according to AASHTO TP137 and conformance to specifications through required trial batching.
 - Submit the completed DT2221 to the engineer electronically. Include the trial batch test results with the mix design submittal.

Replace paragraph four with the following effective with the November 2021 letting:

- (4) Prepare and submit modifications to a concrete mix to the engineer for approval 3 business days before using that modified mix. Modifications requiring the engineer's approval include changes in:
 1. Source of any material. For paving and barrier mixes, a source change for fly ash of the same class does not constitute a mix design change.
 2. Quantities of cementitious materials.
 3. Addition or deletion of admixtures. Minor admixture dosage adjustments required to maintain air content or slump do not require engineer review or approval.

710.5.5 Strength

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

- (1) Cast all 6" x 12" cylinders or all 6" x 6" x 21" beams in a set from the same sample. Do not cast more than one set of specimens from a single truckload of concrete. Mark each specimen to identify the lot and subplot or location on the project it represents.

710.5.6 Aggregate Testing

Retitle and replace the entire text with the following effective with the November 2021 letting:

710.5.6 Aggregate Testing During Concrete Production

710.5.6.1 General

- (1) The department will accept gradation based on the results of department-performed acceptance testing.
- (2) The department and contractor will obtain samples using the same method. When belt sampling, contractor personnel shall obtain samples for the department under the direct observation of the department personnel. Contractor will define sampling method in the QMP or abbreviated QMP.

710.5.6.2 Contractor Control Charts

710.5.6.2.1 General

- (1) Test aggregate gradations during concrete production except as allowed for small quantities under 710.2. Required contractor testing will be performed using non-random samples.
- (2) Sample aggregates from either the conveyor belt or from the working face of the stockpiles.
- (3) Sample aggregates within 2 business days before placement for each mix design. Include this gradation on the control charts.
- (4) Report gradation test results and provide control charts to the engineer within 1 business day of obtaining the sample. Submit results to the engineer and electronically into MRS as specified in 701.1.2.7.
- (5) Conduct aggregate testing at the minimum frequency shown based on the anticipated daily cumulative plant production for each mix design. The contractor's concrete production tests can be used for the same mix design on multiple contracts.

TABLE 710-1 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS I

DAILY PLANT PRODUCTION RATE FOR WisDOT WORK	MINIMUM FREQUENCY
Gradation Report Before Placement	
1000 cubic yards or less	one test per day
more than 1000 cubic yards	two tests per day

TABLE 710-2 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS II

MINIMUM FREQUENCY
Gradation Report Before Placement
One test per calendar week of production

710.5.6.2.2 Optimized Aggregate Gradation Control Charts

- (1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the following:
 - 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
 - Sum of volumetric percentages retained on No. 8, No. 16, and No. 30 sieves.
 - Sum of volumetric percentages retained on No. 30, No. 50, No. 100, and No. 200 sieves.
- (2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the volumetric percent retained of the optimized aggregate gradation limits specified in table 501-4.
- (3) Throughout the contract, construct a 4-point running average of the volumetric percent retained for each sieve to determine if the blended aggregate gradation is within the tarantula curve limits specified in table 501-4.

710.5.6.2.3 Combined Aggregate Gradation Control Charts

- (1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
- (2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the percent passing by weight requirements of the combined aggregate gradation limits specified in table 501-4.
- (3) Throughout the contract, construct a 4-point running average of the percent passing by weight for each sieve to determine if the blended aggregate gradation is within the combined aggregate gradation limits specified in table 501-4.

710.5.6.3 Department Acceptance Testing

- (1) Department testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract.
- (2) The department will split each sample, test for acceptance, and retain the remainder for a minimum of 10 calendar days.
- (3) The department will obtain the sample and deliver to regional testing lab in the same day. Department will report gradation test results to the contractor within 1 business day of being delivered to the lab. Department and contractor can agree to an alternative test result reporting timeframe; alternative timeframe is required to be documented in the QMP.
- (4) Additional samples may be taken at the engineer's discretion due to change in condition.

TABLE 710-3 DEPARTMENT GRADATION TESTING FREQUENCY

CONCRETE CLASSIFICATION	MINIMUM DEPARTMENT FREQUENCY
Class I: Pavement	1 test per placement day for first 5 days of placement. If all samples are passing, reduced frequency is applied.
	Reduced frequency: 1 test per calendar week of placement
Class I: Structures	1 test per 250 CY placed <ul style="list-style-type: none"> - Minimum of 1 test per substructure - Minimum of 1 test per superstructure

Class I: Cast-in-Place Barrier	1 test per 500 CY placed
Class II	No minimum testing

710.5.7 Corrective Action

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

710.5.7.1 Optimized Aggregate Gradations

- (1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size, do the following:
 1. Notify the other party immediately.
 2. Perform corrective action documented in the QC plan or as the engineer approves.
 3. Document and provide corrective action results to the engineer as soon as they are available.
 4. Department will conduct two tests within the next business day after corrective action is complete.
 5. If blended aggregate gradations are within the tarantula curve limits by the second department test:
 - Continue with concrete production.
 - Contractor will include a break in the 4-point running average.
 - For Class I: Pavements, department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
 6. If blended aggregate gradations are not within the tarantula curve limits by the second department test:
 - Provide a new mix design with an increased cementitious content.
 - If the mix design already has a cementitious content of 565 or more pounds per cubic yard, provide a new mix design.
 - If the contract requires optimized aggregate gradations under 501.2.7.4.2.1(2), stop concrete production and submit a new mix design.
- (2) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a new mix design.
- (3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

710.5.7.2 Combined Aggregate Gradations

- (1) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by less than or equal to 1.0 percent on a single sieve size, do the following:
 1. Notify the other party immediately.
 2. Perform corrective action documented in the QC plan or as the engineer approves.
 3. Document and provide corrective action results to the engineer as soon as they are available.
 4. Department will conduct two tests within the next business day after corrective action is complete.
 5. If blended aggregate gradations are within the combined aggregate gradation limits by the second department test:
 - Continue with concrete production.
 - Contractor will include a break in the 4-point running average.
 - For Class I: Pavements, department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
 6. If blended aggregate gradations are not within the combined aggregate gradation limits by the second department test, stop concrete production and submit a new mix design.
- (2) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a new mix design.
- (3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

715.3.1.1 General

Replace paragraphs three and four with the following effective with the November 2021 letting:

- (3) Cast a set of 3 additional 6"x12" cylinders and test the concrete surface resistivity according to AASHTO T358. Perform this testing at least once per lot if total contract quantities are greater than or equal to the following:
 - 20,000 square yards for pavements.
 - 5,000 linear feet for barriers.
 - 500 cubic yards for structure concrete.

Submit the resistivity to the nearest tenth into MRS for information only. Resistivity testing is not required for the following:

- Lot with less than 3 sublots.
- Concrete items classified as ancillary.
- Concrete placed under the following bid items:
 - Concrete Pavement Approach Slab
 - Concrete Masonry Culverts
 - Concrete Masonry Retaining Walls
- (4) Test the air void system at least once per lot and enter the SAM number in MRS for information only. SAM testing is not required for the following:
 - For lots with less than 3 sublots.
 - High early strength (HES) concrete.
 - Special high early strength (SHES) concrete.
 - Concrete placed under the following bid items:
 - Concrete Pavement Approach Slab
 - Concrete Masonry Culverts
 - Concrete Masonry Retaining Walls
 - Steel Grid Floor Concrete Filled
 - Crash Cushions Permanent
 - Crash Cushions Permanent Low Maintenance
 - Crash Cushions Temporary

715.3.1.2.3 Lots by Cubic Yard

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

- (1) Define standard lots and sublots conforming to the following:

TABLE 715-1 CLASS I - LOT AND SUBLot SIZES

CONCRETE CLASSIFICATION	LOT SIZE	SUBLot SIZE	NUMBER OF SUBLots PER LOT
Class I: Pavement	1250 cubic yards	250 cubic yards	5
Class I: Structures	250 cubic yards	50 cubic yards	5
Class I: Cast-in-Place Barrier	500 cubic yards	100 cubic yards	5

- (2) The contractor may include sublots less than or equal to 25 percent of the standard volume in the previous subplot. For partial sublots exceeding 25 percent of the standard volume, notify the engineer who will direct additional testing to represent that partial subplot.
- (3) An undersized lot is eligible for incentive payment under 715.5 if the lot has 3 or more sublots for that lot.

715.3.2 Strength Evaluation

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

715.3.2.1 General

- (1) The department will make pay adjustments for strength on a lot-by-lot basis using the compressive strength of contractor QC cylinders or the flexural strength of contractor QC beams.

-
- (2) Randomly select 2 QC specimens to test at 28 days for percent within limits (PWL). Compare the strengths of the 2 randomly selected QC specimens and determine the 28-day subplot average strength as follows:
- If the lower strength divided by the higher strength is 0.9 or more, average the 2 QC specimens.
 - If the lower strength divided by the higher strength is less than 0.9, break one additional specimen and average the 2 higher strength specimens.

715.3.2.2 Removal and Replacement

715.3.2.2.1 Pavement

- (1) If a subplot strength is less than 2500 psi in compressive strength or 500 psi in flexural strength, the department may direct the contractor to core that subplot to determine its structural adequacy and whether to direct removal.
- (2) If the engineer directs coring, obtain three cores from the subplot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24.
- (3) Have an independent consultant test cores according to AASHTO T24.
- (4) The department will assess concrete for removal and replacement based on a subplot-by-subplot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.
- (5) The subplot pavement is conforming if the compressive strengths of all cores from the subplot are 2500 psi or greater.
- (6) The subplot pavement is nonconforming if the compressive strengths of any core from the subplot is less than 2500 psi. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.2.2.2 Structures and Cast-in-Place Barrier

- (1) The department will evaluate the subplot for possible removal and replacement if the 28-day subplot average compressive strength is lower than $f'c$ minus 500 psi. The value of $f'c$ is the design stress the plans show. The department may assess further strength price reductions or require removal and replacement only after coring the subplot.
- (2) The engineer may initially evaluate the subplot strength using a non-destructive method. Based on the results of non-destructive testing, the department may accept the subplot at the previously determined pay for the lot, or direct the contractor to core the subplot.
- (3) If the engineer directs coring, obtain three cores from the subplot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24. Determine core locations, subject to the engineer's approval, that do not interfere with structural steel.
- (4) Have an independent consultant test cores according to AASHTO T24.
- (5) The department will assess concrete for removal and replacement based on a subplot-by-subplot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.
- (6) If the 3-core average is greater than or equal to 85 percent of $f'c$, and no individual core is less than 75 percent of $f'c$, the engineer will accept the subplot at the previously determined pay for the lot. If the 3-core average is less than 85 percent of $f'c$, or an individual core is less than 75 percent of $f'c$, the engineer may require the contractor to remove and replace the subplot. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.3 Aggregate

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

715.3.3.1 General

- (1) Except as allowed for small quantities in 710.2, test aggregate conforming to 710.5.6.

715.3.3.2 Structures

- (1) In addition to the aggregate testing required under 710.5.6, determine the fine and coarse aggregate moisture content for each sample.
- (2) Calculate target batch weights for each mix when production of that mix begins. Whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, adjust the batch weights to maintain the design w/cm ratio.

715.5 Payment

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

715.5.1 General

- (1) The department will pay incentive for compressive strength under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

- (2) Incentive payment may be more or less than the amount the schedule of items shows.
- (3) The department will administer disincentives for strength under the Disincentive Strength Concrete Structures, Disincentive Strength Concrete Barrier, Disincentive Flexural Strength Concrete Pavement, and Disincentive Compressive Strength Concrete Pavement, administrative items.
- (4) The pay factor that is calculated from the equations in 715.5.2(2) and 715.5.3(2) will be applied to the unit costs listed below:
- Pavement: \$45 per SY.
 - Structure: \$635 per CY.
 - Cast-in-place barrier: \$75 per LF.
- (5) 28-day strength average for a lot is the average of the individual subplot strengths within the given lot.
- (6) The department will not pay a strength incentive for concrete that is nonconforming in another specified property, for ancillary concrete accepted based on tests of class I concrete, or for high early strength concrete unless placed in pavement gaps as allowed under 715.3.1.2.2.
- (7) Submit test results to the department electronically using MRS software. The department will validate contractor data before determining pay adjustments.
- (8) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are incidental to the contract.

715.5.2 Compressive Strength

- (1) The department will measure PWL relative to strength lower specification limits as follows:
- Compressive strength of 3700 psi for pavements.
 - Compressive strength of 4000 psi for structures and cast-in-place barrier.

- (2) The department will adjust pay for each lot using equation "Comp2022" as follows:

Percent within Limits (PWL)	Pay Factor (%)
>= 90 to 100	$(1/5 \times \text{PWL}) + 82$
>= 85 to < 90	100
>= 50 to < 85	$(5/7 \times \text{PWL}) + (275/7)$
< 50	50 ^[1]

^[1] Any material resulting in a lot PWL value less than 50 will be evaluated according to 715.3.2. In the event the material remains in place, it will be paid at 50 percent of the contract unit price of the concrete bid item.

- (3) The department will not pay incentive if the lot standard deviation is greater than the following:
- 400 psi for pavement.
 - 350 psi for structure and cast-in-place barrier
- (4) For lots with less than 3 sublots, there is no incentive but the department will reduce pay by 50 percent of the contract unit price for sublots with an average compressive strength below the following:
- 3700 psi for pavements.
 - 4000 psi for structures and cast-in-place barrier.

715.5.3 Flexural Strength

- (1) The department will measure PWL relative to strength lower specification limits as follows:
- Flexural strength of 650 psi for pavements.

- (2) The department will adjust pay for each lot using equation "Flex2022" as follows:

Percent within Limits (PWL)	Pay Factor (%)
>= 90 to 100	$(2/5 \times \text{PWL}) + 64$
>= 85 to < 90	100

>= 50 to < 85
< 50

$(5/7 \times \text{PWL}) + (275/7)$
 $50^{[1]}$

^[1] Material resulting in a lot PWL value less than 50 will be evaluated according to 715.3.2. In the event the material remains in place, it will be paid at 50 percent of the contract unit price of the concrete bid item.

- (3) The department will not pay incentive if the lot standard deviation is greater than 60 psi.
 - (4) For lots with less than 3 sublots, there is no incentive but the department will reduce pay by 50 percent of the contract unit price for sublots with an average flexural strength below 650 psi.
-

ERRATA**460.2.2.3 Aggregate Gradation Master Range****Correct errata by adding US Standard equivalent sieve sizes.**

- (1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm) (1 1/2 inch)	No. 2 (25.0 mm) (1 inch)	No.3 (19.0 mm) (3/4 inch)	No. 4 (12.5 mm) (1/2 inch)	No. 5 (9.5 mm) (3/8 inch)	No. 6 (4.75 mm) (3/16 inch)	SMA No. 4 (12.5 mm) (1/2 inch)	SMA No. 5 (9.5 mm) (3/8 inch)
50.0-mm (2-inch)	100							
37.5-mm (1 1/2-inch)	90 - 100	100						
25.0-mm (1-inch)	90 max	90 - 100	100					
19.0-mm (3/4-inch)	—	90 max	90 - 100	100			100	
12.5-mm (1/2-inch)	—	—	90 max	90 - 100	100		90 - 97	100
9.5-mm (3/8-inch)	—	—	—	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm (No. 4)	—	—	—	—	90 max	90 - 100	25 - 35	35 - 45
2.36-mm (No. 8)	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm (No. 16)	—	—	—	—	—	30 - 55	—	—
0.60-mm (No. 30)	—	—	—	—	—	—	18 max	18 max
0.075-mm (No. 200)	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min ^[1]	15.0 min ^[2]	16.0 - 17.5	16.0 min	17.0 min

^[1] 14.5 for LT and MT mixes.

^[2] 15.5 for LT and MT mixes.

715.5.1 General**Correct the bid item number for Incentive Compressive Strength Concrete Pavement.**

- (1) The department will pay incentive for compressive strength under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

ADDITIONAL SPECIAL PROVISION 7

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

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

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

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

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

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

(2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

Non-discrimination Provisions

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

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

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

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

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

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

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

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

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

Pertinent Non-Discrimination Authorities:

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

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

Effective November 2020 letting

BUY AMERICA PROVISION

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

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

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

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



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0002	201.0105 Clearing	2.000 STA	_____.	_____.
0004	201.0205 Grubbing	2.000 STA	_____.	_____.
0006	203.0211.S Abatement of Asbestos Containing Material (structure) 01. B-7-6	1.000 EACH	_____.	_____.
0008	203.0270 Removing Structure Over Waterway Debris Capture (structure) 01. B-7-6	1.000 EACH	_____.	_____.
0010	204.0100 Removing Concrete Pavement	135.000 SY	_____.	_____.
0012	204.0115 Removing Asphaltic Surface Butt Joints	6.000 SY	_____.	_____.
0014	204.0120 Removing Asphaltic Surface Milling	460.000 SY	_____.	_____.
0016	204.0150 Removing Curb & Gutter	200.000 LF	_____.	_____.
0018	204.0165 Removing Guardrail	320.000 LF	_____.	_____.
0020	204.0190 Removing Surface Drains	2.000 EACH	_____.	_____.
0022	204.0220 Removing Inlets	2.000 EACH	_____.	_____.
0024	204.0245 Removing Storm Sewer (size) 01. 12-Inch	14.000 LF	_____.	_____.
0026	204.0245 Removing Storm Sewer (size) 01. 24-Inch	32.000 LF	_____.	_____.
0028	204.0280 Sealing Pipes	2.000 EACH	_____.	_____.
0030	205.0100 Excavation Common	314.000 CY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0032	206.1000 Excavation for Structures Bridges (structure) 01. B-7-6	LS	LUMP SUM	_____.
0034	209.0200.S Backfill Controlled Low Strength	1.000 CY	_____.	_____.
0036	210.1500 Backfill Structure Type A	160.000 TON	_____.	_____.
0038	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 8560-01-73	LS	LUMP SUM	_____.
0040	213.0100 Finishing Roadway (project) 01. 8560-01-73	1.000 EACH	_____.	_____.
0042	305.0110 Base Aggregate Dense 3/4-Inch	100.000 TON	_____.	_____.
0044	305.0120 Base Aggregate Dense 1 1/4-Inch	550.000 TON	_____.	_____.
0046	312.0115 Select Crushed Material	44.000 CY	_____.	_____.
0048	415.0070 Concrete Pavement 7-Inch	36.000 SY	_____.	_____.
0050	415.0410 Concrete Pavement Approach Slab	80.000 SY	_____.	_____.
0052	416.1010 Concrete Surface Drains	2.000 CY	_____.	_____.
0054	455.0605 Tack Coat	55.000 GAL	_____.	_____.
0056	465.0105 Asphaltic Surface	160.000 TON	_____.	_____.
0058	502.0100 Concrete Masonry Bridges	16.000 CY	_____.	_____.
0060	502.3200 Protective Surface Treatment	860.000 SY	_____.	_____.
0062	502.3210 Pigmented Surface Sealer	197.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0064	502.4205 Adhesive Anchors No. 5 Bar	28.000 EACH	_____.	_____.
0066	505.0600 Bar Steel Reinforcement HS Coated Structures	2,288.000 LB	_____.	_____.
0068	509.0301 Preparation Decks Type 1	60.000 SY	_____.	_____.
0070	509.0302 Preparation Decks Type 2	26.000 SY	_____.	_____.
0072	509.0500 Cleaning Decks	846.000 SY	_____.	_____.
0074	509.1500 Concrete Surface Repair	21.000 SF	_____.	_____.
0076	509.2000 Full-Depth Deck Repair	5.000 SY	_____.	_____.
0078	509.2500 Concrete Masonry Overlay Decks	64.000 CY	_____.	_____.
0080	509.9050.S Cleaning Parapets	442.000 LF	_____.	_____.
0082	511.1200 Temporary Shoring (structure) 01. B-7-6	610.000 SF	_____.	_____.
0084	516.0500 Rubberized Membrane Waterproofing	8.000 SY	_____.	_____.
0086	601.0588 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	245.000 LF	_____.	_____.
0088	601.0590 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	6.000 LF	_____.	_____.
0090	603.8000 Concrete Barrier Temporary Precast Delivered	745.000 LF	_____.	_____.
0092	603.8125 Concrete Barrier Temporary Precast Installed	1,350.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0094	606.0200 Riprap Medium	8.000 CY	_____.	_____.
0096	606.0300 Riprap Heavy	214.000 CY	_____.	_____.
0098	606.0400 Riprap Extra-Heavy	65.000 CY	_____.	_____.
0100	606.0700 Grouted Riprap Heavy	14.000 CY	_____.	_____.
0102	612.0206 Pipe Underdrain Unperforated 6-Inch	40.000 LF	_____.	_____.
0104	612.0406 Pipe Underdrain Wrapped 6-Inch	80.000 LF	_____.	_____.
0106	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.	_____.
0108	614.0905 Crash Cushions Temporary	4.000 EACH	_____.	_____.
0110	614.2300 MGS Guardrail 3	75.000 LF	_____.	_____.
0112	614.2500 MGS Thrie Beam Transition	157.600 LF	_____.	_____.
0114	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.	_____.
0116	618.0100 Maintenance And Repair of Haul Roads (project) 01. 8560-01-73	1.000 EACH	_____.	_____.
0118	619.1000 Mobilization	1.000 EACH	_____.	_____.
0120	624.0100 Water	5.000 MGAL	_____.	_____.
0122	625.0500 Salvaged Topsoil	1,020.000 SY	_____.	_____.
0124	628.1104 Erosion Bales	72.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0126	628.1504 Silt Fence	1,025.000 LF	_____.	_____.
0128	628.1520 Silt Fence Maintenance	1,025.000 LF	_____.	_____.
0130	628.1905 Mobilizations Erosion Control	3.000 EACH	_____.	_____.
0132	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH	_____.	_____.
0134	628.2027 Erosion Mat Class II Type C	1,020.000 SY	_____.	_____.
0136	628.6005 Turbidity Barriers	695.000 SY	_____.	_____.
0138	628.7015 Inlet Protection Type C	3.000 EACH	_____.	_____.
0140	628.7504 Temporary Ditch Checks	45.000 LF	_____.	_____.
0142	628.7555 Culvert Pipe Checks	5.000 EACH	_____.	_____.
0144	629.0210 Fertilizer Type B	0.700 CWT	_____.	_____.
0146	630.0170 Seeding Mixture No. 70	6.000 LB	_____.	_____.
0148	630.0500 Seed Water	15.000 MGAL	_____.	_____.
0150	634.0616 Posts Wood 4x6-Inch X 16-FT	1.000 EACH	_____.	_____.
0152	634.0618 Posts Wood 4x6-Inch X 18-FT	1.000 EACH	_____.	_____.
0154	637.2210 Signs Type II Reflective H	28.000 SF	_____.	_____.
0156	638.2102 Moving Signs Type II	3.000 EACH	_____.	_____.
0158	638.2602 Removing Signs Type II	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0160	638.3000 Removing Small Sign Supports	1.000 EACH	_____.	_____.
0162	638.4000 Moving Small Sign Supports	3.000 EACH	_____.	_____.
0164	642.5001 Field Office Type B	1.000 EACH	_____.	_____.
0166	643.0300 Traffic Control Drums	7,770.000 DAY	_____.	_____.
0168	643.0420 Traffic Control Barricades Type III	380.000 DAY	_____.	_____.
0170	643.0705 Traffic Control Warning Lights Type A	760.000 DAY	_____.	_____.
0172	643.0715 Traffic Control Warning Lights Type C	2,885.000 DAY	_____.	_____.
0174	643.0900 Traffic Control Signs	6,745.000 DAY	_____.	_____.
0176	643.0920 Traffic Control Covering Signs Type II	1.000 EACH	_____.	_____.
0178	643.1050 Traffic Control Signs PCMS	14.000 DAY	_____.	_____.
0180	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0182	645.0111 Geotextile Type DF Schedule A	50.000 SY	_____.	_____.
0184	645.0120 Geotextile Type HR	161.000 SY	_____.	_____.
0186	646.1020 Marking Line Epoxy 4-Inch	2,150.000 LF	_____.	_____.
0188	646.9000 Marking Removal Line 4-Inch	1,340.000 LF	_____.	_____.
0190	649.0150 Temporary Marking Line Removable Tape 4-Inch	8,680.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0192	649.0850 Temporary Marking Stop Line Removable Tape 18-Inch	24.000 LF	_____.	_____.
0194	650.4500 Construction Staking Subgrade	400.000 LF	_____.	_____.
0196	650.5000 Construction Staking Base	370.000 LF	_____.	_____.
0198	650.5500 Construction Staking Curb Gutter and Curb & Gutter	251.000 LF	_____.	_____.
0200	650.6500 Construction Staking Structure Layout (structure) 01. B-7-6	LS	LUMP SUM	_____.
0202	650.7000 Construction Staking Concrete Pavement	30.000 LF	_____.	_____.
0204	650.9910 Construction Staking Supplemental Control (project) 01. 8560-01-73	LS	LUMP SUM	_____.
0206	650.9920 Construction Staking Slope Stakes	400.000 LF	_____.	_____.
0208	661.0100 Temporary Traffic Signals for Bridges (structure) 01. B-7-6	LS	LUMP SUM	_____.
0210	690.0150 Sawing Asphalt	685.000 LF	_____.	_____.
0212	690.0250 Sawing Concrete	37.000 LF	_____.	_____.
0214	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000	500.00
0216	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0218	SPV.0060 Special 01. Moving Delineators and Markers	4.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20220510037 Project(s): 8560-01-73

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
0220	SPV.0090 Special 01. Concrete Curb & Gutter Cure and Seal Treatment	251.000 LF	_____.	_____.
0222	SPV.0195 Special 01. Select Crushed Material for Travel Corridor	14.000 TON	_____.	_____.
	Section: 0001		Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH ADDENDA HERE



Wisconsin Department of Transportation

May 4, 2022

**Division of Transportation Systems
Development**

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

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

NOTICE TO ALL CONTRACTORS:

ASP-6 Addendum #01

Letting of May 10, 2022

Attached is a copy of the revised ASP-6. This ASP-6 replaces ASP-6 in all proposals in the May 10, 2022 Letting.

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

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

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

Make the following revisions to the standard specifications:

415.3.16 Tolerance in Pavement Thickness

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

415.3.16.1 General

- (1) Construct the plan thickness or thicker. The department will accept pavement thickness based on the results of department-performed acceptance testing conforming to:

Magnetic Pulse Induction	CMM 870: ASTM E3209 WTM
Probing.....	CMM 870: WTP C-002
Preplacement Measurement	CMM 870: WTP C-003

415.3.16.2 Pavement Units

415.3.16.2.1 Basic Units

- (1) Basic unit is defined as a slip formed, single lane, with a minimum lane width of 10 feet, measured, from the pavement edge to the adjacent longitudinal joint; from one longitudinal joint to the next; or between pavement edges if there is no longitudinal joint.

415.3.16.2.2 Special Units

- (2) Establish special units for areas of fillets, intersections, gaps, gores, shoulders, ramps, pavement lanes less than 10 feet wide and other areas not included in basic units.

415.3.16.3 Test Plate Locations

- (1) Place department-furnished test plates. Within 5 business days after paving, enter the sequential number and associated position data into MRS available at:

<http://www.atwoodsystems.com/>

- (2) Contractor will maintain plate location markings for 10 business days after paving.

415.3.16.4 Acceptance Testing

415.3.16.4.1 Basic Units

415.3.16.4.1.2 Magnetic Pulse Induction

- (1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before testing.
- (3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings falls within the 80 to 50 percent pay range.
- (4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable. Department will determine limits of unacceptable pavement by performing the following:
- The engineer will test each consecutive plate stationed ahead and behind until the thickness test result is plan thickness or greater.
 - The engineer will direct the contractor to core the hardened concrete to determine the extent of the unacceptable area. In each direction, the contractor shall take cores at points approximately 20 feet from the furthest out of specification plate towards the plate that is plan thickness of greater. Once a core is within 80 to 100 percent pay range, the coring is complete and the limits of unacceptable pavement extend from the stationing between the core test results of 80 to 100 percent payment, inclusive of all unacceptable core and plate test results.
 - The contractor shall perform coring according to AASHTO T24. The department will evaluate the results according to AASHTO T148
 - The contractor shall fill core holes with concrete or mortar.

415.3.16.4.2 Special Units

415.3.16.4.2.1 Magnetic Pulse Induction

- (1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before testing.
- (3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings falls within the 80 to 50 percent pay range.
- (4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the department will measure the second plate in that unit. If both plates are required to be measured, then all six thickness measurements will be averaged for that unit. If the average of the six measurements is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable.

415.3.16.4.2.2 Probing

- (1) The department will measure slip form special units during concrete placement. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) Department will probe 2 random locations within the special unit. The average of the two readings will be the reported measurement for the special unit.

415.3.16.4.2.3 Preplacement Measurement

- (1) The department will measure non-slip form special units before concrete placement.
- (2) Thickness corrections will be made to a conforming thickness by reshaping the base aggregate before the pavement is placed.

415.5.2 Adjusting Pay for Thickness

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

- (1) The department will adjust pay for pavement thickness under the Nonconforming Thickness Concrete Pavement administrative item as follows:

FOR PAVEMENT THINNER THAN PLAN THICKNESS BY:	PERCENT OF THE CONTRACT UNIT PRICE
> 1/4 inch but <= 1/2 inch	80
> 1/2 inch but <= 3/4 inch	60
> 3/4 inch but <= 1 inch	50

- (2) When pavement of unacceptable final thickness is determined, as specified in 415.3.16.4, the department will direct the contractor to either:
 - 1. Remove and replace unacceptable concrete pavement to the nearest joint with new concrete pavement of conforming thickness. The department will pay once for the area at the full contract price.
 - 2. If the unacceptable pavement is less than 100 LF, the department may allow the concrete to remain in place without payment for the unacceptable area.

460.2.6 Recovered Asphaltic Binders

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

- (2) The contractor may replace virgin binder with recovered binder up to the maximum percentage allowed under 460.2.5 without further testing. When the design percent asphalt binder replaced exceeds the allowable limits in 460.2.5, the contractor must:
 - Document adjustments made to the mix design in the mix design submittal.
 - Submit test results that indicate the mixture's asphaltic binder meets or exceeds the upper and lower temperature grade requirements the bid item designates.
 - If only one recycled asphaltic material source is used, furnish one of the following:
 - Test results from extracted and recovered binder from the resultant mixture.
 - Blending charts that indicate the resultant mixture's high and low temperature PG as an interpolation of the percent binder replaced between the virgin binder's and the recycled asphaltic material source binder's high and low temperature PG.
 - If two or more recycled asphaltic material sources are used, furnish test results from extracted and

recovered binder from the resultant mixture.

501.2.6 Water

Retitle with the following effective with the November 2021 letting:

501.2.6 Mixing Water

501.2.6.2 Requirements

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

- (2) Water from other sources must comply with the following:

Acidity, maximum of 0.1N NaOH to neutralize 200 mL of water; CMM 870: WTP C-001.....	2 mL
Alkalinity, maximum of 0.1N HCL to neutralize 200 mL of water; CMM 870: WTP C-001.....	15 mL
Maximum sulphate (SO ₄); CMM 870: WTP C-001.....	0.05 percent
Maximum chloride; CMM 870: WTP C-001.....	0.10 percent
Maximum total solids; CMM 870: WTP C-001	
Organic.....	0.04 percent
Inorganic.....	0.15 percent

501.3.2.2.2 Supplementary Cementitious Material

Replace the entire text with the following effective with the May 2022 letting:

- (1) Replace 15 to 30 percent by weight of the total cementitious material content with approved SCMs for class I concrete as specified in 715.
- (2) Replace a maximum of 30 percent by weight of the total cementitious material content with approved SCMs for class II and class III concrete as specified in 716.
- (3) Limit Class F fly ash sources not on the APL to maximum 15 percent.
- (4) Minimum SCM content may be waived by the engineer.

501.3.2.4.2 Air Entrainment

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

- (2) Test fresh concrete air content according to AASHTO T152 or AASHTO TP118 at the contract-required frequency and as the engineer directs. Test concrete placed by pumping or belting at the point of discharge from the pump line or belt.

501.3.7.1 Slump

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

- (1) Use a 1-inch to 4-inch slump for concrete used in structures or placed in forms, except as follows:
 - Do not exceed a slump of 2 inches for grade E concrete.
 - Increase slump as specified in 502.3.5.3 for concrete placed underwater.
 - If BTS approves a concrete mixture using a superplasticizer, the contractor may increase slump for that mixture to a maximum of 9 inches without exceeding the maximum mix water allowed for that grade.

531.5 Payment

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

- (2) Payment for Concrete Masonry Ancillary Structures Type NS is full compensation for providing concrete for non-standard sign structure foundations; and for anchor rod assemblies. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

Replace paragraph five with the following effective with the November 2021 letting:

- (5) Payment for the Foundation bid items is full compensation for providing concrete foundations; for anchor rod assemblies; for reinforcing steel; and for embedded conduit and electrical components. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

642.2.2.1 General

Replace paragraph one with the following effective with the November 2021 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. Ensure quality cell phone reception is achievable inside the field office.

701.3.1 General

Replace table 701-1 with the following effective with the November 2021 letting:

TABLE 701-1 TESTING AND CERTIFICATION STANDARDS

TEST	TEST STANDARD	MINIMUM REQUIRED CERTIFICATION (any one of the certifications listed for each test)
Random Sampling	CMM 830.9.2	Transportation Materials Sampling Technician (TMS) TMS Assistant Certified Technician (ACT-TMS) Aggregate Technician I (AGGTEC-I) AGGTEC-I Assistant Certified Technician (ACT-AGG) PCC Technician I (PCCTEC-I) PCCTEC-I Assistant Certified Technician (ACT-PCC) Grading Technician I (GRADINGTEC-I) Grading Assistant Certified Technician (ACT-GRADING)
Sampling Aggregates	AASHTO T2 ^[1] ^[4]	TMS, ACT-TMS, AGGTECT-1, ACT-AGG
Percent passing the No. 200 sieve	AASHTO T11 ^[1]	AGGTEC-I, ACT-AGG
Fine & coarse aggregate gradation	AASHTO T27 ^[1]	
Aggregate moisture content	AASHTO T255 ^[1]	
Fractured faces	ASTM D5821 ^[1]	
Liquid limit	AASHTO T89	Aggregate Testing for Transportation Systems (ATTS)
Plasticity index	AASHTO T90 ^[3]	GRADINGTEC-I, or ACT-GRADING
Sampling freshly mixed concrete	AASHTO R60	PCCTEC-1 ACT-PCC
Air content of fresh concrete	AASHTO T152 ^[2] AASHTO TP118 ^[5]	
Air void system of fresh concrete	AASHTO TP118 ^[5]	
Concrete slump	AASHTO T119 ^[2]	
Concrete temperature	ASTM C1064	
Making and curing concrete specimens	AASHTO T23	
Moist curing for concrete specimens	AASHTO M201	
Concrete compressive strength	AASHTO T22	Concrete Strength Tester (CST) CST Assistant Certified Technician (ACT-CST)
Concrete flexural strength	AASHTO T97	
Concrete surface resistivity ^[2]	AASHTO T358	
Voids in aggregate	AASHTO T19	PCCTEC-II
Profiling	—	PROFILER

^[1] As modified in CMM 860.

^[2] As modified in CMM 870.

^[3] A plasticity check, if required under individual QMP specifications, may be performed by an AGGTEC-I in addition to the certifications listed for liquid limit and plasticity index tests.

^[4] Plant personnel may operate equipment to obtain samples under the direct observation of a TMS or higher.

^[5] Consolidate by rodding.

710.2 Small Quantities

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

- (1) The department defines small quantities as follows:
 - As specified in 715.1.1.2 for class I concrete.
 - Less than 50 cubic yards of class II ancillary concrete placed under a single bid item.
- (2) For contracts with only small quantities of material subject to testing, modify the requirements of 710 as follows:

1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
2. Provide one of the following for aggregate process control:
 - Documented previous testing dated within 120 calendar days. Provide gradation test results to the engineer before placing material.
 - Non-random start-up gradation testing.

710.4 Concrete Mixes

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

- (2) At least 7 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:
 1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, air content, and SAM number.
 2. For cementitious materials and admixtures: type, brand, and source.
 3. For aggregates: absorption, SSD bulk specific gravity, wear, soundness, freeze thaw test results if required, and air correction factor. Also include aggregate production records dated within 2 years if using those results in the design. Submit component aggregate gradations, aggregate proportions, and target combined blended aggregate gradations using the following:
 - DT2220 for combined aggregate gradations.
 - DT2221 for optimized aggregate gradations.
 4. For optimized concrete mixtures:
 - Complete the worksheets within DT2221 according to the directions.
 - Ensure the optimized aggregate gradations and the optimized mix design conform to WisDOT specifications and pass the built-in tests within DT2221.
 - Verify slip-form mixture workability according to AASHTO TP137 and conformance to specifications through required trial batching.
 - Submit the completed DT2221 to the engineer electronically. Include the trial batch test results with the mix design submittal.

Replace paragraph four with the following effective with the November 2021 letting:

- (4) Prepare and submit modifications to a concrete mix to the engineer for approval 3 business days before using that modified mix. Modifications requiring the engineer's approval include changes in:
 1. Source of any material. For paving and barrier mixes, a source change for fly ash of the same class does not constitute a mix design change.
 2. Quantities of cementitious materials.
 3. Addition or deletion of admixtures. Minor admixture dosage adjustments required to maintain air content or slump do not require engineer review or approval.

710.5.5 Strength

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

- (1) Cast all 6" x 12" cylinders or all 6" x 6" x 21" beams in a set from the same sample. Do not cast more than one set of specimens from a single truckload of concrete. Mark each specimen to identify the lot and subplot or location on the project it represents.

710.5.6 Aggregate Testing

Retitle and replace the entire text with the following effective with the November 2021 letting:

710.5.6 Aggregate Testing During Concrete Production

710.5.6.1 General

- (1) The department will accept gradation based on the results of department-performed acceptance testing.
- (2) The department and contractor will obtain samples using the same method. When belt sampling, contractor personnel shall obtain samples for the department under the direct observation of the department personnel. Contractor will define sampling method in the QMP or abbreviated QMP.

710.5.6.2 Contractor Control Charts

710.5.6.2.1 General

- (1) Test aggregate gradations during concrete production except as allowed for small quantities under 710.2. Required contractor testing will be performed using non-random samples.

- (2) Sample aggregates from either the conveyor belt or from the working face of the stockpiles.
- (3) Sample aggregates within 2 business days before placement for each mix design. Include this gradation on the control charts.
- (4) Report gradation test results and provide control charts to the engineer within 1 business day of obtaining the sample. Submit results to the engineer and electronically into MRS as specified in 701.1.2.7.
- (5) Conduct aggregate testing at the minimum frequency shown based on the anticipated daily cumulative plant production for each mix design. The contractor’s concrete production tests can be used for the same mix design on multiple contracts.

TABLE 710-1 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS I

DAILY PLANT PRODUCTION RATE FOR WisDOT WORK	MINIMUM FREQUENCY
Gradation Report Before Placement	
1000 cubic yards or less	one test per day
more than 1000 cubic yards	two tests per day

TABLE 710-2 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS II

MINIMUM FREQUENCY
Gradation Report Before Placement
One test per calendar week of production

710.5.6.2.2 Optimized Aggregate Gradation Control Charts

- (1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the following:
 - 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
 - Sum of volumetric percentages retained on No. 8, No. 16, and No. 30 sieves.
 - Sum of volumetric percentages retained on No. 30, No. 50, No. 100, and No. 200 sieves.
- (2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the volumetric percent retained of the optimized aggregate gradation limits specified in table 501-4.
- (3) Throughout the contract, construct a 4-point running average of the volumetric percent retained for each sieve to determine if the blended aggregate gradation is within the tarantula curve limits specified in table 501-4.

710.5.6.2.3 Combined Aggregate Gradation Control Charts

- (1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
- (2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the percent passing by weight requirements of the combined aggregate gradation limits specified in table 501-4.
- (3) Throughout the contract, construct a 4-point running average of the percent passing by weight for each sieve to determine if the blended aggregate gradation is within the combined aggregate gradation limits specified in table 501-4.

710.5.6.3 Department Acceptance Testing

- (1) Department testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract.
- (2) The department will split each sample, test for acceptance, and retain the remainder for a minimum of 10 calendar days.
- (3) The department will obtain the sample and deliver to regional testing lab in the same day. Department will report gradation test results to the contractor within 1 business day of being delivered to the lab. Department and contractor can agree to an alternative test result reporting timeframe; alternative timeframe is required to be documented in the QMP.
- (4) Additional samples may be taken at the engineer’s discretion due to change in condition.

TABLE 710-3 DEPARTMENT GRADATION TESTING FREQUENCY

CONCRETE CLASSIFICATION	MINIMUM DEPARTMENT FREQUENCY
Class I: Pavement	1 test per placement day for first 5 days of placement. If all samples are passing, reduced frequency is applied.
	Reduced frequency: 1 test per calendar week of placement
Class I: Structures	1 test per 250 CY placed <ul style="list-style-type: none"> - Minimum of 1 test per substructure - Minimum of 1 test per superstructure
Class I: Cast-in-Place Barrier	1 test per 500 CY placed
Class II	No minimum testing

710.5.7 Corrective Action

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

710.5.7.1 Optimized Aggregate Gradations

- (1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size, do the following:
 1. Notify the other party immediately.
 2. Perform corrective action documented in the QC plan or as the engineer approves.
 3. Document and provide corrective action results to the engineer as soon as they are available.
 4. Department will conduct two tests within the next business day after corrective action is complete.
 5. If blended aggregate gradations are within the tarantula curve limits by the second department test:
 - Continue with concrete production.
 - Contractor will include a break in the 4-point running average.
 - For Class I: Pavements, department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
 6. If blended aggregate gradations are not within the tarantula curve limits by the second department test:
 - Provide a new mix design with an increased cementitious content.
 - If the mix design already has a cementitious content of 565 or more pounds per cubic yard, provide a new mix design.
 - If the contract requires optimized aggregate gradations under 501.2.7.4.2.1(2), stop concrete production and submit a new mix design.
- (2) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a new mix design.
- (3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

710.5.7.2 Combined Aggregate Gradations

- (1) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by less than or equal to 1.0 percent on a single sieve size, do the following:
 1. Notify the other party immediately.
 2. Perform corrective action documented in the QC plan or as the engineer approves.
 3. Document and provide corrective action results to the engineer as soon as they are available.
 4. Department will conduct two tests within the next business day after corrective action is complete.
 5. If blended aggregate gradations are within the combined aggregate gradation limits by the second department test:
 - Continue with concrete production.
 - Contractor will include a break in the 4-point running average.

- For Class I: Pavements, department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
- 6. If blended aggregate gradations are not within the combined aggregate gradation limits by the second department test, stop concrete production and submit a new mix design.
- (2) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a new mix design.
- (3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

715.3.1.1 General

Replace paragraphs three and four with the following effective with the November 2021 letting:

- (3) Cast a set of 3 additional 6"x12" cylinders and test the concrete surface resistivity according to AASHTO T358. Perform this testing at least once per lot if total contract quantities are greater than or equal to the following:

- 20,000 square yards for pavements.
- 5,000 linear feet for barriers.
- 500 cubic yards for structure concrete.

Submit the resistivity to the nearest tenth into MRS for information only. Resistivity testing is not required for the following:

- Lot with less than 3 sublots.
- Concrete items classified as ancillary.
- Concrete placed under the following bid items:
 - Concrete Pavement Approach Slab
 - Concrete Masonry Culverts
 - Concrete Masonry Retaining Walls

- (4) Test the air void system at least once per lot and enter the SAM number in MRS for information only. SAM testing is not required for the following:

- For lots with less than 3 sublots.
- High early strength (HES) concrete.
- Special high early strength (SHES) concrete.
- Concrete placed under the following bid items:
 - Concrete Pavement Approach Slab
 - Concrete Masonry Culverts
 - Concrete Masonry Retaining Walls
 - Steel Grid Floor Concrete Filled
 - Crash Cushions Permanent
 - Crash Cushions Permanent Low Maintenance
 - Crash Cushions Temporary

715.3.1.2.3 Lots by Cubic Yard

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

- (1) Define standard lots and sublots conforming to the following:

TABLE 715-1 CLASS I - LOT AND SUBLOT SIZES

CONCRETE CLASSIFICATION	LOT SIZE	SUBLOT SIZE	NUMBER OF SUBLOTS PER LOT
Class I: Pavement	1250 cubic yards	250 cubic yards	5
Class I: Structures	250 cubic yards	50 cubic yards	5
Class I: Cast-in-Place Barrier	500 cubic yards	100 cubic yards	5

- (2) The contractor may include sublots less than or equal to 25 percent of the standard volume in the previous subplot. For partial sublots exceeding 25 percent of the standard volume, notify the engineer who will direct additional testing to represent that partial subplot.
- (3) An undersized lot is eligible for incentive payment under 715.5 if the lot has 3 or more sublots for that lot.

715.3.2 Strength Evaluation

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

715.3.2.1 General

- (1) The department will make pay adjustments for strength on a lot-by-lot basis using the compressive strength of contractor QC cylinders or the flexural strength of contractor QC beams.
- (2) Randomly select 2 QC specimens to test at 28 days for percent within limits (PWL). Compare the strengths of the 2 randomly selected QC specimens and determine the 28-day subplot average strength as follows:
 - If the lower strength divided by the higher strength is 0.9 or more, average the 2 QC specimens.
 - If the lower strength divided by the higher strength is less than 0.9, break one additional specimen and average the 2 higher strength specimens.

715.3.2.2 Removal and Replacement

715.3.2.2.1 Pavement

- (1) If a subplot strength is less than 2500 psi in compressive strength or 500 psi in flexural strength, the department may direct the contractor to core that subplot to determine its structural adequacy and whether to direct removal.
- (2) If the engineer directs coring, obtain three cores from the subplot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24.
- (3) Have an independent consultant test cores according to AASHTO T24.
- (4) The department will assess concrete for removal and replacement based on a subplot-by-subplot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.
- (5) The subplot pavement is conforming if the compressive strengths of all cores from the subplot are 2500 psi or greater.
- (6) The subplot pavement is nonconforming if the compressive strengths of any core from the subplot is less than 2500 psi. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.2.2.2 Structures and Cast-in-Place Barrier

- (1) The department will evaluate the subplot for possible removal and replacement if the 28-day subplot average compressive strength is lower than f'_c minus 500 psi. The value of f'_c is the design stress the plans show. The department may assess further strength price reductions or require removal and replacement only after coring the subplot.
- (2) The engineer may initially evaluate the subplot strength using a non-destructive method. Based on the results of non-destructive testing, the department may accept the subplot at the previously determined pay for the lot, or direct the contractor to core the subplot.
- (3) If the engineer directs coring, obtain three cores from the subplot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24. Determine core locations, subject to the engineer's approval, that do not interfere with structural steel.
- (4) Have an independent consultant test cores according to AASHTO T24.
- (5) The department will assess concrete for removal and replacement based on a subplot-by-subplot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.
- (6) If the 3-core average is greater than or equal to 85 percent of f'_c , and no individual core is less than 75 percent of f'_c , the engineer will accept the subplot at the previously determined pay for the lot. If the 3-core average is less than 85 percent of f'_c , or an individual core is less than 75 percent of f'_c , the engineer may require the contractor to remove and replace the subplot. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.3 Aggregate

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

715.3.3.1 General

- (1) Except as allowed for small quantities in 710.2, test aggregate conforming to 710.5.6.

715.3.3.2 Structures

- (1) In addition to the aggregate testing required under 710.5.6, determine the fine and coarse aggregate moisture content for each sample.
- (2) Calculate target batch weights for each mix when production of that mix begins. Whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, adjust the batch weights to maintain the design w/cm ratio.

716.2.1 Class II Concrete

Replace paragraph two with the following effective with the May 2022 letting:

- (2) Perform random QC testing at the following frequencies:
 1. Test air content, temperature, and slump a minimum of once per 100 cubic yards for each mix design and placement method.
 2. Cast one set of 2 cylinders per 200 cubic yards for each mix design and placement method. Cast a minimum of one set of 2 cylinders per contract for each mix design and placement method. Random 28-day compressive strength cylinders are not required for HES or SHES concrete.
 3. For deck overlays, perform tests and cast cylinders once per 50 cubic yards of grade E concrete placed.
 4. For concrete base, one set of tests and one set of cylinders per 250 cubic yards.

The department will allow concrete startup test results for quantities under 50 cubic yards. Cast one set of 2 cylinders if using startup testing for acceptance.

ERRATA

460.2.2.3 Aggregate Gradation Master Range

Correct errata by adding US Standard equivalent sieve sizes.

- (1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm) (1 1/2 inch)	No. 2 (25.0 mm) (1 inch)	No.3 (19.0 mm) (3/4 inch)	No. 4 (12.5 mm) (1/2 inch)	No. 5 (9.5 mm) (3/8 inch)	No. 6 (4.75 mm) (3/16 inch)	SMA No. 4 (12.5 mm) (1/2 inch)	SMA No. 5 (9.5 mm) (3/8 inch)
50.0-mm (2-inch)	100							
37.5-mm (1 1/2-inch)	90 - 100	100						
25.0-mm (1-inch)	90 max	90 - 100	100					
19.0-mm (3/4-inch)	—	90 max	90 - 100	100			100	
12.5-mm (1/2-inch)	—	—	90 max	90 - 100	100		90 - 97	100
9.5-mm (3/8-inch)	—	—	—	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm (No. 4)	—	—	—	—	90 max	90 - 100	25 - 35	35 - 45
2.36-mm (No. 8)	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm (No. 16)	—	—	—	—	—	30 - 55	—	—
0.60-mm (No. 30)	—	—	—	—	—	—	18 max	18 max
0.075-mm (No. 200)	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min ^[1]	15.0 min ^[2]	16.0 - 17.5	16.0 min	17.0 min

^[1] 14.5 for LT and MT mixes.

^[2] 15.5 for LT and MT mixes.

715.5.1 General

Correct the bid item number for Incentive Compressive Strength Concrete Pavement.

- (1) The department will pay incentive for compressive strength under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL