HIGHWAY WORK PROPOSAL

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

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<u>COUNTY</u>	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	<u>HIGHWAY</u>
Sauk	5080-02-74	N/A	Spring Green - Reedsburg; USH 14 to CTH Gg	STH 023
Sauk	5080-02-82	N/A	Spring Green - Reedsburg; Structures B-56-235 & B-56-236	STH 023

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: \$280,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.	
Bid Submittal Date: February 13, 2024 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code SAMPLE	
Contract Completion Time October 22, 2024	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)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

Type of Work:

For Department Use Only

Excavation, Base, HMA Pavement, Concrete Pavement, Culvert Pipes, Curb and Gutter, Sidewalk, Storm Sewer, Beam Guard, Signs, Pavement Marking, Street Lights, Bridge Replacements.

Notice of Award Dated

Date Guaranty Returned

(Bidder Title)

PLEASE ATTACH PROPOSAL GUARANTY HERE

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

BID PREPARATION

Preparing the Proposal Schedule of Items

A. General

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 - 1. Electronic bid on 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 ExpressTM on-line bidding exchange at <u>http://www.bidx.com/</u>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 ExpressTM on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

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

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

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

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

B. Submitting Electronic Bids

B.1 On the Internet

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

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid 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 ExpediteTM 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 ExpressTM 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 ExpediteTM generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name BN00 Proposals: 1, 12, 14, & 22

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the 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 ExpediteTM generated schedule of items is not the same on each page.
 - 2. The check code printed on the printout of the ExpediteTM generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
 - 3. The diskette or CD ROM is not submitted at the time and place the department designates.

B Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

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

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

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

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

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

PRINCIPAL	
(Company Name) (Affix Corporate Seal)	
(Signature and Title)	
(Company Name)	
(Signature and Title)	
(Company Name)	
(Signature and Title)	(Name of Surety) (Affix Seal)
(Company Name)	(Signature of Attorney-in-Fact)
(Signature and Title)	
NOTARY FOR PRINCIPAL	NOTARY FOR SURETY
(Date)	(Date)
State of Wisconsin)	State of Wisconsin)
) ss. County)) 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

ime Period Valid (From/To)
lame of Surety
lame 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)

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

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

Instructions for Certification

- 1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
- 4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
- 7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

<u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered</u> <u>Transactions</u>

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

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STSP'S Revised June 29, 2023 SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 5080-02-74, Spring Green – Reedsburg, USH 14 to CTH GG, STH 23, Sauk County, Wisconsin; and Project 5080-02-82, Spring Green – Reedsburg, Structures B-56-235 & B-56-236, STH 23, Sauk County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2024 Edition, as published by the department, and these special provisions.

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

100-005 (20230629)

2. Scope of Work.

The work under this contract shall consist of grading, asphaltic surface milling, cold-in-place recycling, HMA pavement, base aggregate dense, culvert pipes, guardrail, erosion control, traffic control, pavement markings, new Structure B-56-235, new Structure B-56-236, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. **Prosecution and Progress.**

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

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the approved start date.

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

Culvert Pipes:

Complete the culvert pipes first. Stage the pipes so that no two culvert sites will be closed to local traffic in an area where adjacent land access may be landlocked. Limit the culvert pipe replacements to a maximum of two-day road closure at each culvert pipe replacement.

Milling, Cold-In-Place Recycling (CIR), and Lower Layer Paving:

Complete the 2-inch initial milling, CIR, and lower layer paving next, with the road closure and detour remaining in place. CIR work shall be completed only between May 1 and October 1 of the year of construction. After the 2-inch initial milling, traffic may operate on the milled surface for no more than 7 continuous calendar days. Then, after the CIR operation, pave the lower layer of HMA Pavement within 96 hours. Stage construction operations to minimize trucking on the CIR surface. If the lower level HMA paving work is not completed within 96 hours, then cease all work on the project until the paving work is completed. Delays in the paving timeframe may be granted at the discretion of the engineer based on project conditions. No additional contract time will be granted while the work of the project is temporarily stopped waiting for the paving work to resume. These timeframes do not apply in Excavation Below Subgrade (EBS) areas.

Work on STH 23 in the area of Highland Road will be limited as follows to allow maximum duration for emergency vehicles to access Highland Road from the north. STH 23 will continue to remain closed to through and local traffic with a hard closure between Valley View Rd and CTH GG during construction of the two bridges. Maintain existing or base course or final paved surface for emergency vehicles from the north project end to and including Highland Road throughout construction, except as follows. Highland Road and STH 23 to the north may be closed for up to 10 calendar days to remove the existing asphalt, install small pipe culverts, install borrow, and place base course. Highland Road and STH 23 to the north

will then be made available to emergency vehicles. Contact the Sauk County Emergency Management Director and the village of Plain Fire & EMS five days prior to the 10 calendar day closure.

Contact Staci Peetz, owner of the Beauty Justice business at the NW corner of the CTH B/Main St./STH 23 intersection, at (608) 546-1022 one week prior to work on the curb ramp and sidewalk in front of that business. Closure of the sidewalk at the business entrance will be allowed only on any Tuesday, or as coordinated with Ms. Peetz. The sidewalk at the entrance shall be completed and opened by Wednesday morning at 8:00 AM or as coordinated with Ms. Peetz.

Fish Spawning

There shall be no instream disturbance of Honey Creek at Station 763+71 as a result of construction activity under or for this contract, from September 15 to May 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of fish.

There shall be no instream disturbance of Shannahan Valley Creek at Station 759+64 as a result of construction activity under or for this contract, from March 1 to June 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of fish.

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

Migratory Birds

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

See below for information on affected structure(s). As a last resort, apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds or clearing nests from all structures before the nests become active in early spring.

Either prevent active nests from becoming established or prevent birds from nesting by installing and/or maintaining one suitable deterrent device on the following structure(s) prior to nesting activity under the bid item Maintaining Bird Deterrent System:

- B-56-137, Station 759+68
- B-56-138, Station 763+71

The structure(s) has an existing deterrent that was installed by Sauk County.

Northern Long-eared Bat (Myotis septentrionalis)

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

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

The department has contracted with others and will perform the following operations after October 31 and prior to April 1:

• Cutting down and removing trees.

Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

Ornate Box Turtle (Terrapene Ornata)

Ornate Box Turtles, a state endangered species, are known to inhabit the oak savannas, and open to semi-open woodlands along the project. It is reasonable to assume that Ornate Box Turtles may be present at or near the project site during construction, Station 239+00 to Station 250+00 LT and RT.

All individuals working on the project from Station 239+00 – Station 250+00 LT and RT shall receive training, provided by WisDOT, on how to identify Ornate Box Turtles and conservation measures associated with an Incidental Take Authorization. Contact Anna Jahns, Southwest Regional Environmental Coordinator at (608) 785-9961 to schedule training prior to beginning the project.

Protect the perimeter of this area of the project to be disturbed with temporary small animal turn-around silt fence after May 1 to discourage turtles from entering the work area. Do not install fence prior to May 1. The site must be monitored for removals prior to any work in the area, including prior to fence installation. Survey the area for turtles behind the silt fence and notify Anna Jahns, WisDOT environmental coordinator, at (608) 785-9961 one month in advance of when work will begin in this area. WisDOT will remove all turtles confined within the project area before any site disturbance. Complete the survey of construction areas periodically throughout the construction period.

The temporary small animal turn-around fence shall be installed during the species' active season (May 1 – September 15) in the area from Station 239+00 – Station 250+00 LT and RT. The temporary small turn-around shall be installed with a qualified monitor onsite and inspected immediately prior to each operation of work. The fence shall be maintained in this area until the project work is completed.

A qualified biologist, provided by WisDOT, shall be on site during project work in the area from Station 239+00 – Station 250+00 LT and RT. Contact Anna Jahns, Southwest Regional Environmental Coordinator at (608) 785-9961 10 days prior to the preconstruction meeting. The biologist shall be on site prior to any ground disturbance. Removals of the Ornate Box Turtle will be conducted by the biologist, daily, prior to any project related disturbance for the day. All Ornate Box Turtles observed within the disturbance area shall be removed, recorded daily, and reported to DNR. All dead Ornate Box Turtles found on site throughout the course of the project shall be recorded (species, approximate age, and possible cause of death), photographed, and reported to DNR.

4. Traffic.

Close STH 23 to through traffic between the project limits throughout the duration of the project. Post all detour signs and devices as shown on the plans. Provide a detour route as shown in the plans.

The ID 5080-02-82, bridge project, will require a hard closure when the bridges are removed. Flagging on STH 23 from the intersection of USH 14 to the village of Plain may be required.

Provide the Sauk County Highway Department, the Sauk County Sheriff's Department, the Wisconsin State Patrol, the towns of Franklin and Spring Green, the villages of Spring Green and Plain, and the engineer a current telephone number which the contractor or his representatives can be contacted during non-working hours in the event a safety hazard develops. Also contact the above listed parties, as well as local emergency services, local school districts (to discuss bus routes), and the post office, prior to starting work and at critical times, such as traffic switches, detours, and road closures to inform them of traffic modifications to their routes.

Submit to the engineer for approval, a detailed traffic control plan if different than the traffic control plan provided in the Plans. Submit this plan to the engineer 14 working days prior to anticipated use.

Do not perform construction operations until all traffic control devices for such work are in proper location.

Maintain access to all businesses and private properties at all times. Additional intermediate construction staging or staging gaps, not shown on the plans, may be necessary to maintain continuous access to all properties. If the contractor coordinates the closure of any access to a business or private property with the owner(s), provide written documentation of coordination with the owner(s) to the engineer.

Wisconsin Lane Closure System Advance Notification

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

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
Shoulder Closures	3 calendar days
Lane closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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 23 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, May 24, 2024 to 6:00 AM Tuesday, May 28, 2024 for Memorial Day;
- From noon Wednesday, July 3, 2024 to 6:00 AM Monday, July 8, 2024 for Independence Day;
- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day.

stp-107-005 (20210113)

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.

Project 5080-02-74

No conflicts anticipated with the following utilities:

Alliant Energy – Gas

Alliant Energy has underground gas lines from the beginning of the project that run north along STH 23 to the intersection with Timberline Road. The gas line heads east and exits the project. No conflicts are anticipated with this line.

Alliant Energy has an underground gas line that runs along the south side of Cherry St. to the intersection with STH 23. At the intersection, the underground line crosses Cherry St. to the north and then crosses STH 23 to the east near Station 484+66. The line then exits the project along Westbrook Dr. No conflicts are anticipated with this line.

Alliant Energy has an underground gas line that runs along Cedar St. The line crosses STH 23 at Station 498+36. On the east side of STH 23, the gas line heads north to Station 499+81 and then exits the project heading east. No conflicts are anticipated with this line.

Alliant Energy has an underground gas line that enters the project at Willow St. on the east side of STH 23 and heads north to Kraemer Ave. The gas line splits and heads east along Kraemer Ave. out of the project limits and also heads west along Leed Pkwy exiting the project. No conflicts are anticipated with this line.

American Transmission Company (ATC) - Electric

ATC has no anticipated conflicts in the project.

Northern Natural Gas Company

Northern Natural Gas Company has an underground gas line that crosses STH 23 at approximately Station 176+00. No conflicts are anticipated with this line.

Prairie Sanitation District

Prairie SD has two underground lines that cross STH 23 near Station 148+30. No conflicts are anticipated.

Sauk County Building Services

Sauk County Building Services has two underground lines that enter the project along the north side of Jones Rd that cross STH 23 and turn south to run along the west side of STH 23. No conflicts are anticipated with these lines.

Sauk County Building Services has two underground lines that enter project along the north side of CTH GG then turn north along the west side of STH 23 and exit the project. No conflicts are anticipated with these lines.

Village of Plain – Water

The village has no conflicts with the project.

Village of Plain – Sanitary Sewer

The village has no conflicts with the project.

Windstream KDL

Windstream KDL has an underground line that runs along the east side of STH 23 from the project beginning to CTH G where it crosses STH 23 and exits the project. No conflicts are anticipated with this line.

Utility relocations with the following utilities as described below.

Alliant Energy – Electric

Alliant Energy has overhead facilities that begin at the intersection of STH 23 and USH 14. The overhead line follows STH 23 north to approximately Jones Rd where the line then exits the project but parallels STH 23 to the north. At Timberline Rd there is an underground line that enters the project and runs north along STH 23 about 400 feet and ends. No conflicts are anticipated with these lines.

The paralleling line re-enters the project near Station 215+00 and runs north along STH 23 to the end of the project. There is an existing pole at Station 488+45 LT that will be relocated to approximately Station 488+60 LT. There is another existing pole at Station 730+41 RT that will be relocated to Station 730+75 RT. These relocations have been completed.

Frontier

Frontier has multiple buried lines along and crossing STH 23 throughout the entire project length. Frontier will replace a fiber cable on the west side of STH 23 near Dawn Road from approximately Station 730+00 – Station 732+00. This will be completed prior to construction in April 2024 and will take approximately 5 days to complete.

Reedsburg Utility Commission – Fiber Optic

Reedsburg Utility Commission (RUC) has underground fiber optic lines from the beginning of the project to the end of the project. RUC will adjust a fiber pedestal at approximately Station 550+50 LT and a fiber hand-hole at approximately Station 502+00 LT. These will be adjusted after final grade is established. This will take approximately 3 days to complete. Notify RUC of any adjustments that need to be made during construction.

Spectrum – Communication

Spectrum has overhead lines at the beginning of the project that are on Alliant's poles. The overhead lines follow Alliant's poles to Snyder Rd. Just south of Snyder Rd Spectrum has an underground line that heads west from Alliant's poles to STH 23. At STH 23, the line heads north to Timberline Rd and then exits the project heading east along Timberline Rd. No conflicts are anticipated with this line.

Spectrum's overhead line reenters the project on Alliant's poles near Station 215+00. The line follows Alliant's poles to Leed Pkwy just north of Plain and exits the project. No conflicts are anticipated with this line.

Spectrum has a buried line that enters the project at Cherry St. The line heads north along STH 23 on the west side to Leed Pkwy. From Station 483+00 to Station 486+25 this line will be discontinued. From Station 493+40 to Station 508+25, the coax and fiber will be discontinued. A new aerial line will be installed on Alliant's pole at Station 493+20 LT diagonally to County B exiting the project. A new aerial line will be installed on Alliant's poles from Station 501+50 to Station 507+00 RT. At the pole near Station 507+00 RT, Spectrum will riser down the pole and bore across STH 23 at a depth of 36 inches to an existing pedestal at Station 508+25 LT. This work will begin in January/February 2024 and take approximately 60 days to complete.

Project 5080-02-82

No conflicts anticipated with the following utilities:

Alliant Energy – Electric

Alliant Energy has overhead facilities along STH 23 from the beginning of the project to the end of the project. There is an overhead line that heads east along Highland Rd exiting the project. No conflicts are anticipated with these lines.

Utility relocations with the following utilities as described below.

Frontier

Frontier has underground facilities along STH 23 from the beginning of the project to the end of the project. The line begins on the east side of STH 23 and runs north to a pedestal at Station 766+21, 46' RT. At this pedestal, one line crosses STH 23 and then heads north along the west side of STH 23. A second line heads east along Highland Rd out of the project limits. This pedestal will be removed and installed at Station 766+25 RT at the new right-of-way corner. This will be completed prior to construction in Dec 2023/Jan 2024 and take approximately 5 days to complete.

Reedsburg Utility Commission – Fiber Optic

Reedsburg Utility Commission (RUC) has underground fiber optic lines from the beginning of the project to the end of the project. RUC has pedestals near Station 757+75 LT and Station 768+00 LT that will be adjusted after construction. Notify RUC prior to work in these areas.

7. Work By Others.

The village of Plain has a local project on Cedar Street that will be constructed during the STH 23 project. Coordinate with the village for work at the intersection of STH 23 / Cedar St. Contact John Ruhland, Director of Public Works, Village of Plain, (608) 588-5465 or <u>jruhland@villageofplain.com</u>.

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

The department has received written verification of coverage under the Section 404 Transportation Regional General Permit from the U.S. Army Corps of Engineers. 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 Mahesh Shrestha at (608) 245-2674.

If the contractor requires work outside the proposed slope intercepts, based on their method of operation to construct the project, it is the contractor's responsibility to determine whether a U.S. Army Corps of Engineers Section 404 permit modification is required. If a Section 404 permit modification is necessary, obtain the permit modification prior to beginning construction operations requiring the permit. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the permit modification. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit modification request.

stp-107-054 (20230629)

9. Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-02). The permit can be found at:

https://widnr.widen.net/s/s5mwp2gd7s/finalsignedwisdotcsgp

A certificate of permit coverage is available from the regional office by contacting Mahesh Shrestha at (608) 245-2674. Post the permit certificate in a conspicuous place at the construction site.

stp-107-056 (20230629)

10. Information to Bidders, Incidental Take Authorization, Ornate Box Turtle.

The department has received written approval from WDNR for an Incidental Take Authorization for potential impacts to the Ornate Box Turtle, a state endangered species, that may be present at or near the project from Station 239+00 to Station 250+00 LT and RT. Comply with the requirements of the authorization in addition to requirements of the special provisions. A copy of the authorization is available from the regional office by contacting WisDOT project manager Mahesh Shrestha at (608) 245-2674.

If the contractor, based on their method of operation to construct the project, requires work outside the proposed slope intercepts shown on the plans, coordinate with WDNR and determine if an Incidental Take Authorization modification is required. If an Incidental Take Authorization modification is necessary, obtain the authorization modification prior to beginning construction operations requiring the modification. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the authorization modification. The contractor must be aware that WDNR may not grant the authorization modification request.

At the driveway to the State Natural Area at Station 240+69 RT and the field entrance at Station 242+11 LT, erosion bales shall be placed across the driveways, with the associated sign, as shown on the plans. Maintain the bale and sign placement as shown on the plans at all times during the project.

The erosion control treatment from Station 239+00 – Station 250+00 LT and RT, as shown on the plans, is required for the Incidental Take Authorization.

Upon completion of the project, all areas of disturbance shall be restored to pre-existing conditions. See the plan details for the types of seed mix required from Station 239+00 – Station 250+00 LT and RT and they shall be installed and maintained per the Incidental Take Authorization.

Additional activities may occur in the project area from Station 239+00 – Station 250+00 LT and RT following road construction. Coordinate this work with the Southwest Regional Environmental Coordinator, Anna Jahns at (608) 785-9961.

Approval of any modifications to the plans or these special provisions or Incidental Take Authorization shall be obtained from the DNR. The contractor must be aware that WDNR may not grant the modification request.

11. 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)

12. Environmental Protection, Dewatering.

Supplement standard spec 107.18 as follows:

If dewatering is required, the water must be treated to remove suspended solids before it is allowed to enter any waterway or wetland. Provide a settling basin, or other suitable means approved by the engineer, with sufficient capacity and size to provide an efficient means to filter the water from the dewatering operation before it is discharged back into the stream as provided in the standard specifications and these special provisions. Direct discharge into the stream will not be permitted. Treatment practices may include the use of a polymer in conjunction with the dewatering mechanism, as approved by the engineer.

In addition, conform to dewatering guidelines of WisDNR Storm Water Management Technical Standards, Code # 1061, "Dewatering". This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/documents/Dewatering_1061.pdf

All work and materials associated with water treatment and/or dewatering will be included in the Excavation for Structures bid item. This shall include furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material, removal of the settling basins after completion of dewatering operations, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work according to the contract.

13. 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)

14. Archaeological Site.

47SK248/BSK-0277 (Correspondence Mounds) site is located approximately Station 508+00 – Station 520+80 RT within the limits shown on the plans.

47SK287/BSK-0281 (Snake Pond Mounds and Gardens) site is located approximately Station 216+00 – Station 223+50 LT and RT within the limits shown on the plans.

47SK244 (unnamed site) site is located approximately Station 760+00 – Station 765+00 LT and RT within the limits shown on the plans.

Notify the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities beyond the existing backslope intercept. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area. WisDOT has requested authorization to work within the burial sites.

If the archaeologist monitor is needed, the monitor must be invited to the Pre-construction meeting.

Do not use the site for borrow or waste disposal. Do not use the site area not currently capped by asphalt/concrete for the staging of personnel, equipment and/or supplies.

15. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following sites:

- 1. Station 139+81 to 140+50 from 33 feet RT of centerline to 150 feet RT of centerline.
- 2. Station 141+41 to 142+46 from 33 feet RT of centerline to 150 feet RT of centerline.
- 3. Station 489+50 to 492+50 from 19.50 feet RT of centerline to 70 feet RT of centerline.
- 4. Station 500+00 to 501+50 from 28 feet LT of centerline to 60 feet LT of centerline.

The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting Mahesh Shrestha, 2101 Wright Street, Madison, WI 53704, (608) 245-2674.

stp-107-100 (20230113)

16. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials, and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and no further meetings will be required unless directed by the engineer. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least two weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

17. Removing Inlet Covers, Item 204.9060.S.01.

A Description

This special provision describes removing inlet covers conforming to standard spec 204.

- **B** (Vacant)
- C (Vacant)

D Measurement

The department will measure Removing Inlet Covers as each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Inlet Covers	EACH
stp-204-025 (20230113)	

18. Removing Post, Item 204.9060.S.02.

A Description

This special provision describes removing post conforming to standard spec 204.

- B (Vacant)
- C (Vacant)

D Measurement

The department will measure Removing Post as each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBERDESCRIPTION204.9060.S.02Removing Poststp-204-025 (20230113)

UNIT EACH

19. Removing Concrete Retaining Wall and Header, Item 204.9180.S.01.

A Description

This special provision describes removing concrete retaining wall and header conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Concrete Retaining Wall and Header in square yards, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9180.S.01	Removing Concrete Retaining Wall and Header	SY

stp-204-025 (20230113)

20. Prepare Foundation for CIR Base Layer 5080-02-74, Item 211.0700.S.01.

A Description

This special provision describes the preparation of foundation for work required prior to Cold In-Place Recycling (CIR) according to standard spec 211 and as hereinafter provided.

B (Vacant)

C Construction

After any contract required surface milling, and immediately prior to commencing CIR operations, remove from the roadway, and up to one inch below the milled surface, any vegetation, standing water, loose crack filler, and any other deleterious materials.

D Measurement

The department will measure Prepare Foundation for CIR Base Layer as each individual project, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION211.0700.S.01Prepare Foundation for CIR Base Layer 5080-02-74EACH

Replace standard spec 211.5.1 (4) with the following:

(4) Payment is full compensation for brooming and crack fill removal.

The department will pay separately for the following work associated with yielding areas under this item under the following contract items:

- Base Repair for CIR Layer.

stp-211-020 (20191121)

21. Base Repair for CIR Layer, Item 211.0800.S.

A Description

This special provision describes base repair for Cold In-Place Recycling (CIR) layer according to standard spec 211, and as hereinafter provided.

B (Vacant)

C Construction

After any contract required surface mill, the engineer and contractor shall visually inspect the milled surface for yielding areas.

Yielding areas will then be repaired prior to the CIR process. The identified yielding areas will be excavated to a maximum of 2 feet, repaired with base course, and a minimum of 5 inches of milled and re-laid pavement material or asphaltic surface in the upper layer.

Add the following to standard spec 211.3.5:

Prior to and during the placement of the CIR layer the contractor shall also be responsible for the work covered under this item.

Perform work under this bid item according to standard spec 205.

Remove soft and/or yielding areas of base to a maximum depth of 2-feet. All areas will be documented, and information will be provided to the engineer. If areas are found after paving operation begin, the engineer will be notified of locations. Excavated area will be filled and compacted with material that meets the material requirements of standard spec 305 and Base Aggregate Dense 1 ¹/₄-inch, or standard spec 330 and Mill and Relay, or standard spec 465 and Asphaltic Surface.

Do not exceed plan quantity without written approval from the engineer.

D Measurement

The department will measure Base Repair for CIR Layer by the cubic yard, 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
211.0800.S	Base Repair for CIR Layer	CY

Payment is full compensation for removing and excavating areas of base to a maximum of 2 feet; required saw cuts; providing, placing, and compacting dense graded base course; milling and relaying pavement; asphaltic surfacing; and traffic control.

stp-211-030 (20200629)

22. Base Aggregate Dense ³/₄-Inch, Item 305.0110.

Add the following to standard spec 301.2.4.3:

Furnish only aggregate classified as crushed stone for Dense 3/4-Inch when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

swr-305-001 (20170711)

23. Cold In-Place Recycling (CIR) Asphaltic Base Layer, Item 327.1000.S; Asphalt Stabilizing Agent, Item 455.0770.S.

A Description

⁽¹⁾ This work consists of the milling, crushing, and screening (as necessary) of the existing hot mix asphalt (HMA) pavement to the width and depth specified on the plans. The processed material shall be blended with foamed asphalt stabilizing agent, water, and other additives as necessary, and required by the mix design, for placement and compaction of this mixture according to the plans and specifications.

B Materials

B.1 Reclaimed Asphalt Pavement (RAP) Material

- (1) The RAP material shall be milled from the existing roadway and processed in place.
- (2) The RAP shall be free of contamination including a base material, aggregate shoulder material, concrete, silt, clay, or other deleterious materials unless specified in the plan.
- (3) Rubberized crack filler, pavement markers, loop wires, fabric, or other materials shall be removed as observed from the roadway during the recycling process. Any residual materials shall be appropriately sized and homogenously blended with the RAP. No rubberized crack filler or fabric piece may have a dimension exceeding a length of 4 inches.
- (4) The milled and processed material shall conform to the following gradation:

<u>Sieve Size</u>	Percent Passing	
2"	100	
1 1⁄2"	98 to 100	
1"	95 to 100	

B.2 Stabilizing Agent

(1) The asphalt stabilizing agent used for Cold In-Place Recycling (CIR) Asphalt Base Layer shall be foamed asphalt.

B.2.1 Foamed Asphalt

- (1) Foamed asphalt shall be produced with a performance graded asphalt binder; without polymer modification; according to standard spec 455.
- (2) Asphalt binder performance grade for foamed asphalt shall be PG 46-34 or PG 52-34. Ensure that the material is furnished by a supplier from the <u>Combined State Binder Group Certified Supplier List.</u>
- (3) Asphalt binder shall be sufficiently heated to meet the mix design expansion and half-life criteria; not to exceed 375° F.
- (4) Asphalt binder shall produce asphalt foam with a minimum expansion ratio of 8, and a half-life of no less than 6 seconds.

B.2.2 Water

- (1) Water may be added to the RAP at the milling head and/or in a mixing chamber.
- (2) Water added to the RAP, used for foaming asphalt, shall be free of sediment and deleterious materials.

B.3 Mixture Design

- (1) The contractor shall be responsible for obtaining milled samples and/or cores for the project mix design.
- (2) Core samples shall be obtained at a minimum frequency of 0.5 lane-mile. Cores shall be obtained from the area to be recycled including the shoulder. Samples obtained by coring should be enough to develop the mix design.
- (3) Samples for mix design obtained by milling shall be taken from at least 3 different locations directly from the area to be recycled.
- (4) All samples shall represent the entire depth of the layer to be recycled.
- (5) Develop and submit a material sampling plan for review and approval a minimum of 5 business days prior to obtaining milled and/or cored samples.
- (6) Material sampling prior to receipt of the engineer's notice to proceed shall require submittal and approval of an Application/Permit to Work on Highway Right-of-Way (<u>DT1812</u>).
- (7) During material sampling operations, contractor insurance shall be as specified in standard spec 107, traffic control requirements shall be as specified in standard spec 107 and 643, and in the contract special provisions.
- (8) Develop and submit a mix design with the optimal asphalt content 10 business days prior to the start of the CIR operation. This will be developed according to AASHTO MP 38-18 and PP 94-18; and additionally, will conform to the requirements listed in B.3.1. Submit mix design using WisDOT's provided CIR mix design template to the engineer and department's Bureau of Technical Services, Materials Management Section, Pavement Unit: <u>DOTDLDTSDBTSPavementUnit@dot.wi.gov</u>

Properties	Test Method	Specification	Criteria
RAP	Gradation of RAP (Sieve Analysis of Aggregates)	AASHTO MP 38-18 and PP 94-18	Fine or Medium Gradation per AASHTO PP 38-18 (Table 1)
	RAP Coating Test	AASHTO T 59	Minimum Good
Foaming	Foamed Asphalt Expansion Ratio	AASHTO MP 38-18 and PP 94-18	Minimum 8.0 Times
	Foamed Asphalt Half-life		Minimum 6.0 Seconds
Mixture Volumetrics	Bulk Specific Gravity of Compacted Samples		Report Only; Ndes=30
	Maximum Theoretical Specific Gravity		Report Only
	% Air Voids in Compacted Dense and Open Bituminous Paving Mixtures		Report Only
	Tensile Strength (Resistance of Compacted Mixture to Moisture)		
	Dry, psi		Minimum 45 Minimum
	Ratio (TSR)		0.60*

Table B.3.1 – Minimum Mix Design Requirements

*0.70 for mix designs requiring the addition of cement.

(9) The mix design shall be used for informational purposes.

(10) The mix design report shall contain the following minimum information:

- 1. Gradation of RAP.
- 2. Density, maximum specific gravity, air void content, indirect dry tensile strength, indirect wet (conditioned) tensile strength, and tensile strength ratio at each recycling agent content iteration (minimum of 4; inclusive of recommended moisture and stabilizing contents) and at the recommended moisture and stabilizing agent contents.
- 3. Recommended water content from the moisture density curve as a percentage of dry RAP.
- 4. Optimum stabilizing agent content as a percentage of dry RAP.
- 5. PG grading of asphalt binder for foamed asphalt, supplier name and location, and certified test report.
- 6. The optimal foaming characteristics of the asphalt stabilizing agent during the mix design process shall be determined at a minimum of using three different percentages of foamed asphalt content, three different temperatures, and water content.
- 7. RAP coating test results.
- 8. Any additives that may be used.

B.4 Quality Management Program

B.4.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan, including random numbers, to the engineer no later than 10 business days before beginning CIR activities. Construct the project as the plan provides.
- (2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post it in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:
 - 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
 - 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
 - 3. A list of suppliers for all stabilizing agents.
 - 4. A list of source locations for all water.
 - 5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
 - 6. Location of the QC laboratory, retained sample storage, and other documentation.
 - 7. A summary of locations or quantities, selected randomly using ASTM Method D3665, to be tested under this provision.

B.4.2 Pre-CIR Construction Meeting

A minimum of five business days prior to the start of CIR construction, hold a pre-CIR construction meeting at a mutually agreed upon time and location. Attendance at the pre-CIR construction meeting is mandatory for the engineer, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

B.4.3 Personnel

- (1) Provide HTCP Nuclear Density Technician I or ACT certified technician for the performance of field density and field moisture content testing.
- (2) Provide HTCP Aggregate Technician I or ACT certified technician for material sampling and sieve analysis.
- (3) A Transportation Materials Sampling (TMS) certified technician is allowed for materials sampling.

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

B.4.4 Equipment

- (1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and applicable AASHTO and/or ASTM specifications and maintain a calibration record at the laboratory.
- (2) Furnish nuclear gauges from the department's approved product list at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

- (3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.
- (4) Conform to AASHTO T310 and CMM 8.15 for density testing and gauge monitoring methods.

B.4.5 Quality Control (QC) Testing

- (1) Roadway production lots will be defined as 4000 lane feet. Each roadway production lot will consist of two 2000 lane feet sublots. The contractor will notify the department before sampling.
- (2) Gradation samples shall be taken at a random location at a minimum frequency of one per lot of production. Gradation samples shall be taken as representative of the full recycled depth. Samples may be obtained prior to or after the addition of stabilizing agent depending on the type of CIR equipment used in the project. For each sample report the gradation of the material, as determined according to AASHTO T27, for the Number 4 (4.75mm) sieve and larger.
- (3) Conduct and report density testing at a minimum frequency of three individual random tests per sublot.
- (4) Conduct and report mill depth checks at a random location at a minimum frequency of once per sublot.
- (5) Measure and report stabilizing agent foaming properties (i.e., half-life and expansion ratio) of each new tanker load from the equipment's test nozzle or recycling unit. If the foaming properties do not meet the requirement as specified in B.2.1, take the necessary corrective action by adjusting the temperature of the stabilizing agent and/or foaming water content.
- (6) Report stabilizing agent temperature at a minimum of one per each new tanker load.
- (7) Report stabilizing agent foamed asphalt expansion ratio and half-life at random locations at a minimum frequency of once per sublot.
- (8) Perform startup QC testing (milling depth, stabilizing agent, foaming properties, and stabilizing agent application rate) within the first 500 feet at the beginning of each day of production.
- (9) Conduct and report daily moisture content of the finished CIR layer representing each day's placement. Moisture content shall be based on the average of three random tests, from each day's placement. The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Engineer-directed tests are an addition to the above three tests representing the day's placement.
- (10) Once the section achieves 2.5% or less in moisture, the section is considered cured and additional moisture tests are not required unless directed by the engineer.
- (11) The contractor shall provide a Daily Inspection Report within 48 hours to the engineer summarizing the following:
 - daily beginning and ending stations
 - applicable mix design
 - stabilizing agent temperature
 - stabilizing agent foaming properties

- sublot tests (mill depth check, density test, and gradation) locations and values
- lot roadway sample locations
- moisture

Any adjustments to the application rate of the stabilizing agent, compaction or foaming water shall be reported as stated in section C.1. Test results (except gradation and moisture) shall be provided to the engineer by the end of the business day.

B.4.6 Department Testing

B.4.6.1 General

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

B.4.6.2 Quality Verification (QV) Testing

- (1) The department will have a technician, or ACT working under a technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.4.3 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling.
- (2) The department will conduct random QV tests at the minimum frequency of 10% of the required QC tests. The department will observe the contractor's QC stabilizing agent foaming property test.
- (3) The department's mill depth check, roadway gradation sample, and density test sites, will be at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will split each QV gradation sample, test half for QV, and retain the remaining half for seven calendar days.
- (4) The department will verify the contractor's moisture content values by testing a moisture content split sample at a frequency of at least one per day.
- (5) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (6) The department will assess QV results by comparing them to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, a re-evaluation of the entire process must be completed before production can resume.

B.4.6.3 Independent Assurance (IA)

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing, including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
 - 1. Split sample testing.
 - 2. Proficiency sample testing.
 - 3. Witnessing sampling and testing.
 - 4. Test equipment calibration checks.
 - 5. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.4.6.4.

B.4.6.4 Dispute Resolution

(1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor shall review the data, examine data reduction and analysis methods, evaluate sampling and testing methods/procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product or work, the department will use third-party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third-party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third-party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C Construction

C.1 General

- (1) Unless the contract provides otherwise, keep the road open to traffic during construction.
- (2) Perform CIR operations; only between the dates of May 15 and September 15; when the air temperature approximately 3 feet above grade, in the shade, and away from artificial heat sources is above 50°F and when the nighttime ambient air temperature is above 35°F the night prior and the following night, unless approved otherwise by the engineer.
- (3) Do not perform CIR operations during inclement weather such as rain or fog; that will not allow proper mixing, placing, and/or compacting of the mixture.
- (4) CIR operations and recycled pavement base layer curing shall be completed to allow adequate time for placement of surfacing according to calendar requirements of standard spec 450.3.2.1.
- (5) The asphalt binder stabilizing agent application rate will be 2.00 percent with a field adjustment tolerance of +/- 0.30 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.
- (6) The metered water added at the mill used for cooling and compaction shall be 2.00 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.
- (7) If the stabilizing agent or water application rate from the mix design referenced in section B.3 is not within the range of 1.70 to 2.30 percent, at the department's direction, 500 feet test sections will be required as a comparison. The contractor's liability for the department's directed test sections will be waived. The department's Bureau of Technical Services Pavement Unit will be consulted on these test sections. No test section will be considered below 1.50 percent asphalt binder stabilizing agent.

C.2 Equipment

- (1) Equipment used for CIR shall be subject to approval by the engineer.
- (2) Tankers supplying hot stabilizing agent components shall be equipped to constantly monitor temperature within the tank.

C.2.1 Milling Machine

- (1) The primary milling machines; not inclusive of pre-mill/wedge-cut milling units; shall be capable of milling the existing pavement at a minimum width of not less than 12.5 feet and to the depth shown on the plans, specified in the contract or directed by the engineer. A smaller milling machine may be used to mill paved shoulders and miscellaneous areas to increase the recycle width.
- (2) The milling machines shall be equipped with automatic depth control, shall maintain constant cutting depth and width, uniform grade, and uniform slope.
- (3) For processes not incorporating additional screening, sizing, or crushing; the milling machine shall be capable of producing RAP sized as specified in B.1.
- (4) Use of a heating device to soften the pavement is not permitted.

C.2.2 Screening, Crushing, and Sizing Equipment

(1) Processes requiring additional screening, sizing, or crushing, shall include a unit with a closed-circuit system capable of continuously returning oversized material to the crusher until all milled material entering the screening, crushing, or sizing equipment meets the gradation requirements of section B.1.

C.2.3 Mixing Unit

- (1) Processed RAP shall be mixed with the stabilizing agent and water in a mixing unit; defined as the milling machine cutter housing, a separate mixing chamber, or a pugmill.
- (2) The asphalt stabilizing agent shall be applied; using a computer-controlled additive system; uniformly at the predetermined application rate. The metering of the stabilizing agent must be monitored through a calibrated pump providing a continuous readout of quantities.
- (3) The additive system shall contain separate pumping systems for adding stabilizing agent and water. Each system shall have an inspection or test nozzle for stabilizing agent and/or water sampling.
- (4) The system shall be capable of producing a uniformly mixed homogeneous recycled pavement base layer mixture.

C.2.4 Paving Equipment

- (1) The placement and shaping of the recycled pavement base layer mixture shall be completed using a self-propelled paver or screed integral to the recycling equipment meeting the requirements of standard spec 450.3.1.4; revised to exclude the requirement of an activated screed or strike-off assembly.
- (2) The screed shall not be heated.
- (3) If utilizing a self-propelled paver, the material shall be transferred directly into the paver hopper from the recycling equipment or with a pick-up device. When a pick-up device is used, the entire windrow shall be removed from the milled surface and transferred to the paver hopper.

C.2.5 Compaction Equipment

- (1) Compaction equipment shall be self-propelled and meet the requirements of standard spec 450.3.1.5.
- (2) The number, weight, and types of rollers shall be used as necessary to achieve the specified compaction. At a minimum, the following rollers shall be used:
 - 1. At least one self-propelled double drum vibratory steel roller with a minimum weight of not less than 10 tons.
 - 2. At least one self-propelled pneumatic-tired roller with a minimum weight of not less than 22 tons.

C.3 Constructing CIR

C.3.1 Preparation

- (1) After any contract required surface milling, and immediately prior to commencing CIR operations, remove from the roadway, and up to 1 inch below the milled surface, any vegetation, standing water, loose crack filler, and any other deleterious materials.
- (2) Inspect the pavement surface, after any contract required surface milling, for areas of yielding subgrade. Yielding areas will be repaired prior to CIR operations.
- (3) Blade the existing base aggregate roadway shoulders away from the asphaltic surface edge to minimize contamination of the CIR base layer.

C.3.2 Processing and Placement of CIR Material

- (1) Mill the existing pavement to the required depth and width indicated on the plans.
- (2) Further process the milled RAP material as necessary by crushing, screening, and/or sizing to the gradation requirements of B.1.
- (3) Blend the RAP material with the mix design specified proportions of stabilizing agent and water; produce a uniform and homogeneous recycled mixture.
- (4) Spread the recycled mixture to the grade, elevations, and slopes specified on the plans, avoiding tearing or scarring of the recycled pavement base layer surface.
- ⁽⁵⁾ Ensure proper material transfer, handling, and spreading to prevent material segregation. If segregation does occur behind the paver, the contractor shall take immediate steps to correct the problem. Corrective action may include adjusting the forward speed of the paving operation and adjusting the flow of material to paver. The contractor shall make adjustments until a satisfactory end-product has been obtained, as determined by the engineer.

(6) Longitudinal joints between successive CIR operations shall be overlapped a minimum of 3 inches. Consideration should be given to the amount of stabilizing agent used in the overlapping pass. Adjust the width of the stabilizing agent application so that the overlapped CIR mixtures maintains the target stabilizing agent content. Transverse joints between successive CIR operations during the same day of placement shall be overlapped a minimum of 2 feet. The beginning of each day's recycling operation shall overlap the end of the preceding recycling operation a minimum of 50 feet unless otherwise directed by the engineer.

C.4 Compaction

C.4.1 Control Strip Construction

- (1) On the first day of production, construct a control strip to identify the target wet density for the CIR layer using a nuclear moisture-density gauge in backscatter measurement. Nuclear gauge test duration in backscatter measurement shall be for a total of one-minute test per location in the direction of paving. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel.
- (2) After the construction of the control strip, the CIR process shall be permitted to continue until the project's first asphalt binder tanker truck is empty. Any further CIR process shall be halted till the completion of the test rolling.
- (3) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 500 feet long and one full lane width. Begin the control strip at a location of at least 200 feet beyond the start of the project.
- (4) Completed control strips may remain in-place to be incorporated into the final roadway cross-section.
- (5) Construct additional control strips, at a minimum, when:
 - 1. The CIR layer thickness changes in excess of 2.0 inches.
 - 2. The percent of target wet density is less than 96% or exceeds 105.0%; and is outside the range of the 10 random measurements defining the control strip; on two consecutive sublots.
 - 3. If there is a significant change in mix proportions, weather conditions, compaction equipment, or other controlling factors, the engineer may require the construction of new control strips to check target density.
- (6) Construct control strips using equipment and methods representative of the operations to be used for constructing the CIR layer.
- (7) After compacting the control strip with a minimum of three roller passes, mark and take three wet density measurements using a nuclear moisture-density gauge in backscatter mode at one random station. One density measurement representing the inside 1/3, one density measurement representing the middle 1/3, and one density measurement representing the outside 1/3 transversely across the traveled lane, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. Subsequent density measurements will be taken at the same three locations.
- (8) After each subsequent pass of compaction equipment over the entirety of the control strip, take wet density measurements at the three marked locations. Continue compacting and testing until the increase in density measurements of individual locations is less than 2.0 lb/ft3, or the density measurements begin to decrease.
- (9) Upon completion of control strip compaction, take 10 randomly located wet density measurements within the limits of the control strip, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. The final measurements recorded at the three locations under article paragraph (6) of this section may be included as 3 of the 10 measurements. Average the 10 measurements to obtain the control strip target density.

C.4.2 Compaction Requirements

(1) Compact the CIR layer to a required density of 96% of the target density. Density acceptance shall be based on the average sublot measurements results.

C.5 Surface Requirements

- (1) Prior to placement of the surface treatment, the engineer and contractor shall visually inspect the CIR layer for distresses including, but not limited to raveled areas, rutted areas, and areas of excess or deficient stabilizing agent, or deficient surface tolerance areas.
- (2) Test the recycled pavement base layer surface at regular intervals, and engineer selected locations, using a 10-foot straightedge or other engineer-specified devices.

- (3) The engineer may direct the repair of surface deviations greater than ½ inch between two surface contact points. High points shall be corrected by rerolling, trimming, milling, or grinding. Depressions may be corrected by having a tack coat applied and be filled with HMA immediately prior to placement of the surface treatment.
- (4) Raveled areas, rutted areas, and areas of excess or deficient stabilizing agent shall be re-processed or repaired. Reprocessing shall consist of milling, blending of additional stabilizing agent, placement with a paver, and compaction with determined rolling patterns as determined by the control strip.

C.6 Maintaining the Work

- (1) After compaction is complete, the contractor will determine when the CIR is stable to open to traffic.
- (2) After opening to traffic, and prior to placement of the upper layer, the surface of the recycled base shall be maintained in a condition suitable for the safe movement of traffic.
- (3) The recycled base and shoulders shall be protected and maintained from standing water, deleterious substances, and/or other damage.
- ⁽⁴⁾ Any damage to the recycled base, excluding department-directed test sections, shall be repaired by the contractor prior to placement of the upper layer at no additional cost to the department.

C.7 Curing and Surfacing

C.7.1 Curing

- (1) Application of a surface treatment or leveling/lower layer of HMA will not be allowed until the moisture content of the CIR layer reduces to 2.50 percent or less.
- (2) If the moisture content of the CIR layer does not reduce to 2.50 percent; the surface treatment may be applied after the change in moisture content is less than 0.30 percentage points for three consecutive calendar days.
- (3) The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Moisture content testing by nuclear density shall only be used for informational purposes and not for acceptance. The department will obtain a sample(s) to verify the contractor's final moisture content values.

C.7.2 Tack Coat

- (1) The surface shall be prepared, and tack coat applied meeting the requirements of standard spec 455.3.2.
- (2) Tack coat application rate shall be 0.05 to 0.07 gal/SY. The engineer may adjust the tack coat application rate based on surface conditions.
- (3) Use only emulsified asphalt material as tack coat specified in standard spec 455.2.5. Paving grade asphaltic tack coat shall not be used.

C.7.3 Surfacing

- (1) Surfacing materials, equipment, and construction methods shall be according to the applicable sections of the standard specs or contract special provisions.
- (2) Paving of final surfacing (for single layer) or leveling/lower layer of HMA on the cured CIR sections shall not be conducted until the moisture content in the CIR layer reduces to 2.50% or less.
- (3) The final surfacing (for single layer) or leveling/lower layer shall be placed on the CIR layer within 10 calendar days once a section of the CIR layer is considered cured per section B.4.5.
- (4) After any rain event, the excess moisture in the CIR layer shall be allowed to dry before paving the final surfacing (for single layer) or leveling/lower HMA layer. The contractor and engineer should inspect the CIR layer to determine suitability for surfacing.

D Measurement

The department will measure Cold In-Place Recycling (CIR) Asphaltic Base Layer by the square yard, acceptably completed.

The department will measure the Asphalt Stabilizing Agent incorporated into the work by the ton; as metered through a calibrated pump, or through delivered ticket quantity.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
327.1000.S	Cold In-Place Recycling (CIR) Asphaltic Base Layer	SY
455.0770.S	Asphalt Stabilizing Agent	TON

Payment is full compensation for measured quantities as specified above; all material including mixing and milling water; equipment necessary for milling and sizing, mixing, paving, compacting the completed CIR; incidentals necessary to the conduct mix design; including sampling and traffic control; mill the existing pavement for recycling, size the milled RAP, inject and mix the RAP with the stabilizing agent, place or pave, compact, and maintain the completed CIR.

The department will pay separately for the repair of yielding areas under the bid item Base Repair for CIR Layer.

The department will pay separately for removing or blading away of the adjacent shoulder material under the bid item Shaping Shoulders.

The department will pay separately for preparation under the bid item Prepare Foundation for CIR Base Layer.

The department will pay separately for surfacing treatments, including tack coat, under the appropriate bid items.

stp-327-010 (20230629)

24. HMA Percent Within Limits (PWL) Test Strip Volumetrics, Item 460.0105.S; HMA Percent Within Limits (PWL) Test Strip Density, Item 460.0110.S.

A Description

This special provision describes the Hot Mix Asphalt (HMA) density and volumetric testing tolerances required for an HMA test strip. An HMA test strip is required for contracts constructed under HMA Percent Within Limits (PWL) QMP. A density test strip is required for each pavement layer placed over a specific, uniform underlying material, unless specified otherwise in the plans. Each contract is restricted to a single mix design per mix type per layer (e.g., upper layer and lower layer may have different mix type specified or may have the same mix type with different mix designs). Each mix design requires a separate test strip. Density and volumetrics testing will be conducted on the same test strip whenever possible.

Perform work according to standard spec 460 and as follows.

B Materials

Use materials conforming to HMA Pavement Percent Within Limits (PWL) QMP special provision.

C Construction

C.1 Test Strip

Submit the test strip start time and date to the department in writing at least 5 calendar days in advance of construction of the test strip. If the contractor fails to begin paving within 2 hours of the submitted start time, the test strip is delayed, and the department will assess the contractor \$2,000 for each instance according to Section E of this document. Alterations to the start time and date must be submitted to the department in writing a minimum of 24 hours prior to the start time. The contractor will not be liable for changes in start time related to adverse weather days as defined by standard spec 101.3 or equipment breakdown verified by the department.

On the first day of production for a test strip, produce approximately 750 tons of HMA. (Note: adjust tonnage to accommodate natural break points in the project.) Locate test strips in a section of the roadway to allow a representative rolling pattern (i.e. not a ramp or shoulder, etc.).

C.1.1 Sampling and Testing Intervals

C.1.1.1 Volumetrics

Laboratory testing will be conducted from a split sample yielding three components, with portions designated for QC (quality control), QV (quality verification), and retained.
During production for the test strip, obtain sufficient HMA mixture for three-part split samples from trucks prior to departure from the plant. Collect three split samples during the production of test strip material. Perform sampling from the truck box and three-part splitting of HMA according to WTM R47. These three samples will be randomly selected by the engineer from each *third* of the test strip tonnage (T), excluding the first 50 tons:

Sample Number	Production Interval (tons)
1	50 to 1/3 T
2	1/3 T to 2/3 T
3	2/3 T to T

C.1.1.2 Density

Required field tests include contractor QC and department QV nuclear density gauge tests and pavement coring at ten individual locations (five in each half of the test strip length) according to Appendix A: *Test Methods and Sampling for HMA PWL QMP Projects*. Both QV and QC teams shall have two nuclear density gauges present for correlation at the time the test strip is constructed. QC and QV teams may wish to scan with additional gauges at the locations detailed in Appendix A, as only gauges used during the test strip correlation phase will be allowed.

C.1.2 Field Tests

C.1.2.1 Density

For contracts that include STSP 460-020 QMP Density in addition to PWL, a gauge comparison according to WTM T355 shall be completed prior to the day of test strip construction. Daily standardization of gauges on reference blocks and a project reference site shall be performed according to WTM T355. A standard count shall be performed for each gauge on the material placed for the test strip, prior to any additional data collection. Nuclear gauge readings and pavement cores shall be used to determine nuclear gauge correlation according to Appendix A. The two to three readings for the five locations across the mat for each of two zones shall be provided to the engineer. The engineer will analyze the readings of each gauge relative to the densities of the cores taken at each location. The engineer will determine the average difference between the nuclear gauge density readings and the measured core densities to be used as a constant offset value. This offset will be used to adjust raw density readings of the specific gauge and shall appear on the density data sheet along with gauge and project identification. An offset is specific to the mix and layer; therefore, a separate value shall be determined for each layer of each mix placed over a differing underlying material for the contract. This constitutes correlation of that individual gauge for the given layer. Two gauges per team are not required to be onsite daily after completion of the test strip. Any data collected without a correlated gauge will not be accepted.

The contractor is responsible for coring the pavement from the footprint of the density tests and filling core holes according to Appendix A. Coring and filling of pavement core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Testing of cores shall be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following laboratory testing and will be responsible for any verification testing at the discretion of the engineer.

The target maximum density to be used in determining core density is the average of the three volumetric/mix Gmm values from the test strip multiplied by 62.24 lb/ft³. In the event mix and density portions of the test strip procedure are separated, or if an additional density test strip is required, the mix portion must be conducted prior to density determination. The target maximum density to determine core densities shall then be the Gmm four-test running average (or three-test average from a PWL volumetric-only test strip) from the end of the previous day's production multiplied by 62.24 lb/ft³. If no PWL production QV volumetric test is to be taken in a density-only test strip, a non-random QV test will be taken according to 460.2.8.3.1.4 as modified in HMA Pavement Percent Within Limits (PWL) QMP and if non-conforming to C.2.1 herein, follow corrective action outlined in 460.2.8.2.1.7(4) as modified in HMA Pavement Percent Within Limits (PWL) QMP.

Exclusions such as shoulders and appurtenances shall be tested and reported according to CMM 815. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3. No density incentive or disincentive will be applied to shoulders or appurtenances. However, unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 815.11.

C.1.3 Laboratory Tests

C.1.3.1 Volumetrics

Obtain random samples according to C.1.1.1 and Appendix A. Perform tests the same day as taking the sample.

Theoretical maximum specific gravities of each mixture sample will be obtained. Bulk specific gravities of both gyratory compacted samples and field cores shall be determined. The bulk specific gravity values determined from field cores shall be used to calculate a correction factor (i.e., offset) for each QC and QV nuclear density gauge. The correction factor will be used throughout the remainder of the layer.

C.2 Acceptance

C.2.1 Volumetrics

Produce mix conforming to the following limits based on individual QC and QV test results (tolerances based on most recent JMF):

ITEM	ACCEPTANCE LIMITS
Percent passing given sieve:	
37.5-mm	+/- 8.0
25.0-mm	+/- 8.0
19.0-mm	+/- 7.5
12.5-mm	+/- 7.5
9.5-mm	+/- 7.5
2.36-mm	+/- 7.0
75-µm	+/- 3.0
Asphaltic content in percent ^[1]	- 0.5
Air Voids	-1.5 & +2.0
VMA in percent ^[2]	- 1.0
Maximum specific gravity	+/- 0.024

^[1] Asphalt content more than -0.5% below the JMF will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction.

^[2] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

Calculation of air voids shall use either the QC, QV, or retained split sample test results, as identified by conducting the paired t-test with the WisDOT PWL Test Strip Spreadsheet.

If QC and QV test results do not correlate as determined by the split sample comparison, the retained split sample will be tested by the department's AASHTO accredited laboratory and HTCP certified personnel as a referee test. Additional investigation shall be conducted to identify the source of the difference between QC and QV data. Referee data will be used to determine material conformance and pay.

C.2.2 Density

Compact all layers of test strip HMA mixture according to Table 460-3.

Nuclear density gauges are acceptable for use on the project only if correlation is completed for that gauge during the time of the test strip and the department issues documentation of acceptance stating the correlation offset value specific to the gauge and mix design. The offset is not to be entered into any nuclear density gauge as it will be applied by the department-furnished Field Density Worksheet.

C.2.3 Test Strip Approval and Material Conformance

All applicable laboratory and field testing associated with a test strip shall be completed prior to any additional mainline placement of the mix. All test reports shall be submitted to the department upon completion and approved before paving resumes. The department will notify the contractor within 24 hours from start of test strip regarding approval to proceed with paving unless an alternate time frame is agreed upon in writing with the department. The 24-hour approval time includes only working days as defined in standard spec 101.3.

The department will evaluate material conformance and make pay adjustments based on the PWL value of air voids and density for the test strip. The QC core densities and QC and QV mix results will be used to determine the PWL values as calculated according to Appendix A.

The PWL values for air voids and density shall be calculated after determining core densities. An approved test strip is defined as the individual PWL values for air voids and density both being equal to or greater than 75, mixture volumetric properties conforming to the limits specified in C.2.1, and an acceptable gauge-to-core correlation. Further clarification on PWL test strip approval and appropriate post-test strip actions are shown in the following table:

PWL TEST STRIP APPROVAL AND MATERIAL CONFORMANCE CRITERIA

PWL VALUE FOR AIR VOIDS AND DENSITY	TEST STRIP APPROVAL	MATERIAL CONFORMANCE	POST-TEST STRIP ACTION
Both PWL ≥ 75	Approved ¹	Material paid for according to Section E	Proceed with Production
50 <u><</u> Either PWL < 75	Not Approved	Material paid for according to Section E	Consult BTS to determine need for additional test strip
Either PWL < 50	Not Approved	Unacceptable material removed and replaced or paid for at 50% of the contract unit price according to Section E	Construct additional Volumetrics or Density test strip as necessary

¹ In addition to these PWL criteria, mixture volumetric properties must conform to the limits specified in C.2.1, split sample comparison must have a passing result and an acceptable gauge-to-core correlation must be completed.

A maximum of two test strips will be allowed to remain in place per pavement layer per contract. If material is removed, a new test strip shall replace the previous one at no additional cost to the department. If the contractor changes the mix design for a given mix type during a contract, no additional compensation will be paid by the department for the required additional test strip and the department will assess the contractor \$2,000 for the additional test strip according to Section E of this special provision. For simultaneously conducted density and volumetric test strip components, the following must be achieved:

- i. Passing/Resolution of Split Sample Comparison
- ii. Volumetrics/mix PWL value > 75
- iii. Density PWL value \geq 75
- iv. Acceptable correlation

If not conducted simultaneously, the mix portion of a test strip must accomplish (i) and (ii), while density must accomplish (iii) and (iv). If any applicable criteria are not achieved for a given test strip, the engineer, with authorization from the department's Bureau of Technical Services, will direct an additional test strip (or alternate plan approved by the department) be conducted to prove the criteria can be met prior to additional paving of that mix. For a density-only test strip, determination of mix conformance will be according to main production, i.e., HMA Pavement Percent Within Limits (PWL) QMP special provision.

D Measurement

The department will measure HMA Percent Within Limits (PWL) Test Strip as each unit of work, acceptably completed as passing the required air void, VMA, asphalt content, gradation, and density correlation for a Test Strip. Material quantities shall be determined according to standard spec 450.4 and detailed here within.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH
460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH

These items are intended to compensate the contractor for the construction of the test strip for contracts paved under the HMA Pavement Percent Within Limits QMP article.

Payment for HMA Percent Within Limits (PWL) Test Strip Volumetrics is full compensation for volumetric sampling, splitting, and testing, and for the proper labeling, handling, and retention of the split samples.

Payment for HMA Percent Within Limits (PWL) Test Strip Density is full compensation for collecting and measuring of pavement cores, acceptably filling core holes, providing of nuclear gauges and operator(s), and all other work associated with completion of a core-to-gauge correlation, as directed by the engineer.

Acceptable HMA mixture placed on the project as part of a volumetric or density test strip will be compensated by the appropriate HMA Pavement bid item with any applicable pay adjustments. If a test strip is delayed as defined in C.1 of this document, the department will assess the contractor \$2,000 for each instance, under the HMA Delayed Test Strip administrative item. If an additional test strip is required because the initial test strip is not approved by the department or the mix design is changed by the contractor, the department will assess the contractor \$2,000 for each additional test strip (i.e., \$2,000 for each individual volumetrics or density test strip) under the HMA Additional Test Strip administrative item.

Pay adjustment will be calculated using 65 dollars per ton of HMA pavement. The department will pay for measured quantities of mix based on \$65/ton multiplied by the following pay adjustment:

PAY ADJUSTMENT FOR HMA PAVEMENT AIR VOIDS & DENSITY

PERCENT WITHIN LIMITS	PAYMENT FACTOR, PF
(PWL)	(percent of \$65/ton)
<u>≥</u> 90 to 100	PF = ((PWL – 90) * 0.4) + 100
<u>≥</u> 50 to < 90	(PWL * 0.5) + 55
<50	50% ^[1]

where, PF is calculated per air voids and density, denoted PFair voids and PFdensity

^[1] Material resulting in PWL value less than 50 shall be removed and replaced, unless the engineer allows for such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density will be according to Table 460-3. Pay adjustment will be determined for an acceptably completed test strip and will be computed as shown in the following equation:

Pay Adjustment = (PF-100)/100 x (WP) x (tonnage) x (\$65/ton)*

*Note: If Pay Factor = 50, the contract unit price will be used in lieu of \$65/ton and the weighted percentage (WP) will equal 1.0.

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids ($PF_{air voids}$) and density ($PF_{density}$) will be determined. $PF_{air voids}$ will be multiplied by the total tonnage produced (i.e., from truck tickets), and $PF_{density}$ will be multiplied by the calculated tonnage used to pave the mainline only (i.e., traffic lane excluding shoulder) as determined according to Appendix A.

The department will pay incentive for air voids under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

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25. HMA Pavement Percent Within Limits (PWL) QMP.

A Description

This special provision describes percent within limits (PWL) pay determination, providing and maintaining a contractor Quality Control (QC) Program, department Quality Verification (QV) Program, required sampling and testing, dispute resolution, corrective action, pavement density, and payment for HMA pavements. Pay is determined by statistical analysis performed on contractor and department test results conducted according to the Quality Management Program (QMP) as specified in standard spec 460, except as modified below.

B Materials

Conform to the requirements of standard spec 450, 455, and 460 except where superseded by this special provision. The department will allow only one mix design for each HMA mixture type per layer required for the contract, unless approved by the engineer. The use of more than one mix design for each HMA pavement layer will require the contractor to construct a new test strip according to HMA Pavement Percent Within Limits (PWL) QMP Test Strip Volumetrics and HMA Pavement Percent Within Limits (PWL) QMP Test strip according to the department.

Replace standard spec 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater with the following:

460.2.8.2.1.3.1 Contracts under Percent within Limits

⁽¹⁾ Furnish and maintain a laboratory at the plant site fully equipped for performing contractor QC testing. Have the laboratory on-site and operational before beginning mixture production.

⁽²⁾ Obtain random samples and perform tests according to this special provision and further defined in Appendix A: *Test Methods & Sampling for HMA PWL QMP Projects*. Obtain HMA mixture samples from trucks at the plant. For the sublot in which a QV sample is collected, discard the QC sample and test a split of the QV sample.

⁽³⁾ Perform sampling from the truck box and three-part splitting of HMA samples according to WTM R47. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per sublot. All QC samples shall provide the following: QC, QV, and Retained. The contractor shall take possession and test the QC portions. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. Additional sampling details are found in Appendix A. Label samples according to WTM R97. Additional handling instructions for retained samples are found in CMM 836.4 and CMM 836.5.

⁽⁴⁾ Use the test methods identified below to perform the following tests at a frequency greater than or equal to that indicated:

- Blended aggregate gradations according to WTM T30.
- Asphalt content (AC) in percent.

Determine AC using one of the following methods:

- AC by ignition oven according to WTM T308. If the department is using an ignition oven to determine AC, conform to WTP <u>H-003</u>. If the department is not using an ignition oven to determine AC, IOCFs must still be reverified for any of the reasons listed in <u>WTP</u> <u>H-003 Table 2</u> and conform to WTP H-003 section 3.
- AC by chemical extraction according to AASHTO T 164 Method A or B.
- AC by automated extraction according to WTM D8159.

- Bulk specific gravity (Gmb) of the compacted mixture according to WTM T166.
- Maximum specific gravity (Gmm) according to WTM T209.
- Air voids (V_a) by calculation according to WTM T269.
- Voids in Mineral Aggregate (VMA) by calculation according to WTM R35.

⁽⁵⁾ Lot size shall consist of 3750 tons with sublots of 750 tons. Test each design mixture at a frequency of one test per 750 tons of mixture type produced and placed as part of the contract. Add a random sample for any fraction of 750 tons at the end of production for a specific mixture design. Partial lots with less than three sublot tests will be included into the previous lot for data analysis and pay adjustment. Volumetric lots will include all tonnage of mixture type under specified bid item unless otherwise specified in the plan.

⁽⁶⁾ Conduct field tensile strength ratio tests, without freeze-thaw conditioning cycles, on each qualifying mixture according to WTM T283 CMM 836.6.14. Test each full 50,000-ton production increment, or fraction of an increment, after the first 5,000 tons of production. Perform required increment testing in the first week of production of that increment. If field tensile strength ratio values are below the spec limit, notify the engineer. The engineer and contractor will jointly determine a corrective action.

Delete standard spec 460.2.8.2.1.5 and 460.2.8.2.1.6.

Replace standard spec 460.2.8.2.1.7 Corrective Action with the following:

460.2.8.2.1.7 Corrective Action

⁽¹⁾ Material must conform to the following action and acceptance limits based on individual QC and QV test results (tolerances relative to the JMF used on the PWL Test Strip):

ACTION LIMITS	ACCEPTANCE LIMITS
+/- 8.0	
+/- 8.0	
+/- 7.5	
+/- 7.5	
+/- 7.5	
+/- 7.0	
+/- 3.0	
-0.3	-0.5
	- 1.5 & +2.0
- 0.5	-1.0
	ACTION LIMITS +/- 8.0 +/- 8.0 +/- 7.5 +/- 7.5 +/- 7.5 +/- 7.0 +/- 3.0 -0.3 - 0.5

^[1] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

⁽²⁾ QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

⁽³⁾ Notify the engineer if any individual test result falls outside the action limits, investigate the cause and take corrective action to return to within action limits. If two consecutive test results fall outside the action limits, stop production. Production may not resume until approved by the engineer. Additional QV samples may be collected upon resuming production, at the discretion of the engineer.

⁽⁴⁾ For any additional non-random tests outside the random number testing conducted for volumetrics, the data collected will not be entered into PWL calculations. Additional QV tests must meet acceptance limits or be subject to production stop. If the department's non-random test does not conform to the acceptance limits, the retained sample will be tested by the BTS lab. If the BTS results also do not meet the acceptance limits, the material will be considered unacceptable as described in (5) below.

⁽⁵⁾ Remove and replace unacceptable material at no additional expense to the department. Unacceptable material is defined as any individual QC or QV tests results outside the acceptance limits or a PWL value < 50. For AC in percent, unacceptable material is defined as any individual QV test result outside of the acceptance limit. The engineer may allow such material to remain in place with a price reduction. The department will pay for such HMA Pavement allowed to remain in place at 50 percent of the contract unit price.

Replace standard spec 460.2.8.3.1.2 Personnel Requirements with the following:

460.2.8.3.1.2 Personnel Requirements

⁽¹⁾ The department will provide at least one HTCP-certified Transportation Materials Sampling (TMS) Technician, to observe QV sampling of HMA mixtures.

⁽²⁾ Under departmental observation, a contractor TMS technician shall collect and split samples.

⁽³⁾ A department HTCP-certified Hot Mix Asphalt, Technician I, Production Tester (HMA-IPT) technician will ensure that all sampling is performed correctly and conduct testing, analyze test results, and report resulting data.

⁽⁴⁾ The department will make an organizational chart available to the contractor before mixture production begins. The organizational chart will include names, telephone numbers, and current certifications of all QV testing personnel. The department will update the chart with appropriate changes, as they become effective.

Replace standard spec 460.2.8.3.1.4 Department Verification Testing Requirements with the following:

460.2.8.3.1.4 Department Verification Testing Requirements

⁽¹⁾ HTCP-certified department personnel will obtain QV random samples by directly supervising HTCP-certified contractor personnel sampling from trucks at the plant. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per sublot. All QV samples shall furnish the following: QC, QV, and Retained. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. The department will take possession of retained samples accumulated to date each day QV samples are collected. The department will retain samples until surpassing the analysis window of up to 5 lots, as defined in standard spec 460.2.8.3.1.7(2) of this special provision. Additional sampling details are found in Appendix A.

⁽²⁾ The department will verify product quality using the test methods specified here in standard spec 460.2.8.3.1.4(3). The department will identify test methods before construction starts and use only those methods during production of that material unless the engineer and contractor mutually agree otherwise.

⁽³⁾ The department will perform all testing conforming to the following standards:

- Bulk specific gravity (Gmb) of the compacted mixture according to WTM T166.
- Maximum specific gravity (Gmm) according to WTM T209.
- Air voids (Va) by calculation according to WTM T269.
- Voids in Mineral Aggregate (VMA) by calculation according to WTM R35.
- Asphalt Content (AC) in percent determined by ignition oven method according to WTM T308 and conforming to WTP H-003, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to WTM D8159.

⁽⁴⁾ The department will randomly test each design mixture at the minimum frequency of one test for each lot.

Delete standard spec 460.2.8.3.1.6.

460.2.8.3.1.7 Data Analysis for Volumetrics

⁽¹⁾ Analysis of test data for pay determination will be contingent upon QC and QV test results. Statistical analysis will be conducted on Gmm and Gmb test results for calculation of Va. If either Gmm or Gmb analysis results in non-comparable data as described in 460.2.8.3.1.7(2), subsequent testing will be performed for both parameters as detailed in the following paragraph.

⁽²⁾ The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Additional comparisons incorporating the first 3 lots of data will be performed following completion of the 4th and 5th lots (i.e., lots 1-3, 1-4, and 1-5). A rolling window of 5 lots will be used to conduct F & t comparison for the remainder of the contract (i.e., lots 2-6, then lots 3-7, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025. If the F- and t-tests report comparable data, the QC and QV data sets are determined to be statistically similar and QC data will be used to calculate the Va used in PWL and pay adjustment calculations. If the F- and t-tests result in non-comparable data, proceed to the *dispute resolution* steps found below. Note: if both QC and QV Va PWL result in a pay adjustment of 102% or greater, dispute resolution testing will not be conducted. Dispute resolution via further investigation is as follows:

^[1] The Retained portion of the split from the lot in the analysis window with a QV test result furthest from the QV mean (not necessarily the sublot identifying that variances or means do not compare) will be referee tested for Gmm, Gmb, and Asphalt Content by the bureau's AASHTO accredited laboratory and certified personnel. All previous lots within the analysis window are subject to referee testing and regional lab testing as deemed necessary. Referee test results will replace the QV data of the sublot(s).

^[2] Statistical analysis will be conducted with referee test results replacing QV results.

- i. If the F- and t-tests indicate variances and means compare, no further testing is required for the lot and QC data will be used for PWL and pay factor/adjustment calculations.
- ii. If the F- and t-tests indicate non-comparable variances or means, the Retained portion of the random QC sample will be tested for Gmm, Gmb, and Asphalt Content by the department's regional lab for the remaining 4 sublots of the lot which the F- and t-tests indicate non-comparable datasets. The department's regional lab and the referee test results will be used for PWL and pay factor/adjustment calculations. Upon the second instance of non-comparable variance or means and for every instance thereafter, the department will assess a pay reduction for the additional testing of the remaining 4 sublots at \$2,000/lot under the HMA Regional Lab Testing administrative item.

^[3] The contractor may choose to dispute the regional test results on a lot basis within 7 days after receiving the results from the region. In this event, the retained portion of each sublot will be referee tested by the department's AASHTO accredited laboratory and certified personnel. The referee Gmm and Gmb test results will supersede the regional lab results for the disputed lot.

- i. If referee testing results in an increased calculated pay factor, the department will pay for the cost of the additional referee testing.
- ii. If referee testing of a disputed lot results in an equal or lower calculated pay factor, the department will assess a pay reduction for the additional referee testing at \$2,000/lot under the Referee Testing administrative item.

⁽³⁾ The department will notify the contractor of the referee test results within 3 working days after receipt of the samples by the department's AASHTO accredited laboratory. The intent is to provide referee test results within 7 calendar days from completion of the lot.

⁽⁴⁾ The department will determine mixture conformance and acceptability by analyzing referee test results, reviewing mixture data, and inspecting the completed pavement according to the standard spec, this special provision, and accompanying Appendix A.

⁽⁵⁾ Unacceptable material (i.e., resulting in a PWL value less than 50 or individual QC or QV test results not meeting the Acceptance Requirements of 460.2.8.2.1.7 as modified herein) will be referee tested by the bureau's AASHTO accredited laboratory and certified personnel and those test results used for analysis. Such material may be subject to remove and replace, at the discretion of the engineer. If the engineer allows the material to remain in place, it will be paid at 50% of the HMA Pavement contract unit price. Replacement or pay adjustment will be conducted on a sublot basis. If an entire PWL sublot is

removed and replaced, the test results of the newly placed material will replace the original data for the sublot. Any remove and replace shall be performed at no additional cost to the department. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test will be conducted and under such circumstances will be entered into the HMA PWL Production spreadsheet for data analysis and pay determination.] The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

Delete standard spec 460.2.8.3.1.8 Corrective Action.

C Construction

Replace standard spec 460.3.3.2 Pavement Density Determination with the following:

460.3.3.2 Pavement Density Determination

⁽¹⁾ The engineer will determine the target maximum density using department procedures described in WTM T355 and CMM 815. The engineer will determine density as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.

⁽²⁾ Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.

⁽³⁾ A lot is defined as 7500 lane feet with sublots of 1500 lane feet (excluding shoulder, even if paved integrally) and placed within a single layer for each location and target maximum density category indicated in table 460-3. The contractor is required to complete three tests randomly per sublot and the department will randomly conduct one QV test per sublot. A partial quantity less than 750 lane feet will be included with the previous sublot. Partial lots with less than three sublots will be included in the previous lot for data analysis/acceptance and pay, by the engineer. If density lots/sublots are determined prior to construction of the test strip, any random locations within the test strip shall be omitted. Exclusions such as shoulders and appurtenances shall be tested and recorded according to CMM 815. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3 or else be subject to disincentives according to 460.5.2.2(5) herein. No density incentive will be applied to shoulders or appurtenances. Offsets will not be applied to nuclear density gauge readings for shoulders or appurtenances. Unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 815.11.

⁽⁴⁾ The three QC locations per sublot represent the outside, middle, and inside of the paving lane. The QC density testing procedures are detailed in Appendix A.

⁽⁵⁾ QV nuclear testing will consist of one randomly selected location per sublot. The QV density testing procedures will be the same as the QC procedure at each testing location and are also detailed in Appendix A.

⁽⁶⁾ An HTCP-certified nuclear density technician (NUCDENSITYTEC-I) shall identify random locations and perform the testing for both the contractor and department. The responsible certified technician shall ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly, or at the completion of each lot.

⁽⁷⁾ For any additional tests outside the random number testing conducted for density, the data collected will not be entered into PWL calculations. However, additional QV testing must meet the tolerances for material conformance as specified in the standard specification and this special provision. If additional density data identifies unacceptable material, proceed as specified in CMM 815.11.

Replace standard spec 460.3.3.3 Waiving Density Testing with Acceptance of Density Data with the following:

460.3.3.3 Analysis of Density Data

⁽¹⁾ Analysis of test data for pay determination will be contingent upon test results from both the contractor (QC) and the department (QV).

⁽²⁾ As random density locations are paved, the data will be recorded in the HMA PWL Production Spreadsheet for analysis in chronological order. The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. A rolling window of 3 lots will be used to conduct F & t comparison for the remainder of the contract (i.e., lots 2-4, then lots 3-5, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025.

- i. If the F- and t-tests indicate variances and means compare, the QC and QV data sets are determined to be statistically similar and QC data will be used for PWL and pay adjustment calculations.
- ii. If the F- and t-tests indicate variances or means do not compare, the QV data will be used for subsequent calculations.

⁽³⁾ The department will determine mixture density conformance and acceptability by analyzing test results, reviewing mixture data, and inspecting the completed pavement according to standard spec, this special provision, and accompanying Appendix A.

⁽⁴⁾ Density resulting in a PWL value less than 50 or not meeting the requirements of 460.3.3.1 (any individual density test result falling more than 3.0 percent below the minimum required target maximum density as specified in standard spec Table 460-3) is unacceptable and may be subject to remove and replace at no additional cost to the department, at the discretion of the engineer.

- i. Replacement may be conducted on a sublot basis. If an entire PWL sublot is removed and replaced, the test results of the newly placed material will replace the original data for the sublot.
- ii. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test must be conducted and under such circumstances will be entered into the data analysis and pay determination.]
- iii. If the engineer allows such material to remain in place, it will be paid for at 50% of the HMA Pavement contract unit price. The extent of unacceptable material will be addressed as specified in CMM 815.11. The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

D Measurement

The department will measure the HMA Pavement bid items acceptably completed by the ton, as specified in standard spec 450.4 and as follows in standard spec 460.5, as modified in this special provision.

E Payment

Replace standard spec 460.5.2 HMA Pavement with the following:

460.5.2 HMA Pavement

460.5.2.1 General

⁽¹⁾ Payment for HMA Pavement Type LT, MT, and HT mixes is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for HMA PWL QMP testing and aggregate source testing; for warm mix asphalt additives or processes; for stabilizer, hydrated lime and liquid antistripping agent, if required; and for all materials including asphaltic materials.

⁽²⁾ If provided for in the plan quantities, the department will pay for a leveling layer, placed to correct irregularities in an existing paved surface before overlaying, under the pertinent paving bid item. Absent a plan quantity, the department will pay for a leveling layer as extra work.

460.5.2.2 Calculation of Pay Adjustment for HMA Pavement using PWL

⁽¹⁾ Pay adjustments will be calculated using 65 dollars per ton of HMA pavement. The HMA PWL Production Spreadsheet, including data, will be made available to the contractor by the department as soon as practicable upon completion of each lot. The department will pay for measured quantities of mix based on this price multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

PAY FACTOR FOR HMA PAVEMENT AIR VOIDS & DENSITY

PERCENT WITHIN LIMITS	PAYMENT FACTOR, PF
(PWL)	(percent of \$65/ton)
≥ 90 to 100	PF = ((PWL – 90) * 0.4) + 100
≥ 50 to < 90	(PWL * 0.5) + 55
<50	50%[1]

where PF is calculated per air voids and density, denoted PF_{air voids} and PF_{density}.

^[1] Any material resulting in PWL value less than 50 shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

⁽²⁾ For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density shall be according to standard spec Table 460-3.

⁽³⁾ Pay adjustment will be determined on a lot basis and will be computed as shown in the following equation:

Pay Adjustment = (PF-100)/100 x (WP) x (tonnage) x (\$65/ton)*

*Note: If Pay Factor = 50, the contract unit price will be used in lieu of \$65/ton and the weighted percentage (WP) will equal 1.0.

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

⁽⁴⁾ Individual Pay Factors for each air voids ($PF_{air voids}$) and density ($PF_{density}$) will be determined. $PF_{air voids}$ will be multiplied by the total tonnage placed (i.e., from truck tickets), and $PF_{density}$ will be multiplied by the calculated tonnage used to pave the mainline only (i.e., travel lane excluding shoulder) as determined according to Appendix A.

⁽⁵⁾ Pay adjustment for shoulders and appurtenances accepted by department testing will be determined on a lot basis. If the lot density is less than the specified minimum in table 460-3, the department will reduce pay based on the contract unit price for the HMA pavement bid item for that lot as follows:

PERCENT LOT DENSITY	PAYMENT FACTOR
BELOW SPECIFIED MINIMUM	(percent of contract price)
From 0.5 to 1.0 inclusive	98
From 1.1 to 1.5 inclusive	95
From 1.6 to 2.0 inclusive	91
From 2.1 to 2.5 inclusive	85
From 2.6 to 3.0 inclusive	70
More than 3.0 ^[1]	

DISINCENTIVE PAY REDUCTION FOR HMA PAVEMENT DENSITY

^[1] Remove and replace the lot with a mixture at the specified density. When acceptably replaced, the department will pay for the replaced work at the contract unit price. Alternatively, the engineer may allow the nonconforming material to remain in place with a 50 percent payment factor.

⁽⁶⁾ The department will pay incentive for air voids and density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

The department will administer a disincentive under the Disincentive HMA Binder Content administrative item for each individual QV test result indicating asphalt binder content below the Action Limit in 460.2.8.2.1.7 presented herein. The department will adjust pay per sublot of mix at 65 dollars per ton of HMA pavement multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

AC Binder Relative to JMF	Pay Adjustment / Sublot	
-0.4% to -0.5%	75%[1]	
More than -0.5%	50%[1][2]	

^[1]Any material resulting in an asphalt binder content more than 0.3% below the JMF AC content will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction according to automated extraction according to WTM D8159.

^[2] Any material resulting in an asphalt binder content more than 0.5% below the JMF AC content shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

Note: PWL value determination is further detailed in the PWL Production Spreadsheet Instructions located in the *Project Info & Instructions* tab of the HMA PWL Production spreadsheet.

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26. Appendix A.

Test Methods & Sampling for HMA PWL QMP Projects

The following procedures are included with the HMA Pavement Percent Within Limits (PWL) Quality Management Program (QMP) special provision:

- WisDOT Procedure for Nuclear Gauge/Core Correlation Test Strip
- WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production
- Sampling for WisDOT HMA PWL QMP
- Calculation of PWL Mainline Tonnage Example

WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip



Outermost locations to be kept approx. 1.5 ft from edge of lane to the center of gauge

Middle locations @ approx. Center of Lane (i.e., 6 feet to center of gauge for 12-ft lane)

Intermediate locations to be at approx. 3.5 & 8.5 feet from edge of lane to center of gauge



The engineer will identify two zones in which gauge/core correlation is to be performed. These two zones will be randomly selected within each *half* of the test strip length. (Note: Density zones shall not overlap and must have a minimum of 100 feet between the two zones; therefore, random numbers may be shifted (evenly) in order to meet these criteria.) Each zone shall consist of five locations across the mat as identified in Figure 1. The following shall be determined at each of the five locations within both zones:

- two one-minute nuclear density gauge readings for QC team*
- two one-minute nuclear density gauge readings for QV team*
- pavement core sample

*If the two readings exceed 1.0 pcf of one another, a third reading is conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge.

The zones are supposed to be undisclosed to the contractor/roller operators. The engineer will not lay out density/core test sites until rolling is completed and the cold/finish roller is beyond the entirety of the zone. Sites are staggered across the 12-foot travel lane, and do not include shoulders. The outermost locations should be 1.5-feet from the center of the gauge to the edge of lane. [NOTE: This staggered layout is only applicable to the test strip. All mainline density locations after test strip should have a longitudinal- as well as transverse-random number to determine location as detailed in the *WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production* section of this document.]

Individual locations are represented by the **L** symbol as seen in Figure 1 above. The symbol is two-part, comprised of the nuclear test locations and the location for coring the pavement, as distinguished here:



The nuclear site is the same for QC and QV readings for the test strip, i.e., the QC and QV teams are to take nuclear density gauge readings in the same footprint. Each of the QC and QV teams are to take a minimum of two one-minute readings per nuclear site, with the gauge rotated 180 degrees between readings, as seen here:



(a) (b)



Figure 2: Nuclear gauge orientation for (a) 1st one-minute reading and (b) 2nd one-minute reading

Photos should be taken of each of the 10 core/gauge locations of the test strip. This should include gauge readings (pcf) and a labelled core within the gauge footprint. If a third reading is needed, all three readings should be recorded and documented. Only raw readings in pcf should be written on the pavement during the test strip, with a corresponding gauge ID/SN (generalized as QC-1 through QV-2 in the following Figure) in the following format:



Figure 3: Layout of raw gauge readings as recorded on pavement

Each core will then be taken from the center of the gauge footprint and will be used to correlate each gauge with laboratory-measured bulk specific gravities of the pavement cores. One core in good condition must be obtained from each of the 10 locations. If a core is damaged at the time of extracting from the pavement, a replacement core should be taken immediately adjacent to the damaged core, i.e., from the same footprint. If a core is damaged during transport, it should be recorded as damaged and excluded from the correlation. Coring after traffic is on the pavement should be avoided. The contractor is responsible for coring of the pavement. Coring and filling of core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Core density testing will be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following initial testing and is responsible for any verification testing.

Each core 100 or 150 mm (4 or 6 inches) in diameter will be taken at locations as identified in Figure 1. Each random core will be full thickness of the layer being placed. The contractor is responsible for thoroughly drying cores obtained from the mat according to WTM R79 prior to using specimens for inplace density determination according to WTM T166.

Cores must be taken before the pavement is open to traffic. Cores are cut under department/project staff observation. Relabel each core immediately after extruding or ensure that labels applied to pavement prior to cutting remain legible. The layer interface should also be marked immediately following extrusion. Cores should be cut at this interface, using a wet saw, to allow for density measurement of only the most recently placed layer. Cores should be protected from excessive temperatures such as direct sunlight. Also, there should be department custody (both in transport and storage) for the cores until they are tested whether that be immediately after the test strip or subsequent day if agreed upon between department and contractor. Use of concrete cylinder molds works well to transport cores. Cores should be placed upside down (flat surface to bottom of cylinder mold) in the molds, one core per mold, cylinder molds stored upright, and ideally transported in a cooler. Avoid any stacking of pavement cores.

Fill all core holes with non-shrink rapid-hardening grout, mortar, or concrete, or with HMA. When using grout, mortar, or concrete, remove all water from the core holes prior to filling. Mix the mortar or concrete in a separate container prior to placement in the hole. If HMA is used, fill all core holes with hot-mix matching the same day's production mix type at same day compaction temperature +/- 20 F. The core holes shall be dry and coated with tack before filling, filled with a top layer no thicker than 2.25 inches, lower layers not to exceed 4 inches, and compacted with a Marshall hammer or similar tamping device using approximately 50 blows per layer. The finished surface shall be flush with the pavement surface. Any deviation in the surface of the filled core holes greater than 1/4 inch at the time of final inspection will require removal of the fill material to the depth of the layer thickness and replacement.

WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production

For nuclear density testing of the pavement beyond the test strip, QC tests will be completed at three locations per sublot, with a sublot defined as 1500 lane feet. The three locations will represent the outside, middle, and inside of the paving lane (i.e., the lane width will be divided into thirds as shown by the dashed longitudinal lines in Figure 3 and random numbers will be used to identify the specific transverse location within each third according to CMM 815). Longitudinal locations within each sublot shall be determined with 3 independent random numbers. The PWL Density measurements do not include the shoulder and other appurtenances. Such areas are tested by the department and are not eligible for density incentive but are subject to disincentive according to 460.5.2.2(5) of the HMA PWL

QMP article. Each location will be measured with two one-minute gauge readings oriented 180 degrees from one another, in the same footprint as detailed in Figure 2 above. Each location requires a minimum of two readings per gauge. The density gauge orientation for the first test will be with the source rod towards the direction of paving. QV nuclear testing will consist of one randomly selected location per sublot. The QV is also comprised of two one-minute readings oriented 180 degrees from one another. For both QC and QV test locations, if the two readings exceed 1.0 pcf of one another, a third reading is conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge. The sublot density testing layout is depicted in Figure 4, with QC test locations shown as solid lines and QV as dashed.



Figure 4: Locations of main lane HMA density testing (QC=solid lines, QV=dashed)

Raw nuclear density data must be shared by both parties at the end of each shift. Paving may be delayed if the raw data is not shared in a timely manner. QC and QV nuclear density gauge readings will be statistically analyzed according to Section 460.3.3.3 of the HMA PWL QMP article. (Note: For density data, if F- and t-tests compare, QC data will be used for the subsequent calculations of PWL value and pay determination. However, if an F- or t-test does not compare, the QV data will be used in subsequent calculations.)

Investigative cores will be allowed on the approaching side of traffic outside of the footprint locations. Results must be shared with the department.

The QV density technician is expected to be onsite within 1 hour of the start of paving operations and should remain on-site until all paving is completed. Perform footprint testing as soon as both the QC and QV nuclear density technician are onsite and a minimum of once per day to ensure the gauges are not drifting apart during a project. Footprint testing compares the density readings of two gauges at the same testing location and can be done at any randomly selected location on the project. Both teams are encouraged to conduct footprint testing as often as they feel necessary. Footprint testing does not need to be performed at the same time. At project start-up, the QV should footprint the first 10 QC locations. Individual density tests less than 0.5% above the lower limit should be communicated to the other party and be footprint tested. Each gauge conducts 2 to 3 1-minute tests according to WTM T355 and the final results from each gauge are compared for the location. If the difference between the QC and QV gauges exceeds 1.0 pcf (0.7 percent) for an average of 10 locations, investigate the cause, check gauge moisture and density standards and perform additional footprint testing. If the cause of the difference between gauge readings cannot be identified, the regional HMA Coordinator will consult the RSO, the regional PWL representative and the BTS HMA unit to determine necessary actions. If it is agreed that there is a gauge comparison issue, perform one of the following two options:

New Gauge Combination

- All 4 gauges used on the test strip must footprint 10 locations on the pavement. Pavement placed on a previous day may be used.
- The results of the footprint testing will be analyzed to see if a better combination of acceptable gauges is available.
- If a better combination is found, those gauges should be used moving forward.
- If a better combination cannot be found, a new gauge correlation must be performed. (see below)

Re-correlation of Gauges

- Follow all test strip procedures regarding correlating gauges except the following:
 - The 10 locations can be QC or QV random locations.
 - The locations used may have been paved on a previous day.
 - Retesting with gauges must be done immediately prior to coring.
 - New gauge offsets will be used for that day's paving and subsequent paving days. New gauge offsets will not be used to recalculate density results from prior days.

Density Dispute Resolution Procedure

Density results may be disputed by the contractor on a lot-by-lot basis if one of the following criteria is met:

- The lot average for either QC or QV is below the lower specification limit.
- The lot average for QC is different from the lot average for QV by more than 0.5%.

In lieu of using density gauges for acceptance of the lot, the lot will be cored in the QV locations. The results of the cores from the entire lot will be entered in the spreadsheet and used for payment. If the pay factor increases, the contractor will only receive the additional difference in payment for the disputed lot. If the pay factor does not increase, the department will assess the contractor \$2,000 for the costs of additional testing.

Notify the engineer in writing before dispute resolution coring. Immediately prior to coring, QC and QV will test the locations with nuclear density gauges.

Under the direct observation of the engineer, cut 100 or 150 mm (4 or 6 inch) diameter cores. Cores will be cut by the next day after completion of the lot, except if the next day is not a working day, then they shall be cut within 48 hours of placement. Prepare cores and determine density according to WTM T166. Dry cores after testing. Fill core holes according to Appendix A and obtain engineer approval before opening to traffic. The department will maintain custody of cores throughout the entire sampling and testing process. The department will label cores, transport cores to testing facilities, witness testing, store dried cores, and provide subsequent verification testing. If a core is damaged at the time of coring, immediately take a replacement core 1 foot ahead of the existing testing location in the direction of traffic at the same offset as the damaged core. If a core is damaged during transport, record it as damaged and notify the engineer immediately.

Sampling for WisDOT HMA PWL QMP Production

Sampling of HMA mix for QC, QV and Retained samples shall conform to WTM R97 and WTM R47 except as modified here.

Sampling Hot Mix Asphalt

At the beginning of the contract, the contractor determines the anticipated tonnage to be produced. The frequency of sampling is 1 per 750 tons (sublot) for QC and Retained Samples and 1 per 3750 tons (lot or 5 sublots) for QV as defined by the HMA PWL QMP article. A test sample is obtained randomly from each sublot. Each random sample shall be collected at the plant according to WTM R97. The contractor must submit the random numbers for all mix sampling to the department before production begins.

Example 1

Expected production for a contract is 12,400 tons. The number of required samples is determined based on this expected production (per HMA PWL QMP SPV) and is determined by the random sample calculation.

Sample 1 – from 50 to 750 tons Sample 2 – from 751 to 1500 tons Sample 3 – from 1501 to 2250 tons Sample 4 – from 2251 to 3000 tons Sample X – Sample 16 – from 11,251 to 12,000 tons Sample 17 – from 12,001 to 12,400 tons

The approximate location of each sample within the prescribed sublots is determined by selecting random numbers using WTM D3665 or by using a calculator or computerized spreadsheet that has a random number generator. The random numbers selected are used in determining when a sample is to be taken and will be multiplied by the sublot tonnage. This number will then be added to the final tonnage of the previous sublot to yield the approximate cumulative tonnage of when each sample is to be taken.

To allow for plant start-up variability, the procedure calls for the first random sample to be taken at 50 tons or greater per production day (not intended to be taken in the first two truckloads). Random samples calculated for 0-50 ton should be taken in the next truck (51-75 ton).

This procedure is to be used for any number of samples per contract.

If the production is less than the final randomly generated sample tonnage, then the random sample is to be collected from the remaining portion of that sublot of production. If the randomly generated sample is calculated to be within the first 0-50 tons of the subsequent day of production, it should be taken in the next truck. Add a random sample for any fraction of 750 tons at the end of the contract. Lot size will consist of 3750 tons with sublots of 750 tons. Partial lots with less than three sublot tests will be included into the previous lot, by the engineer.

It is intended that the plant operator not be advised ahead of time when samples are to be taken.

If belt samples are used during troubleshooting, the blended aggregate will be obtained when the mixture production tonnage reaches approximately the sample tonnage. For plants with storage silos, this could be up to 60 minutes in advance of the mixture sample that's taken when the required tonnage is shipped from the plant.

QC, QV, and retained samples shall be collected for all test strip and production mixture testing using a three-part splitting procedure according to WTM R47.

Calculation of PWL Mainline Tonnage Example

A mill and overlay project in being constructed with a 12-foot travel lane and an integrally paved 3-foot shoulder. The layer thickness is 2 inches for the full width of paving. Calculate the tonnage in each sublot eligible for density incentive or disincentive.

Solution:

$$\frac{1500 ft \times 12 ft}{9 sf/sy} \times \frac{2 in \times 112 lb/sy/in}{2000 lb/ton} = 224 tons$$

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27. HMA Pavement Longitudinal Joint Density.

A Description

This special provision incorporates longitudinal joint density requirements into the contract and describes the data collection, acceptance, and procedure used for determination of pay adjustments for HMA pavement longitudinal joint density. Pay adjustments will be made on a linear foot basis, as applicable per pavement layer and paving lane. Applicable longitudinal joints are defined as those between any two or more traffic lanes including full-width passing lanes, turn lanes, or auxiliary lanes more than 1,500 lane feet, and those lanes must also include the 460.2005 Incentive Density PWL HMA Pavement bid item. This excludes any joint with one side defined as a shoulder and ramp lanes of any length. If echelon paving is required in the contract, the longitudinal joint density specification shall not apply for those joints. Longitudinal joints placed during a test strip will be tested for information only to help ensure the roller pattern will provide adequate longitudinal joint density during production. Longitudinal joint density test results collected during a test strip are not eligible for pay adjustment.

Pay is determined according to standard spec 460, HMA Pavement Percent Within Limits QMP special provisions, and as modified within.

B Materials

Compact all applicable HMA longitudinal joints to the appropriate density based on the layer, confinement, and mixture type shown in Table B-1.

	Percent of Target Maximum Density			
Layer	Unco	nfined	Confined	
	LT and MT	HT	LT and MT	HT
Lower (on crushed/recycled base)	88	89	89.5	90.5
Lower (on Concrete/HMA)	90 ^[1]	90[1]	91.5 ^[1]	91.5 ^[1]
Upper	90	90	91.5	91.5

TABLE B-1 MINIMUM REQUIRED LONGITUDINAL JOINT DENSITY

^[1] Minimum reduced by 1.0 percent for a 1.25-inch-thick No. 5 mix lower layer constructed on a paved or milled surface.

C Construction

Add the following to standard spec 460.3.3.2:

- ⁽⁵⁾ Establish companion density locations at each applicable joint. Each companion location shares longitudinal stationing with a QC or QV density location within each sublot and is located transversely with the center of the gauge 6-inches from the final joint edge of the paving area. Sublot and lot numbering remains the same as mainline densities, however, in addition to conventional naming, joint identification must clearly indicate "M" for inside/median side of lane or "O" for outside shoulder side of lane, as well as "U" for an unconfined joint or "C" for a confined joint (e.g., XXXXX-MC or XXXXX-OU).
- (6) Each joint will be measured, reported, and accepted under methods, testing times, and procedures consistent with the program employed for mainline density, i.e., PWL.
- (7) For single nuclear density test results greater than 3.0% below specified minimums per Table B-1 herein, perform the following:
 - a) Testing at 50-foot increments both ahead and behind the unacceptable site.
 - b) Continued 50-foot incremental testing until test values indicate higher than or equal to -3.0 percent from target joint density.
 - c) Materials within the incremental testing indicating lower than -3.0 percent from target joint density are defined as unacceptable and will be handled with remedial action as defined in the payment section of this document.

d) The remaining sublot average (exclusive of unacceptable material) will be determined by the first forward and backward 50-foot incremental tests that reach the criteria of higher than or equal to -3.0 percent from target joint density.

Note: If the 50-foot testing extends into a previously accepted sublot, remedial action is required up to and inclusive of such material; however, the results of remedial action must not be used to recalculate the previously accepted sublot density. When this occurs, the lane feet of any unacceptable material will be deducted from the sublot in which it is located, and the previously accepted sublot density will be used to calculate pay for the remainder of the sublot.

- (8) Joint density measurements will be kept separate from all other density measurements and entered as an individual data set into Atwood Systems.
- (9) Placement and removal of excess material outside of the final joint edge, to increase joint density at the longitudinal joint nuclear testing location, will be done at the contractor's discretion and cost. This excess material and related labor will be considered waste and will not be paid for by the department. Joints with excess material placed outside of the final joint edge to increase joint density or where a notched wedge is used will be considered unconfined joints.
- (10) When not required by the contract, echelon paving may be performed at the contractor's discretion to increase longitudinal joint density and still remain eligible to earn incentive. The additional costs incurred related to echelon paving will not be paid for by the department. If lanes are paved in echelon, the contractor may choose to use a longitudinal vertical joint or notched wedge longitudinal joint as described in <u>SDD 13c19</u>. Lanes paved in echelon shall be considered confined on both sides of the joint regardless of the selected joint design. The joint between echelon paved lanes shall be placed at the centerline or along lane lines.
- (11) When performing inlay paving below the elevation of the adjacent lane, the longitudinal joint along the adjacent lane to be paved shall be considered unconfined.

D Measurement

The department will measure each side of applicable longitudinal joints, as defined in Section A of this special provision, by the linear foot of pavement, acceptably placed. Measurement will be conducted independently for the inside or median side and for the outside or shoulder side of paving lanes with two applicable longitudinal joints. Each paving layer will be measured independently at the time the mat is placed.

E Payment

Add the following as 460.5.2.4 Pay Adjustment for HMA Pavement Longitudinal Joint Density:

⁽¹⁾ The department will administer longitudinal joint density adjustments under the Incentive Density HMA Pavement Longitudinal Joints and Disincentive Density HMA Pavement Longitudinal Joints items. The department will adjust pay based on density relative to the specified targets in Section B of this special provision, and linear foot of the HMA Pavement bid item for that sublot as follows:

PAY ADJUSTMENT FOR HMA PAVEMENT LONGITUDINAL JOINT DENSITY

PERCENT SUBLOT DENSITY	PAY ADJUSTMENT PER LINEAR FOOT
ABOVE/BELOW SPECIFIED MINIMUM	
Equal to or greater than +1.0 confined, +2.0 unconfined	\$0.20
From 0.0 to +0.9 confined, 0.0 to +1.9 unconfined	\$0
From -0.1 to -1.0	\$(0.20)
From -1.1 to -2.0	\$(0.40)
From -2.1 to -3.0	\$(0.80)
More than -3.0	REMEDIAL ACTION ^[1]

^[1] Remedial action must be approved by the engineer and agreed upon at the time of the pre-pave meeting and may include partial sublots as determined and defined in 460.3.3.2(7) of this document. If unacceptable material is removed and replaced per guidance by the engineer, the removal and replacement will be for the full lane width of the side of which the joint was constructed with unacceptable material.

- ⁽²⁾ The department will not assess joint density disincentives for pavement placed in cold weather because of a department-caused delay as specified in <u>standard spec 450.5.2(3)</u>.
- (3) The department will not pay incentive on the longitudinal joint density if the traffic lane is in disincentive A disincentive may be applied for each mainline lane and all joint densities if both qualify for a pay reduction.
- (4) Inlay paving operations will limit payment for additional material to 2 inches wider than the final paving lane width at the centerline.

The department will pay incentive for longitudinal joint density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement Longitudinal Joints administrative item.

Appendix

WisDOT Longitudinal Joint - Nuclear Gauge Density Layout

Each QC and QV density location must have a companion density location at any applicable joint. This companion location must share longitudinal stationing with each QC or QV density location and be located transversely with the center of the gauge 6-inches from the edge of the paving area.

For HMA Pavement Percent Within Limits QMP projects, this appears as follows:



Further Explanation of PAY ADJUSTMENT FOR HMA PAVEMENT LONGITUDINAL JOINT DENSITY Table

	Confined				
	Lower Laye	r (On Base)	Upper Layer		
	LT/MT	НТ	LT/MT	НТ	Pay Adjust
Mainline Target (SS 460-3)	91.0	92.0	93.0	93.0	-
Confined Target (mainline - 1.5)	89.5	90.5	91.5	91.5	-
Equal to or greater than +1.0	<u>></u> 90.5	<u>></u> 91.5	<u>></u> 92.5	<u>></u> 92.5	\$0.20
From 0.0 to +0.9	90.4 - 89.5	91.4 - 90.5	92.4 - 91.5	92.4 - 91.5	\$0
From -0.1 to -1.0	89.4 - 88.5	90.4 - 89.5	91.4 - 90.5	91.4 - 90.5	(\$0.20)
From -1.1 to -2.0	88.4 - 87.5	89.4 - 88.5	90.4 - 89.5	90.4 - 89.5	(\$0.40)
From -2.1 to -3.0	87.4 - 86.5	88.4 - 87.5	89.4 - 88.5	89.4 - 88.5	(\$0.80)
More than -3.0	< 86.5	< 87.5	< 88.5	< 88.5	REMEDIAL ACTION

	Unconfined				
	Lower Laye	r (On Base)	Upper	Layer	
	LT/MT	НТ	LT/MT	НТ	Pay Adjust
Mainline Target (SS 460-3)	91.0	92.0	93.0	93.0	-
Unconfined Target (Mainline -3.0)	88.0	89.0	90.0	90.0	-
Equal to or greater than +2.0	<u>≥</u> 90.0	<u>></u> 91.0	<u>≥</u> 92.0	<u>≥</u> 92.0	\$0.20
From 0.0 to +1.9	89.9 - 88.0	90.9 - 89.0	91.9 - 90.0	91.9 - 90.0	\$0
From -0.1 to -1.0	87.9 - 87.0	88.9 - 88.0	89.9 - 89.0	89.9 - 89.0	(\$0.20)
From -1.1 to -2.0	86.9 - 86.0	87.9 - 87.0	88.9 - 88.0	88.9 - 88.0	(\$0.40)
From -2.1 to -3.0	85.9 - 85.0	86.9 - 86.0	87.9 - 87.0	87.9 - 87.0	(\$0.80)
More than -3.0	< 85.0	< 86.0	< 87.0	< 87.0	REMEDIAL ACTION

stp-460-075 (20230629)

28. Abutment Construction.

Determine the method of construction, and observe the following conditions:

- 1. If a cofferdam is used, build the cofferdam of non-erodable material.
- Concrete poured under water will be allowed; pour the concrete conforming to standard spec 502.3.5.3. Ensure that the forms are tight to prevent leakage of concrete into the stream. Treat all displaced water by filtration, settling basin, or other means sufficient to reduce the cement content before discharging the water into the stream.
- 3. Excavated material from the stream may be utilized in the fill slopes so long as it is covered with other suitable material to prevent it from eroding back into the stream.

stp-502-010 (20050502)

29. Reconstructing Inlets.

This includes removal and re-installation of the existing box to the new horizontal alignment and includes any necessary pipe work.

30. Maintaining Bird Deterrent System Station 759+68, Item 999.2005.S.01; Maintaining Bird Deterrent System Station 763+71, Item 999.2005.S.02.

A Description

This special provision describes inspecting and maintaining approved deterrents that prevent migratory bird nesting on bridges and culverts. Swallows or other migratory birds' nests have been observed on or under the existing culvert or bridge at the station identified. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. One deterrent system shall be maintained for each applicable structure. Deterrent methods selected shall be appropriate for structure type, size and/or site-specific constraints.

B Materials

B.1 Hardware and Lumber

Lumber, hardware, and fastening devices shall be durable enough to last through the length of the nesting season. Fastening devices and deterrence system must be approved by the engineer prior to installation on culverts and bridges that will remain in service after removal of deterrent systems. The method of fastening should not compromise the culvert or bridge concrete surfaces or steel protection systems. The attachment locations must be restored and repaired as needed by use of engineer approved fillers, sealers, and paint systems.

B.2 Netting Materials

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

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

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

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and of equal length as the netting.

B.3 Plastic Strip Curtain

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

Furnish 3-foot wide lengths of 6 mil minimum plastic sheeting with the lower 2 feet cut into vertical strips 2 inches wide.

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and staples to attach plastic strips to wood to fabricate the strip curtain.

Furnish concrete screws to attach strip curtain to structure.

B.4 Corner Slope Materials

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

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

C Construction

C.1 General

If active nests are observed after construction starts, or if a trapped bird or an active nest is found, stop work that may affect birds or their nests, and notify the engineer to consult with the Wisconsin Department of Natural Resources transportation liaison, Andy Barta at (608) 235-2955, or the department regional environmental coordinator, Anna Jahns at (608) 785-9961.

Efforts should be made to release trapped birds, unharmed.

C.2 Nest Removal

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

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

C.3 Exclusion Netting

C.3.1 Installation

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

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

C.4 Plastic Curtains

C.4.1 Installation

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

C.5 Corner Slopes

C.5.1 Installation

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

C.6 Inspection and Maintenance

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

Remove any unoccupied or partially constructed nests without eggs or nestlings.

Repair deterrents to prevent birds from attempting to nest again.

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

C.7 Removal and Structure Repair

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

D Measurement

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

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.2005.S.01	Maintaining Bird Deterrent System Station 759+68	EACH
999.2005.S.02	Maintaining Bird Deterrent System Station 763+71	EACH

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

stp-999-200 (20220107)

31. Adjusting Water Valves, Item SPV.0060.01.

A Description

This special provision describes providing, locating, exposing, and protecting existing water valve boxes after the pavement is removed, furnishing and installing water valve box extension if necessary; and adjusting the water valve boxes to the final finished elevation required.

B (Vacant)

C Construction

Furnish and install water valve box extensions to the existing water valve boxes if necessary. Protect the water valve boxes during construction. Clean out the water valve boxes as necessary to assure the valve wrench will fit completely over the valve bolt. Adjust the valve boxes to the required final finished elevation.

D Measurement

The department will measure Adjusting Water Valves by the each, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Adjusting Water Valves	EACH

Payment is full compensation for locating, exposing, and protecting water valve boxes; furnishing and installing water valve box extensions if necessary; exclusive of water valve boxes; cleaning out the water valve boxes and adjusting water valve boxes to the final finished elevation. The contractor shall replace water valve boxes, which are damaged by the contractor's operations, in kind, at the contractor's expense.

32. Adjusting Sanitary Manhole Covers, Item SPV.0060.02.

A Description

This special provision describes Adjusting Sanitary Manhole Covers according to plans, standard spec 611 and as herein provided.

B Materials

Furnish materials conforming to standard spec 611.2 and as herein provided.

Reuse the existing manhole frame and cover. If the frame or cover is damaged due to contractor operations, the contractor is to provide a new frame and cover matching the same dimensions as the existing frame and cover and approved by the Villages of Bloomington and Patch Grove.

C Construction

Complete construction according to standard spec 611.3 and conforming to the Wisconsin Water and Sewer Specifications and the following:

Adjust the existing manhole casting by raising or lowering the casting to match the new roadway grade. Adjust the manhole cover by adding and or removing adjusting rings so as to align the top of the casting with the finished pavement surface. Compact base aggregate and patching around each manhole to prevent settling.

D Measurement

The department will measure Adjusting Sanitary Manhole Covers as each individual unit, acceptably completed.

E Payment

The department will p	ay for measured quantities at the contract unit price under the following bid	item:
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Adjusting Sanitary Manhole Covers	EACH

Payment is full compensation for providing all required materials, exclusive of frames, grates, or covers; for removing, reinstalling, and adjusting the covers and adjusting rings; notifying the local municipality; for excavating, backfilling and compaction.

33. Cover Plates Left in Place, Item SPV.0060.03.

A Description

Furnish and install a steel plate to cover and support construction, backfill material, and traffic loading at storm sewer structures as shown on the plans, according to the pertinent provisions of standard spec 611, and as hereinafter provided.

Cover plates left in place becomes the property of the department after final acceptance by the engineer.

B Materials

Provide a 0.75-inch minimum thickness steel plate that extends to the outside edge of the existing masonry walls. Backfill with base aggregate dense, $1 \frac{1}{4}$ ".

Provide ¹/₄-inch diameter steel bolts and epoxy to secure the cover plate to the top deck of the existing structure.

C Construction

Remove the existing grate, frame, and accompanying grade adjusting rings. Remove 2' minimum concrete block. Remove all loose debris and other accumulated material found on the structure deck which would otherwise interfere with cover plate installation. Drill a single 3/8-inch hole centered in each corner of the cover plate. Set the cover plate on the existing structure deck, ensuring the access hole is completely covered and that the cover plate extends to the edges of the existing masonry. Place cover plate over portion of storm sewer structure which is below the proposed flow line elevation. Do not extend covers above the proposed flow line to prevent flow bypass of the inlet. Embed and epoxy each 1/4-inch steel bolt a minimum of 2-inches into the structure deck through each drilled hole. Backfill to the subgrade elevation any construction voids above the cover plate with base aggregate dense 1-1/4 inch.

Place cover plates as shown on the plans.

D Measurement

The department will measure Cover Plates Left in Place as each individual cover plate left in place, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONSPV.0060.03Cover Plates Left in PlaceEACH

Payment is full compensation for furnishing and installing the cover plate and leaving cover plates in place; furnishing and installing drilled epoxy bars; base aggregate dense, 1-1/4" backfill; removing inlet frame and lid; removing 2' minimum concrete block, and for excavation.

34. Concrete Base Type 1 Special, Item SPV.0060.04.

A Description

This special provision describes Concrete Base Type 1 Special according to standard spec 654, as shown on the plans, and as herein provided.

B Materials

Furnish materials according to standard spec 654.2.

C Construction

Conform to standard spec 654.3.

D Measurement

The department will measure Concrete Base Type 1 Special as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
SPV.0060.04	Concrete Base Type 1 Special	EACH	

Payment is full compensation according to standard spec 654.5.

35. Management of Contaminated Groundwater, Item SPV.0060.05.

A Description

A.1 General

This special provision describes management of contaminated water generated during dewatering, if necessary. Contaminated water encountered, but not requiring removal as a standard course of construction, shall remain in-place and shall not be managed according to this special provision. Contaminated water shall be either containerized for disposal or treated and discharged to the ground surface according to this special provision.

Perform this work according to standard spec 205 and with all local and state regulations, including, but not limited to, pertinent parts of the:

- Wisconsin Administrative Code, Chapters NR 100-299,
- Wisconsin Statutes, Chapters 30 and 31,
- Erosion Control Implementation Plan (ECIP), and
- WDNR Technical Standards, Sediment Control Water Application of Polymers No. 1051, Dewatering No. 1061, Sediment Trap No. 1063, and Sediment Basin No. 1064.

Perform all work necessary to control, handle, and dispose of groundwater and surface water, and all other water that may be encountered within contaminated locations, as required for performance of the work.

The cost of performing this work will be paid on a lump sum basis.

A.2 Notice to the Contractor – Contaminated Location(s)

The department completed testing for soil, sediment, and groundwater contamination for locations within this project where excavation is required. Testing indicated that contaminated soil and/or groundwater is present at the following location as shown on the plans:

Petroleum Contamination: Station 495+00 to 496+00, from the reference line to construction limits on the right, from 0 to 10 feet bgs

Groundwater contamination with petroleum compounds at concentrations exceeding the Preventative Action Limit identified in s. NR 140.10 Wisconsin Administrative Code and/or exceeding the Effluent Limits of the Wisconsin Department of Natural Resources General Permit to Discharge Under the Wisconsin Pollutant Discharge Elimination System, Contaminated Groundwater from Remedial Action Operations Permit, is likely to be encountered during excavation activities.

Contaminated soils, sediments, groundwater, and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soils, sediments, groundwater, and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If petroleum film (sheen) or odors are observed during dewatering activities at other locations on the project, terminate dewatering activities and notify the engineer. Contaminated soil, sediment, and groundwater at other locations shall be managed by the contractor under this contract, under direction of the engineer and the environmental consultant. USTs will be removed by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name:	Anna Jahns
	Wisconsin DOT-SW Region
Address:	3550 Mormon Coulee Road
	La Crosse, WI 54601
Phone:	(608) 785-9961
E-mail:	Annah.Jahns@dot.wi.gov
Consultant:	TRC Environmental Corporation
Address:	999 Fourier Drive, Suite 101
	Madison, WI 53717
Contact:	Dan Haak
Phone:	(608) 826-3628 office, (608) 886-7423 mobile

A.3 Coordination

Coordinate work under this contract with the environment consultant retained by the department:

Consultant:	TRC Environmental Corporation
Address:	999 Fourier Drive, Suite 101
	Madison, WI 53717
Contact:	Dan Haak
Phone:	(608) 826-3628 office, (608) 886-7423 mobile
E-mail:	dhaak@trccompanies.com

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated water based on groundwater analytical results from previous investigations, visual observations, and/or field screening;
- Documenting that activities associated with the management of contaminated water are in conformance with the contaminated water management methods for this project as specified herein; and
- Assisting the contractor with laboratory analytical results as necessary for disposal of contaminated water. Contractor shall be responsible for coordinating disposal with the disposal facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant has the opportunity to be present during dewatering activities in the contaminated areas. Do not pump contaminated groundwater or haul it off-site without specific approval from the environmental consultant.

Identify the method of management and disposal of contaminated water and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of dewatering activities in the contaminated locations or at the preconstruction conference, whichever comes first.

The environmental consultant will determine the location and limits of contaminated groundwater to be managed and treated or conveyed into a temporary holding tank based on groundwater analytical results from previous field investigations, visual observations or field screening of groundwater, surface water, and precipitation that collects within the excavations.

A.4 Contaminated Groundwater Management Plan Approval

The contaminated groundwater management plan for this project has been designed to minimize the offsite disposal of contaminated water. The contaminated groundwater management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Anna Jahns with the department at (608) 785-9961.

A.5 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During dewatering activities in the contaminated locations, expect to encounter water contaminated with petroleum compounds. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

Groundwater may be present within the construction limits. Water generated during dewatering operations (if necessary) is expected to be permitted to discharge to the ground surface except in the contaminated locations.

Control operations in the contaminated locations to minimize the quantity of contaminated water managed. Minimize the amount of open trenches, and construct diversion berms and implement other controls to minimize the infiltration of surface water into excavations in areas of known contamination. Maintain surface water controls until construction of utilities in the areas of contamination are complete. Allow contaminated water encountered, but not requiring removal as a standard course of construction, to remain in-place and do not manage according to this special provision.

If surface water infiltrates excavations and dewatering is required, water may be discharged to the surface if the water meets the requirements of the project dewatering permit and the applicable requirements of the Wisconsin Pollution Discharge Elimination System (WPDES) for contaminated groundwater from remedial action operations. This includes, but is not limited to, pretreatment of water in order to meet WPDES discharge requirements. Perform all necessary monitoring to document compliance with WPDES requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with WPDES requirements.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment, and drainage and disposal facilities. Notify the engineer of any dewatering activities and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

The environmental consultant may periodically evaluate water removed from the contaminated locations. Assist the environmental consultant in collecting water samples. The sampling frequency shall be a maximum of one sample for every 1,000 gallons removed.

Water generated from dewatering activities within the contaminated locations may exceed the surface water discharge limits for compounds specified in the Wisconsin DNR's "General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System" for "Contaminated Groundwater from Remedial Action Operations" (WPDES Permit No. WI-0046566-5), Table 3.1.

If dewatering of groundwater is required in the contaminated locations, water shall be either containerized for disposal or treated and discharged to the ground surface. Pump contaminated water that exceeds surface water discharge limits, as determined by the environmental consultant, into either temporary holding tanks or a treatment system provided by the contractor, as necessary to complete construction. The contractor will coordinate holding tank mobilizations, waste characterization sampling of accumulated water, and transportation/disposal of contaminated water. The cost for holding tank mobilization, transportation, and contaminated water disposal is incidental to the project and will be paid by the contractor.

D Measurement

Management of Contaminated Groundwater will be paid as a lump sum for the contract. The department will measure work under this section as a single complete unit of work, acceptably performed.

E Payment

The department will pay for measured quantities at the contract lump sum under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Management of Contaminated Groundwater	EACH

Payment is full compensation for controlling contaminated water and preventing non-contaminated surface water and precipitation from entering the areas of contamination; managing and pumping contaminated water from excavations in the area of contamination to the designated discharge point; and for furnishing all labor, tools, equipment, permits, and incidentals necessary to complete the work.

36. Remove and Salvage Street Light, Item SPV.0060.06.

A Description

This special provision describes removing and salvaging or disposing of street lighting units. This work shall be according to the plans, standard detail drawings, and as hereinafter provided.

B Materials

Salvage all street lighting materials from the project except for internal pole wiring.

C Construction

Disconnect and salvage the complete lighting unit from the locations shown in the plans and/or as designated by the engineer.

Carefully remove and stockpile all equipment at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground. Properly dispose of any equipment that is not salvaged.

This item includes coordination and incidentals necessary to remove or have removed by others; street signs, and all accessories affixed to the lighting units.

D Measurement

The department will measure Remove and Salvage Street Light as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONSPV.0060.06Remove and Salvage Street LightEACH

Payment is full compensation for removing and salvaging the pole, mounting bracket and luminaire.

37. Reinstall Street Light, Item SPV.0060.07.

A Description

This special provision describes installing a salvaged street light pole, arm, and luminaire on a new concrete base. Construction of the new concrete base shall be paid for separately.

B Materials

Use all street lighting materials salvaged from the project except for pole wiring.

C Construction

Reinstall street lights according to the pertinent provisions of standard spec 657 and standard spec 659.

D Measurement

The department will measure Reinstall Street Light as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONUNITSPV.0060.07Reinstall Street LightEACH

Payment is full compensation for installing the salvaged pole, arm, and luminaire.

swr-659-003 (20160601)

38. Connect to Existing Storm Sewer Pipe, Item SPV.0060.08.

A Description

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

B Materials

Mortar: Material complying with standard spec 519.2.3.

Standard Coupling or Joint: Pipe manufacturer's standard coupling or joint materials capable of producing a soil-tight joint.

Gravity Pipe Coupling: Premanufactured rubber or elastomeric sleeve and stainless band assembly fabricated to mate with outer diameters of the pipes to be joined and complying with ASTM C1173.

Concrete for Pipe Collar: Material complying with standard spec 520.2.4.

C Construction

Excavate as required both horizontally and vertically to locate connection point and determine the material and diameter of the existing pipe. Comply with the requirements of standard spec 608.3.

Connect new pipe to existing pipe using mortar joint, standard coupling or joint, or gravity pipe coupling. Use concrete collar for connection to existing pipe where the engineer agrees a mortar joint, standard coupling or joint, or gravity pipe coupling cannot be used.

D Measurement

The department will measure Connect to Existing Storm Sewer Pipe as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONSPV.0060.08Connect to Existing Storm Sewer PipeEACH

Payment is full compensation for furnishing and installing materials including mortar, joint materials, concrete collar, coupling, and/or concrete, for locating the existing pipe, and for excavation, backfilling, disposing of surplus material, and restoring the work site.

The department will pay separately for the pipe.

39. Grading and Shaping for Curb Ramps, Item SPV.0060.09.

A Description

This special provision describes excavating, grading, filling, shaping, and compacting as necessary to construct each curb ramp location conforming to standard spec 205 and 208, as the plans show, and as follows.

B Materials

Furnish materials as the plans show and engineer directs conforming to the standard specs for the following:

Common excavation 205.2 Borrow 208.2

C Construction

Construct the final subgrade for the curb ramp at the locations on the plans and as the engineer directs. Dispose of all surplus and unsuitable material as specified in standard spec 205.3.12.

D Measurement

The department will measure Grading and Shaping for Curb Ramps as a unit of work at each curb ramp location, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Grading and Shaping for Curb Ramps	EACH

Payment is full compensation for all excavating, grading, placing borrow, shaping, and compacting at each curb ramp location.

Sidewalk removal, base aggregate dense, construction staking, curb ramp detectable warning field, concrete sidewalk, sawing, and restoration will be paid under respective contract bid items.

40. Verify Landmark Reference Monuments, Item SPV.0060.10.

A Description

This special provision describes preserving the location and constructing new monuments for existing Public Land Survey System (PLSS) section corner monuments and witness monuments located within permanent easements, temporary easements, or construction permit areas, which may be lost or disturbed by construction operations.

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

B Materials

The department can furnish aluminum monument caps if necessary. Otherwise, all materials for the monumentation and witness ties will be the responsibility of the contractor to provide. Any monuments that satisfy Wisconsin Administrative Code Chapter AE-7 will be acceptable.

C Construction

Complete the work according to the direction of the Sauk County Surveyor and as follows:

Contact and follow the direction of the Sauk County Surveyor on perpetuation requirements for PLSS section corner monuments and witness monuments. Obtain existing tie sheets from the Sauk County Surveyor. Locate and verify existing PLSS monuments and ties. Furnish, and install, if necessary, temporary and/or permanent ties. Provide a temporary tie sheet to the Wis-DOT SW Region-Madison Survey Coordinator and the Sauk County Surveyor, for use by the public during the construction phase of the project and before the final monumentation is complete.

Perpetuate and/or reset all PLSS monuments and witness monuments under the direction of a State of Wisconsin Licensed Professional Land Surveyor. Prepare the temporary and final PLSS monument records according to the Wisconsin Administrative Code Chapter AE-7. Prepare and file new monument records with the Sauk County Surveyor according to AE-7 and provide a copy of the same to the Wis-DOT SW Region-Madison Survey Coordinator. This work shall be overseen and completed by a State of Wisconsin Licensed Professional Land Surveyor.

The approximate location of the section corners that will likely be disturbed due to the proposed construction:

Landmark Reference Monument

Station	Offset	Township	Range	Section Corner
495+04	1.6' RT	Franklin	9	Sec 8, NW 1/4
547+15	23.13' RT	Franklin	9	Sec 5, NE 1/4

Notify the Sauk County Surveyor and Wis-DOT SW Region-Madison Survey Coordinator at least thirty (30) working days prior to construction operations that may disturb existing monuments, with pertinent questions or for department provided monument caps.

D Measurement

The department will measure Verify Landmark Reference Monuments by each PLSS section corner monument, acceptably verified, tied, and preserved.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Verify Landmark Reference Monuments	EACH

This price shall be payment in full for furnishing a Professional Land Surveyor; obtaining existing PLSS monument record tie sheet(s); preparing, providing and filing temporary/final PLSS monument record tie sheet(s) from a Professional Land Surveyor; all survey work related to the perpetuation process; the furnishing and placing of all PLSS survey monuments; the furnishing and placement of any necessary witness ties; the removal of the existing monument(s) if necessary; and excavating for the placement of the new monument(s) if necessary.

F Contact Information

WisDOT SW Region-Madison Survey Coordinator

Jarod Alvarez (608) 246-7918 jarod.alvarez@dot.wi.gov

Sauk County Surveyor

Pat Dederich (608) 355-4474 pat.dederich@saukcountywi.gov

swr-621-004

41. Research and Locate Existing Land Parcel Monuments, Item SPV.0060.11.

A Description

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

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

B (Vacant)

C Construction

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

Before construction, research, locate and document monuments located in permanent easements, temporary easements, and construction permit areas. Establish coordinate ties to the monuments to satisfy Wisconsin Administrative Code Chapter AE-7.

Prepare a monument location map showing the type of monuments found and their coordinates. The transportation project plat (TPP) is acceptable as a base map for the monument location map. Provide a copy of the monument location map to the engineer, Sauk County Surveyor and SW Region-Madison Plat Coordinator.

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Research and Locate Existing Land Parcel Monuments	EACH

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

F Contact Information

WisDOT SW Region-Madison Plat Coordinator

Steven Schmidt (608) 246-5390 stevenx.schmidt@dot.wi.gov

Sauk County Surveyor

Pat Dederich (608) 355-4474 pat.dederich@saukcountywi.gov

swr-621-003

42. Verify and Replace Existing Land Parcel Monuments, Item SPV.0060.12.

A Description

This special provision describes verifying the final location of, and replacing existing land parcel or boundary monuments, previously located under the item "Research and Locate Existing Land Parcel Monuments", that are lost or disturbed by construction operations.

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

B Materials

Provide minimum sized replacement monuments as follows:

- Locations outside of pavement areas:
 - 1-inch inside diameter by 24-inch long iron pipe
 - 3/4-inch diameter by 24-inch long rod or rebar
- Locations in asphalt pavement areas:
 - Survey spike
 - Mag nail
- Locations in concrete pavement areas:
 - Drilled hole
 - Chiseled mark

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Verify and Replace Existing Land Parcel Monuments	EACH

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

F Contact Information

WisDOT SW Region-Madison Plat Coordinator

Steven Schmidt (608) 246-5390 stevenx.schmidt@dot.wi.gov

Sauk County Surveyor

Pat Dederich (608) 355-4474 pat.dederich@saukcountywi.gov

swr-621-005

43. Sprayed Asphaltic Surface Treatment, Item SPV.0070.01.

A Description

This special provision describes spraying of asphaltic material onto aggregate shoulders around guardrail installations to control and prevent erosion.

B Materials

Furnish asphaltic material that is according to the pertinent requirements of standard spec 604.2.

C Construction

Apply the asphaltic material uniformly over the surface of the aggregate shoulder at a rate sufficient to thoroughly coat surface or as engineer directs. Assume a starting application rate of 0.35 gal/sy. Avoid excessive application of asphaltic material and exercise care to repent material run-off. Do not apply before impending rains.

D Measurement

The department will measure Sprayed Asphaltic Surface Treatment by the gallon, acceptably placed, according to standard spec 455.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0070.01	Sprayed Asphaltic Surface Treatment	GAL

Payment is full compensation for providing, handling, heating, and applying asphaltic material and for maintaining completed work.

44. Concrete Sidewalk Special, Item SPV.0165.01.

A Description

This special provision describes installation of concrete sidewalk with a thickened edge to be used as a base for pedestrian railing.

B Materials

Furnish concrete conforming to standard spec 602.2.

Furnish coated tie bars and dowel bars conforming to standard spec 505.2.6.

C Construction

Adhere to standard spec 602 for concrete sidewalks and as per details shown on the plans.

D Measurement

The department will measure Concrete Sidewalk Special by the square foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Concrete Sidewalk Special	SF

Payment is full compensation for installing the concrete sidewalk as per details on the plans, restoring the site, and for cleanup.

45. High Friction Surface Treatment, Item SPV.0180.01.

A Description

This special provision describes providing a high friction surface treatment (HFST) composed of aggregate in a resin binder on HMA or concrete pavements as the plans show and as follows.

B Materials

B.1 Resin Binder

Supply a two-part thermosetting resin binder which is compatible with the pavement type, bonds to the pavement surface, holds the aggregate firmly in place in a broad range of climates including below-freezing temperatures, and meets the requirements specified in Table 1. Supply a primer if recommended by the resin binder manufacturer.

Property Requirements		Test Method*	
Viceosity	7 20 poison	ASTM D2556	
VISCOSITY		1-pint specimen	
Gel Time	10 minute minimum	ASTM C881	
Ger Time	10-minute minimum	60g mass	
Liltimate Tensile Strength	2 000 – 5 000 psi @ 7 davs	ASTM D638	
	2,000 – 3,000 psi @ 7 days	Type 1 specimen	
Elongation at Break	30% - 70% @ 7 days	ASTM D638	
Elongation at Dicak	30% - 70% @ 7 days	Type 1 specimen	
Compressive Strength	≥ 1000 psi @ 3 hrs and	ASTM D695**	
	≥ 5000 psi @ 24 hours		
Water Absorption	< 1.0% @ 24-hr	ASTM D570	
		24-hr immersion	
Shore D Hardness	60 – 80 @ 7 days	ASTM D2240***	
		Type 1 precision, Type D method	
Cure Rate	≤ 3 hours	ASTM D1640	
	(Dry Through Time)	50-55 wet mil thickness***	
Adhesive Strength	250 psi @ 24 hours or 100%	ASTM \/1583***	
Addesive Stieligti	Substrate failure	ASTIM V 1565	

Table 1. Resin Binder Properties

- * Prepare samples per manufacturer's recommendation; cure all specimens at $73 \pm 2^{\circ}$ F and at $50 \pm 2^{\circ}$ F; and test all specimens at $73 \pm 2^{\circ}$ F.
- ** 2"x2" cubes made of 2.75 parts of 20-30 mesh sand to 1 part mixed resin binder; use plastic inserts in oversized molds to produce 2" cubes.
- *** Conduct testing on applicable pavement type.

B.2 Aggregates

Furnish calcined bauxite aggregate that is fractured or angular in shape; resistant to polishing and crushing; clean and free of surface moisture; free from silt, clay, asphalt, or other organic materials; compatible with the resin binder; and meet the properties and gradation requirements in Tables 2 and 3. Check with resin binder manufacturer for any compatibility requirements or concerns.

Table	2. Agg	regate	Prope	rties
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Property	Requirements	Test Methods
Moisture Content	≤ 0.2%	AASHTO T 255
Fine Aggregate Angularity	≥ 45%	AASHTO T 304, Method A
Micro-Deval	≤ 15% loss	ASTM D7428
LA Wear	\leq 10% loss @ 100 revolutions and \leq 25% loss @500 revolutions	AASHTO T 96
Freeze-Thaw Soundness	≤ 9% loss @ 50, 16, or 25 cycles using Procedure A, B, or C, respectively	AASHTO T 103
Sieve Size	% Passing by Weight	
------------	---------------------	
No. 4	100	
No. 6	95	
No. 16	0-5	
No. 30	0-1	

Table 3. Aggregate Gradation (AASHTO T27)

B.3 Approval of High Friction Surface Treatment

A minimum of 20 working days before applying HFST, submit product data sheets and specifications from the manufacturer, and a certified test report from an independent laboratory verifying that the resin binder and the calcined bauxite aggregate meet all the requirements specified in Tables 1, 2, and 3. Documents must be dated within three years.

If resin binder has not been previously used in Wisconsin, also submit a list of at least five reference projects where the resin binder has been used for similar applications and in locations that have similar climatic conditions as Wisconsin. Supply a description of the projects along with contact information of the facility owner.

If the engineer requests, provide samples of the resin binder and aggregate for department testing before applying HFST.

C Construction

C.1 General

The contractor will provide documentation showing HFST application experience from at least three previous projects completed for WisDOT or other agencies.

Conduct a meeting with the resin binder manufacturer representatives before applying HFST to establish procedures for maintaining optimum working conditions and coordination of the work. Submit recommended application procedures, including quality control practices, to the engineer for approval. Ensure that a resin binder manufacturer representative is on site to provide technical assistance and quality assurance during surface preparation and for application of HFST.

Ensure that the resin binder components maintain their original properties during storage and handling. Store all aggregate in a dry environment and protect from contaminants on the job site.

C.2 Pavement Surface Preparation

C.2.1. Pavement Surface Repair

Remove visibly unsound or disintegrated areas of the pavement surface as the plans show or the engineer directs. Clean and dry all cracks too large to be filled with surface treatment. Fill cracks with a mixture of resin binder and aggregate before applying the surface treatment. Follow manufacturer's recommendations for curing before applying the surface treatment.

Check with resin binder manufacturer to ensure that products used for pavement repairs or patches are compatible with the resin HFST. Ensure that any new concrete or repairs are fully cured before placing the HFST.

C.2.2 Surface Preparation

Cover and protect utilities, drainage structures, expansion joints on bridge decks, and other structures within or adjacent to the application location to prevent materials from adhering to or entering those structures.

Remove pavement markings that are within the treatment area. Cover existing pavement markings adjacent to the application if they are to remain in place.

After all pavement repairs or patches have completely cured, and no more than 24 hours before HFST application, prepare a concrete pavement surface by shot blasting to roughen the surface texture. Ensure the pavement surface has no grease, oil, curing compound, loosely bonded mortar, pavement marking, or other foreign matter resting on the pavement surface.

Completely remove any grease, oil, pavement marking, or other foreign matter resting on an HMA pavement surface that could prevent proper bonding of the resin binder by shot blasting. Shot blast entire HMA pavement surfaces that are less than 30 days old prior to cleaning and installing HFST.

Sufficiently clean HMA and concrete pavement surfaces by vacuum-sweeping and blowing, with oil-free compressed air, just before applying HFST. Compressors must be equipped with functioning oil/water separators. Cleaning must be done the same day that HFST will be applied. Ensure the surface is clean, completely dry, and free of all dust, oil, debris, and other material that might interfere with the bond between the resin binder and the existing pavement surface.

If the engineer requires additional verification of adequate surface preparation of the pavement, test the bond strength according to ASTM C1583. The surface is acceptable if the tensile bond strength is greater than or equal to 250 psi, or failure is in the substrate. Repeat shot blasting, cleaning, and testing, if needed, until passing test results are obtained or the surface is acceptable to the engineer.

Keep vehicles and unnecessary equipment off the cleaned surface; only allow HFST application equipment on the clean surface. Apply HFST as soon as possible after pavement surface preparations are completed.

Abide by the established quality control practices and adhere to any additional manufacturer recommendations for surface preparation. Request that the engineer inspect and approve the pavement surface immediately prior to placing the HFST.

C.3 Application of the HFST

Do not apply the HFST if any of the following exists:

- Pavement surface is wet, damp, or has received rainfall in the previous 24 hours.
- Pavement surface is not sufficiently clean.
- Ambient air or pavement surface temperature is below 50° F or below the manufacturer's recommendations.
- If the anticipated weather conditions would prevent adequate curing of the HFST.
- Rain is predicted before HFST completion or proper cure is achieved.
- Pavement preparation is inadequate or didn't pass pull-off test.

Close treatment areas to traffic until HFST has completely cured and the pavement surface has been vacuum-swept.

Construct HFST to the full width of the existing pavement surface or as the plans show or engineer directs. Extend the HFST application 2'-3' into the shoulders if application site is on a curve. Apply as a single layer 1/8 inch to 1/4 inch thick.

Apply a primer to the pavement surface if recommended by the resin binder manufacturer and according to their application recommendations. Abide by the established quality control practices and adhere to any additional manufacturer recommendations for HFST application.

Blend and mix the resin binder components at the manufacturer's specified ratio using equipment capable of providing the desired results.

Apply the resin binder uniformly over the pavement surface manually or with automated equipment at a uniform thickness of 50-65 mils (25-32ft2/gal). Use enough resin to cover the pavement surface and sufficiently embed half the thickness of the aggregate; do not apply so much that it covers the aggregate and creates a slick surface. Adjust application rate, as needed, based on the pavement surface type, profile, and condition.

If using automated equipment, ensure that the equipment features positive displacement, volumetric metering, and is capable of storing, mixing, heating, monitoring, and distributing the binder components at the proper mix ratio. Adjust the pressure and the speed of the equipment to achieve the proper application thickness. If applying the binder by hand, use a serrated edged squeegee to spread the resin binder and provide uniform coverage at the proper thickness.

Do not contaminate the wet binder or allow the binder material to separate or cure and impair bonding of the aggregate.

Immediately after applying the resin binder, distribute a sufficient quantity of dry calcined bauxite aggregate to completely cover the resin binder by hand broadcasting or by using a standard chip spreader or equivalent machine. Ensure aggregate is placed within five minutes of the resin binder placement, before it begins to cure. When broadcasting, sprinkle or drop the aggregate onto the resin binder vertically. Do not distribute aggregate in a way that will cause it to roll in the resin binder before coming to a rest; do not push the aggregate into position with a broom or any other hand tool. If using a chip spreader, the machine shall follow closely behind the crew or equipment applying the resin binder. Immediately cover any visible wet or bare spots, or areas with excessive binder, with additional calcined bauxite aggregate before the resin binder begins to set.

Allow the HFST to properly cure, adhering to manufacturer recommendations for minimum cure times at applicable temperatures.

After the HFST is fully cured, remove excess loose surface aggregate by sweeping, blowing, or vacuuming. Do not tear or otherwise damage the surface. Excess calcined bauxite aggregate that is recovered by a vacuum sweeper can be reused if clean, uncontaminated, and dry. Remove and replace damaged areas or areas with excess or insufficient aggregate coverage. Clean expansion joints, utilities, and drainage structures of all debris before opening to traffic.

Additionally, within 3 to 7 days after opening to traffic, vacuum sweep the pavement surface to remove loosened aggregate from the high friction surface area, the shoulders, and any other areas within and immediately adjacent to the HFST site.

D Measurement

The department will measure High Friction Surface Treatment by the square yard, 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.0180.01	High Friction Surface Treatment	SY

Payment for High Friction Surface Treatment is full compensation for testing materials; for preparing the pavement surface; filling all cracks; for providing the HFST; for cleanup; and for vacuum sweeping and disposing of excess material after the completion and again 3 to 7 days after completion.

The department will pay separately for pavement repairs and traffic control.

46. Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil, Item SPV.0195.01.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of contaminated soil. Contaminated soil shall be disposed of at a WDNR-approved facility. The closest WDNR-approved facilities are:

La Crosse County Landfill 3200 Berlin Drive La Crosse, WI 54601 (608) 785-9572

Advanced Disposal Cranberry Creek Landfill 2510 Engel Road Wisconsin Rapids, WI 54495 (715) 997-3134

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a completed solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Locations

The department testing for soil contamination within this project where excavation is required. Previous investigations indicate that contamination is present at the following location:

Petroleum Contamination: Station 495+00 to 496+00, from the reference line to construction limits on the right, from 0 to greater than 10 feet bgs.

Contaminated soil and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soil and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Contaminated soil at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name:	Anna Jahns
	Wisconsin DOT-SW Region
Address:	3550 Mormon Coulee Road
	La Crosse, WI 54601
Phone:	(608) 785-9961
E-mail:	Annah.Jahns@dot.wi.gov
Name:	Dan Haak
	TRC Environmental Corporation
Address:	999 Fourier Drive, Suite 101
	Madison, WI 53717
Phone:	(608) 826-3628 office, (608) 886-7423 mobile
E-mail:	DHaak@trccompanies.com

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	TRC Environmental Corporation
Address:	999 Fourier Drive, Suite 101, Madison, WI 53717
Contact:	Dan Haak
Phone:	(608) 826-3628 office, (608) 886-7423 mobile
E-mail:	DHaak@trccompanies.com

The role of the environmental consultant will be limited to:

- Determining the location and limits of contaminated soil to be excavated based on analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying contaminated soils to be hauled to the disposal facility;
- 3. Documenting that activities associated with management of contaminated soil are in conformance with the contamination management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of contaminated soil from the disposal facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also, notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Identify the WDNR-approved bioremediation and disposal facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation and disposal facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not pump or haul contaminated groundwater offsite without specific approval from the environmental consultant. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Protection of Groundwater Monitoring Wells

Groundwater monitoring wells may be present within the construction limits. Protect all groundwater monitoring wells to maintain their integrity. Adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant for the abandonment or adjustment of the wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

A.5 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Anna Jahns with the department at (608) 785-9961.

A.6 Health and Safety Requirements for Workers Remediating Contamination

Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products; polycyclic aromatic hydrocarbons; and metals. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

Disposal of contaminated soil at the bioremediation and disposal facility is subject to the facility's safety policies.

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite disposal. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material (PID readings less than 10 ppm and no observation of staining or petroleum odor, or based on existing analytical data) for reuse as fill within the construction limits as allowed, or

- Petroleum contaminated soil (significant petroleum odor, staining, and/or PID readings greater than 10 ppm) for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Potentially contaminated soil for temporary stockpiling and additional characterization prior to disposal.

Directly load and haul soil designated by the environmental consultant for offsite disposal to the WDNRapproved facility. Verify that vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils so as not to contain free liquids.

When material is encountered outside the above-identified limits of known contamination that appears to have been impacted with petroleum or chemical products, or when other obvious potentially contaminated materials are encountered or material exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or when underground storage tanks are encountered, suspend excavation in that area and notify the engineer.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil in tons of contaminated soil accepted by the disposal facility as documented by weight tickets generated by the facility. Load tickets must be delivered to the engineer within 10 business days of the date on which the soil was accepted by the facility.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation and/or disposal of contaminated soil; tipping fees; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

ADDITIONAL SPECIAL PROVISION 4

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

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Acceptance and Final Payment

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work.

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

Make the following revisions to the standard specifications:

108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

108.9.4.1 Winter Suspension for Completion Date Contracts

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

108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:

- (1) Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
- (2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
- (3) The following are non-compensable delays:
 - 1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
 - 2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
 - 3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
 - 4. Delays from fires or epidemics.
 - 5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
 - 6. Altered quantities as specified in 109.3.

108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:

- (1) Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
- (2) The following are compensable delays:

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

310 Open Graded Base

310.2 Materials

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

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

AASHTO No. 67 ^[1]		
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67	
2-inch	-	
1 1/2-inch	-	
1-inch	100	
3/4-inch	90 – 100	
1/2-inch	-	
3/8-inch	20 – 55	
No. 4	0 – 10	
No. 8	0 – 5	
No. 16	-	
No. 30	-	
No. 50	-	
No. 100	-	
No. 200	<=1.5	

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

^[1] Size according to AASHTO M43.

390 Base Patching

390.4 Measurement

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

- (1) The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.
- (2) The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.
- ⁽³⁾ The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

390.5 Payment

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

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

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

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

460 Hot Mix Asphalt Pavement

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:

(4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:

Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.

Batch plants:

 Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.

Asphalt content (AC) in percent:

Determine AC using one of the following methods:

- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

Bulk specific gravity of the compacted mixture:

According to WTM T166.

Theoretical maximum specific gravity:

According to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G_{mb}) of the compacted mixture according to WTM T166.

Maximum specific gravity (Gmm) according to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

503 Prestressed Concrete Members

503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:

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

604 Slope Paving

604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:

(3) Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

TABLE 604-01	COARSE AGGREGATE (% passing by weight)
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AASHTO No. 4 ^[1]				
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 4			
2-inch	100			
1 1/2-inch	90 - 100			
1-inch	20 - 55			
3/4-inch	0 - 15			
1/2-inch	-			
3/8-inch	0 - 5			
No. 4	-			
No. 8	-			
No. 16	-			
No. 30	-			
No. 50	-			
No. 100	-			
No. 200	<=1.5			

^[1] Size according to AASHTO M43.

612 Underdrains

612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:

(1) Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

614 Semi-rigid Barrier Systems and End Treatments

614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:

(1) Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

TABLE 014-2 FINE AGGREGATE GRADATION		
SEIVE	FINE AGGREGATE (% PASSING by WEIGHT)	
3/8-inch	100	
No. 4	90 - 100	
No. 8	-	
No. 16	45 - 85	
No. 30	-	
No. 50	5 - 30	
No. 100	0 - 10	
No. 200	<=3.5	
	1	

TABLE 614-2 FINE AGGREGATE GRADATION

628 Erosion Control

628.2.13 Rock Bags

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

(2) Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

639 Drilling Wells

639.2.1 General

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

(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

652 Electrical Conduit

652.3.1.2 Installing Underground

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

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

ERRATA

390.3.4 Special High Early Strength Concrete Patching

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

(1) Construct as specified for special high early strength repairs under 416.3.7 except as follows:

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

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 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.
 - 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. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
 - 6. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
 - All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.
- B. Costs for conforming to this special provision are incidental to the contract.

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

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

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

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll 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 <u>paul.ndon@dot.wi.gov</u>. 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 Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

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

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

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).

BUY AMERICA PROVISION

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

1. Iron and Steel

All iron and steel manufacturing and coating processes (from the initial melting stage through the application of coatings) must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America.

The exemption of the iron and steel manufacturing and coating processes Buy America requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project.

2. Manufactured Product

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

3. Construction Material

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

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

- The Total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project¹; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below \$500,000²

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Buy America provision.

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

Upon completion of the project, certify to the engineer, in writing using department form DT4567 that all iron and steel, manufactured products, and construction materials conform to this Buy America provision.

Form DT4567 is available at: https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Attach a list of iron or steel and construction material exemptions and their associated costs to the certification form.

¹ The de minimis public interest waiver does not apply to iron and steel subject to the requirements of 23 U.S.C. 313 on financial assistant administered by FHWA. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for iron and steel. 2 The small grant portion of the waiver does not apply to iron, steel, and manufactured goods subject to the requirements of 49 U.S.C. 22905(a).



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0205 Grubbing	36.000 STA		
0004	203.0100 Removing Small Pipe Culverts	2.000 EACH		
0006	203.0220 Removing Structure (structure) 01. STA 730+57	1.000 EACH	·	
0008	203.0220 Removing Structure (structure) 02. STA 730+74	1.000 EACH	·	·
0010	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 01. B-56-137	1.000 EACH		
0012	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 02. B-56-138	1.000 EACH		·
0014	204.0100 Removing Concrete Pavement	79.000 SY		
0016	204.0110 Removing Asphaltic Surface	1,270.000 SY		
0018	204.0115 Removing Asphaltic Surface Butt Joints	2,117.000 SY		
0020	204.0120 Removing Asphaltic Surface Milling	239,885.000 SY		
0022	204.0130 Removing Curb	9.000 LF		
0024	204.0150 Removing Curb & Gutter	1,371.000 LF		
0026	204.0155 Removing Concrete Sidewalk	471.000 SY		
0028	204.0165 Removing Guardrail	12,902.000 LF		
0030	204.0195 Removing Concrete Bases	2.000 EACH	·	



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0210 Removing Manholes	1.000 EACH		
0034	204.0220 Removing Inlets	4.000 EACH		
0036	204.0245 Removing Storm Sewer (size) 01. 12- Inch	8.000 LF		;
0038	204.0245 Removing Storm Sewer (size) 02. 15- Inch	4.000 LF	·	·
0040	204.0245 Removing Storm Sewer (size) 03. 18- Inch	77.000 LF		·
0042	204.0245 Removing Storm Sewer (size) 04. 24- Inch	162.000 LF		·
0044	204.9060.S Removing (item description) 01. Inlet Covers	4.000 EACH		·
0046	204.9060.S Removing (item description) 02. Post	2.000 EACH		
0048	204.9180.S Removing (item description) 01. Concrete Retaining Wall and Header	13.000 SY		
0050	205.0100 Excavation Common	10,679.000 CY		
0052	206.1001 Excavation for Structures Bridges (structure) 01. B-56-235	1.000 EACH		
0054	206.1001 Excavation for Structures Bridges (structure) 02. B-56-236	1.000 EACH		·
0056	208.0100 Borrow	10,530.000 CY		
0058	210.1500 Backfill Structure Type A	678.000 TON		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	211.0101	1.000		
	Prepare Foundation for Asphaltic Paving (project) 01. 5080-02-74	EACH	·	
0062	211.0700.S	1.000		
	Prepare Foundation for CIR Base Layer (project) 01. 5080-02-74	EACH		·
0064	211.0800.S	562.000		
	Base Repair for CIR Layer	CY	•	
0066	213.0100	1.000		
	Finishing Roadway (project) 01. 5080-02-74	EACH		·
0068	213.0100	1.000		
	Finishing Roadway (project) 02. 5080-02-82	EACH		
0070	305.0110	11,640.000		
	Base Aggregate Dense 3/4-Inch	TON	·	
0072	305.0120	7,522.000		
	Base Aggregate Dense 1 1/4-Inch	TON	•	
0074	305.0500	481.000		
0070		51A	•	·
0076	Breaker Run	260.000 TON		
0078	312.0110	4,251.000		
	Select Crushed Material	TON	·	·
0080	327.1000.S	222,485.000		
	CIR Asphaltic Base Layer	SY	•••	•
0082	415.0080	90.000		
	Concrete Pavement 8-Inch	SY	·	
0084	415.0410	224.000		
		51		•
0086	416.0610 Drilled Tie Bars	33.000 FACH		
0088	450 4000	486.000	·	·
0000	HMA Cold Weather Paving	-100.000 TON		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0090	455.0605 Tack Coat	25,748.000 GAL		
0092	455.0770.S Asphalt Stabilizing Agent	886.000 TON	·	
0094	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	2.000 EACH		
0096	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	4.000 EACH		·
0098	460.2000 Incentive Density HMA Pavement	1,170.000 DOL	1.00000	1,170.00
0100	460.2005 Incentive Density PWL HMA Pavement	28,042.000 DOL	1.00000	28,042.00
0102	460.2007 Incentive Density HMA Pavement Longitudinal Joints	12,380.000 DOL	1.00000	12,380.00
0104	460.2010 Incentive Air Voids HMA Pavement	42,307.000 DOL	1.00000	42,307.00
0106	460.6224 HMA Pavement 4 MT 58-28 S	26,460.000 TON		
0108	460.6225 HMA Pavement 5 MT 58-28 S	17,662.000 TON		
0110	465.0105 Asphaltic Surface	502.000 TON		
0112	465.0120 Asphaltic Surface Driveways and Field Entrances	75.000 TON	·	·
0114	465.0315 Asphaltic Flumes	10.000 SY		
0116	465.0520 Asphaltic Rumble Strips, Shoulder	107,031.000 LF	·	
0118	465.0560 Asphaltic Rumble Strips, Centerline	49,904.000 LF		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

Alt Mbr ID:

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Approximate Item ID Line **Unit Price Bid Amount** Quantity and Number Description Units 0120 502.0100 573.000 CY **Concrete Masonry Bridges** 0122 502.3200 626.000 Protective Surface Treatment SY 0124 502.3210 208.000 **Pigmented Surface Sealer** SY 0126 503.0137 665.000 Prestressed Girder Type I 36W-Inch LF 0128 504.0900 39.000 **Concrete Masonry Endwalls** CY 0130 505.0400 11,650.000 Bar Steel Reinforcement HS Structures LB 0132 505.0600 68,320.000 Bar Steel Reinforcement HS Coated LB Structures 0134 506.2605 14.000 Bearing Pads Elastomeric Non-EACH Laminated 0136 506.4000 12.000 Steel Diaphragms (structure) 01. EACH B-56.235 0138 513.2001 98.000 **Railing Pipe** LF 0140 516.0500 52.000 SY Rubberized Membrane Waterproofing 0142 2.000 520.1018 Apron Endwalls for Culvert Pipe 18-Inch EACH 0144 520.1024 2.000 Apron Endwalls for Culvert Pipe 24-Inch EACH 0146 520.3318 28.000 Culvert Pipe Class III-A 18-Inch LF 0148 520.3324 64.000 Culvert Pipe Class III-A 24-Inch LF



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0150	522.0484	196.000		
	Culvert Pipe Reinforced Concrete Class IV 84-Inch	LF		
0152	522.1024	1.000		
	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	·	
0154	525.0124	2.000		
	Culvert Pipe Corrugated Aluminum 24- Inch	LF	·	·
0156	525.0324	1.000		
	Apron Endwalls for Culvert Pipe Aluminum 24-Inch	EACH	·	·
0158	531.2042	18.000		
	Drilling Shaft 42-Inch	LF		·
0160	531.5130	1.000		
	Foundation Single-Shaft Type MC-III (structure) 01. S-56-0029	EACH		
0162	531.8990	1.000		
	Anchor Assemblies Poles on Structures	EACH		·
0164	532.5130	1.000		
	Monotube Cantilever Type III (structure) 01. S-56-0029	EACH		
0166	550.1100	955.000		
	Piling Steel HP 10-Inch X 42 Lb	LF		·
0168	601.0105	8.000		
	Concrete Curb Type A	LF		·
0170	601.0405	33.000		
	Concrete Curb & Gutter 18-Inch Type A	LF		·
0172	601.0411	1,474.000		
	Concrete Curb & Gutter 30-Inch Type D	LF	·	·
0174	601.0588	210.000		
	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	·	·
0176	601.0590	26.000		
	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Pro L Nu	posal _ine Imber	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0178	8	601.0600 Concrete Curb Pedestrian	88.000 LF		·
0180	0	602.0410 Concrete Sidewalk 5-Inch	5,548.000 SF		
0182	2	602.0415 Concrete Sidewalk 6-Inch	683.000 SF		
0184	4	602.0515 Curb Ramp Detectable Warning Field Natural Patina	358.000 SF		·
0186	6	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	158.000 SF		·
0188	8	602.0810 Concrete Driveway 6-Inch	254.000 SY		
0190	0	602.3010 Concrete Surface Drains	4.000 CY		
0192	2	606.0100 Riprap Light	2,935.000 CY		
0194	4	606.0200 Riprap Medium	23.000 CY		
0196	6	606.0300 Riprap Heavy	934.000 CY		
0198	8	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	16.000 LF		
0200	D	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	4.000 LF	·	
0202	2	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	130.000 LF		
0204	4	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	109.000 LF	·	·



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0206	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	44.000 LF		·
0208	611.0430 Reconstructing Inlets	1.000 EACH		
0210	611.0624 Inlet Covers Type H	5.000 EACH	<u>.</u>	·
0212	611.0636 Inlet Covers Type HM-S	3.000 EACH		
0214	611.1230 Catch Basins 2x3-FT	2.000 EACH		
0216	611.2004 Manholes 4-FT Diameter	1.000 EACH		
0218	611.2006 Manholes 6-FT Diameter	1.000 EACH		
0220	611.3230 Inlets 2x3-FT	1.000 EACH		
0222	611.8110 Adjusting Manhole Covers	9.000 EACH		
0224	611.8115 Adjusting Inlet Covers	6.000 EACH		
0226	612.0406 Pipe Underdrain Wrapped 6-Inch	484.000 LF	·	
0228	614.0150 Anchor Assemblies for Steel Plate Beam Guard	8.000 EACH		
0230	614.0200 Steel Thrie Beam Structure Approach	41.200 LF		
0232	614.0370 Steel Plate Beam Guard Energy Absorbing Terminal	2.000 EACH		·
0234	614.0800 Crash Cushions Permanent	2.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0236	614.2300 MGS Guardrail 3	1,612.500 LF		
0238	614.2330 MGS Guardrail 3 K	9,162.500 LF		
0240	614.2350 MGS Guardrail Short Radius	485.500 LF		
0242	614.2500 MGS Thrie Beam Transition	472.800 LF		
0244	614.2610 MGS Guardrail Terminal EAT	38.000 EACH		
0246	614.2630 MGS Guardrail Short Radius Terminal	6.000 EACH		
0248	618.0100 Maintenance and Repair of Haul Roads (project) 01. 5080-02-74	1.000 EACH	·	
0250	618.0100 Maintenance and Repair of Haul Roads (project) 02. 5080-02-82	1.000 EACH	·	
0252	619.1000 Mobilization 01. 5080-02-74	1.000 EACH		
0254	619.1000 Mobilization 02. 5080-02-82	1.000 EACH		
0256	624.0100 Water	380.000 MGAL		
0258	625.0500 Salvaged Topsoil	28,229.000 SY		
0260	628.1104 Erosion Bales	10.000 EACH		
0262	628.1504 Silt Fence	27,386.000 LF		
0264	628.1520 Silt Fence Maintenance	27,386.000 LF		
0266	628.1905 Mobilizations Erosion Control	14.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0268	628.1910 Mobilizations Emergency Erosion Control	11.000 EACH		
0270	628.2004 Erosion Mat Class I Type B	13,337.000 SY		
0272	628.2008 Erosion Mat Urban Class I Type B	1,232.000 SY		
0274	628.2027 Erosion Mat Class II Type C	13,661.000 SY		
0276	628.6005 Turbidity Barriers	704.000 SY	·	·
0278	628.7015 Inlet Protection Type C	34.000 EACH	·	·
0280	628.7504 Temporary Ditch Checks	25.000 LF	·	·
0282	628.7555 Culvert Pipe Checks	9.000 EACH	·	·
0284	629.0210 Fertilizer Type B	23.900 CWT	·	·
0286	630.0120 Seeding Mixture No. 20	1,086.700 LB		·
0288	630.0140 Seeding Mixture No. 40	23.500 LB		
0290	630.0200 Seeding Temporary	972.800 LB	·	·
0292	630.0500 Seed Water	983.700 MGAL		
0294	633.5100 Markers ROW	20.000 EACH		. <u></u>
0296	633.5200 Markers Culvert End	9.000 EACH	·	·
0298	634.0614 Posts Wood 4x6-Inch X 14-FT	41.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0300	634.0616 Posts Wood 4x6-Inch X 16-FT	5.000 EACH	·	
0302	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	1.000 EACH		
0304	637.2210 Signs Type II Reflective H	29.840 SF		
0306	637.2230 Signs Type II Reflective F	19.000 SF		
0308	638.2102 Moving Signs Type II	63.000 EACH		
0310	638.2602 Removing Signs Type II	6.000 EACH		
0312	638.3000 Removing Small Sign Supports	50.000 EACH		
0314	638.4000 Moving Small Sign Supports	7.000 EACH		
0316	642.5201 Field Office Type C	1.000 EACH		·
0318	643.0300 Traffic Control Drums	7,120.000 DAY		·
0320	643.0420 Traffic Control Barricades Type III	13,861.000 DAY		
0322	643.0705 Traffic Control Warning Lights Type A	21,744.000 DAY		·
0324	643.0900 Traffic Control Signs	84,487.000 DAY		
0326	643.0920 Traffic Control Covering Signs Type II	16.000 EACH		
0328	643.1000 Traffic Control Signs Fixed Message	36.000 SF		
0330	643.1050 Traffic Control Signs PCMS	14.000 DAY		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0332	643.3165 Temporary Marking Line Paint 6-Inch	39,919.000 LF		
0334	643.3170 Temporary Marking Line Epoxy 6-Inch	39,919.000 LF		
0336	643.3350 Temporary Marking Crosswalk Removable Tape 6-inch	1,272.000 LF		·
0338	643.3770 Temporary Marking Raised Pavement Marker Type II	529.000 EACH		
0340	643.5000 Traffic Control 01. 5080-02-74	1.000 EACH	·	·
0342	643.5000 Traffic Control 02. 5080-02-82	1.000 EACH		
0344	644.1410 Temporary Pedestrian Surface Asphalt	1,617.000 SF		·
0346	644.1430 Temporary Pedestrian Surface Plate	194.000 SF		
0348	644.1440 Temporary Pedestrian Surface Matting	1,617.000 SF	<u>.</u>	
0350	644.1601 Temporary Pedestrian Curb Ramp	344.000 DAY		
0352	644.1605 Temporary Pedestrian Detectable Warning Field	184.000 SF		
0354	644.1810 Temporary Pedestrian Barricade	2,308.000 LF		
0356	645.0111 Geotextile Type DF Schedule A	150.000 SY		
0358	645.0120 Geotextile Type HR	1,756.000 SY		
0360	645.0130 Geotextile Type R	9,772.000 SY		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0362	646.2020 Marking Line Epoxy 6-Inch	968.000 LF		
0364	646.2040 Marking Line Grooved Wet Ref Epoxy 6- Inch	194,105.000 LF	·	
0366	646.4020 Marking Line Epoxy 10-Inch	390.000 LF		
0368	646.6120 Marking Stop Line Epoxy 18-Inch	120.000 LF		
0370	646.6466 Cold Weather Marking Epoxy 6-Inch	51,535.000 LF		
0372	646.6470 Cold Weather Marking Epoxy 10-Inch	98.000 LF		
0374	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,402.000 LF		·
0376	646.8320 Marking Parking Stall Epoxy	144.000 LF		
0378	646.9010 Marking Removal Line Water Blasting 4- Inch	245.000 LF		
0380	650.4000 Construction Staking Storm Sewer	6.000 EACH		
0382	650.4500 Construction Staking Subgrade	1,994.000 LF		
0384	650.5000 Construction Staking Base	1,994.000 LF		·
0386	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,751.000 LF		
0388	650.6000 Construction Staking Pipe Culverts	3.000 EACH		
0390	650.6501 Construction Staking Structure Layout (structure) 01. S-56-0029	1.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0392	650.6501 Construction Staking Structure Layout (structure) 02 B-56-235	1.000 EACH	·	·
0394	650.6501 Construction Staking Structure Layout (structure) 03. B-56-236	1.000 EACH	·	·
0396	650.8000 Construction Staking Resurfacing Reference	61,823.000 LF	·	·
0398	650.8501 Construction Staking Electrical Installations (project) 01. 5080-02-74	1.000 EACH		·
0400	650.9000 Construction Staking Curb Ramps	38.000 EACH		
0402	650.9500 Construction Staking Sidewalk (project) 01. 5080-02-74	1.000 EACH		
0404	650.9911 Construction Staking Supplemental Control (project) 01. 5080-02-74	1.000 EACH		
0406	650.9911 Construction Staking Supplemental Control (project) 02. 5080-02-82	1.000 EACH		
0408	650.9920 Construction Staking Slope Stakes	18,833.000 LF		
0410	654.0102 Concrete Bases Type 2	1.000 EACH		
0412	654.0113 Concrete Bases Type 13	1.000 EACH		
0414	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	1.000 EACH		
0416	657.0305 Poles Type 2	1.000 EACH		·
0418	657.0356 Poles Type 12-Over Height	1.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0420	657.0540 Monotube Arms 40-FT	1.000 EACH	·	·
0422	657.0590 Trombone Arms 20-FT	1.000 EACH	·	
0424	690.0150 Sawing Asphalt	3,014.000 LF		
0426	690.0250 Sawing Concrete	309.000 LF	·	
0428	715.0502 Incentive Strength Concrete Structures	3,438.000 DOL	1.00000	3,438.00
0430	740.0440 Incentive IRI Ride	46,352.000 DOL	1.00000	46,352.00
0432	999.2005.S Maintaining Bird Deterrent System (station) 01. 759+68	1.000 EACH		
0434	999.2005.S Maintaining Bird Deterrent System (station) 02. 763+71	1.000 EACH	·	·
0436	SPV.0060 Special 01. Adjusting Water Valves	8.000 EACH		
0438	SPV.0060 Special 02. Adjusting Sanitary Manhole Covers	4.000 EACH		
0440	SPV.0060 Special 03. Cover Plates Left In Place	1.000 EACH		
0442	SPV.0060 Special 04. Concrete Base Type 1 Special	2.000 EACH	·	
0444	SPV.0060 Special 05. Management of Contaminated Groundwater	1.000 EACH	·	
0446	SPV.0060 Special 06. Remove and Salvage Street Light	2.000 EACH	·	
0448	SPV.0060 Special 07. Reinstall Street Light	2.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0450	SPV.0060	8.000		
	Sewer Pipe	EACH	·	•
0452	SPV.0060	23.000		
	Special 09. Grading and Shaping for Curb Ramps	EACH		·
0454	SPV.0060	2.000		
	Special 10. Verify Landmark Reference Monuments	EACH	·	
0456	SPV.0060	8.000		
	Special 11. Research and Locate Existing Land Parcel Monuments	EACH		
0458	SPV.0060	8.000		
	Special 12. Verify and Replace Existing Land Parcel Monuments	EACH		•
0460	SPV.0070	2,873.000		
	Special 01. Sprayed Asphaltic Surface Treatment	GAL		·
0462	SPV.0165	757.000		
	Special 01. Concrete Sidewalk Special	SF	·	
0464	SPV.0180	14,188.000		
	Special 01. High Friction Surface Treatment	SY		·
0466	SPV.0195	20.000		
	Special 01. Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil	TON	·	·
	Section: 000 ⁷	1	Total:	
			Total Bid:	_

PLEASE ATTACH ADDENDA HERE



Wisconsin Department of Transportation

January 18, 2024

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 February 13, 2024

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

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

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

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

Make the following revisions to the standard specifications:

108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

108.9.4.1 Winter Suspension for Completion Date Contracts

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

108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:

- (1) Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
- (2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
- (3) The following are non-compensable delays:
 - 1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
 - 2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
 - 3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
 - 4. Delays from fires or epidemics.
 - 5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
 - 6. Altered quantities as specified in 109.3.

108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:

- (1) Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
- (2) The following are compensable delays:
- 1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
- 2. A contract change for an engineer-ordered suspension under 104.2.2.3.
- 3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25.
- 4. The unexpected discovery of a hazardous substance consistent with 107.24.
- 5. The non-completion of work that utilities or other third parties perform, if that work is not completed as specified in the contract.
- (3) For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under 108.11, and will pay the contractor for delay costs determined as follows:
 - 1. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
 - 2. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

310 Open Graded Base

310.2 Materials

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

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

AASHTO No. 67 ^[1]					
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67				
2-inch	-				
1 1/2-inch	-				
1-inch	100				
3/4-inch	90 – 100				
1/2-inch	-				
3/8-inch	20 – 55				
No. 4	0 – 10				
No. 8	0 – 5				
No. 16	-				
No. 30	-				
No. 50	-				
No. 100	-				
No. 200	<=1.5				

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

^[1] Size according to AASHTO M43.

390 Base Patching

390.4 Measurement

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

- (1) The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.
- (2) The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.
- ⁽³⁾ The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

390.5 Payment

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

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

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

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

460 Hot Mix Asphalt Pavement

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:

(4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:

Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.

Batch plants:

 Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.

Asphalt content (AC) in percent:

Determine AC using one of the following methods:

- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

Bulk specific gravity of the compacted mixture:

According to WTM T166.

Theoretical maximum specific gravity:

According to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G_{mb}) of the compacted mixture according to WTM T166.

Maximum specific gravity (Gmm) according to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

460.3.3.2 Pavement Density Determinations

Replace entire section with the following effective with the February 2024 letting:

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

503 Prestressed Concrete Members

503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:

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

604 Slope Paving

604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:

(3) Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

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

AASHTO No. 4 ^[1]				
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 4			
2-inch	100			
1 1/2-inch	90 - 100			
1-inch	20 - 55			
3/4-inch	0 - 15			
1/2-inch	-			
3/8-inch	0 - 5			
No. 4	-			
No. 8	-			
No. 16	-			
No. 30	-			
No. 50	-			
No. 100	-			
No. 200	<=1.5			

^[1] Size according to AASHTO M43.

612 Underdrains

612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:

(1) Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

614 Semi-rigid Barrier Systems and End Treatments

614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:

(1) Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

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

TABLE 614-2 FINE AGGREGATE GRADATION

628 Erosion Control

628.2.13 Rock Bags

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

(2) Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

639 Drilling Wells

639.2.1 General

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

(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

652 Electrical Conduit

652.3.1.2 Installing Underground

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

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

ERRATA

390.3.4 Special High Early Strength Concrete Patching

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

(1) Construct as specified for special high early strength repairs under 416.3.7 except as follows:

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



January 22, 2024

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:

Proposal #03: 5080-02-74 Spring Green - Reedsburg USH 14 to CTH GG STH 23 Sauk County 5080-02-82 Spring Green - Reedsburg Structures B-56-235 & B-56-236 STH 23 Sauk County

Letting of February 13, 2024

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

Schedule of Items:

Revised Bid Item Quantities						
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum	
611.3230	Inlets 2X3-FT	Each	1	1	2	

Deleted Bid Item Quantities						
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum	
654.0113	Concrete Bases Type 13	Each	1	-1	0	
657.0356	Poles Type 12-Over Height	Each	1	-1	0	
657.0540	Monotube Arms 40-FT	Each	1	-1	0	

Plan Sheets:

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
150,160	Miscellaneous Quantities, added quantity and removed bid items

Schedule of Items

Attached, dated January 22, 2024, are the revised Schedule of Items Pages 8 and 14 - 16.

Plan Sheets

The following $8\frac{1}{2} \times 11$ -inch sheets are attached and made part of the plans for this proposal: Revised: 150 and 160.

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

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

END OF ADDENDUM

608.0312 608.0315 608.0318 608.03;
STORM SEWER STORM SEWER STORM SEWER STORM SEV
PIPE PIPE PIPE PIPE PIPE PIPE PIPE PIPE
EILIZ-INCH IIIZ-INCH IIIZ-INCH IIIZ-ANCH IIIZ-ANCH IIIZ-NCH IIZ-NCH IIZ-NC
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10 16 4 12
H23 53
H23 - 65 -
40 0 0 <u>118 10</u>
AT 130 130 130 10
STORM SEWER STRU
611.0430 611.0624
RECONSTRUCTING INLET COVERS
RUCTURE DEPTH INVERT EACH EACH EACH
4.19 800.90 1
4.08 799.67 1
3.88 795.50 - 1
795.95 1
2.4 798.68
1
1 5
-EVATION
HWY: STH 23
•

			Addendum No. 01 ID 5080-02-74 Revised Sheet 160 January 22, 2024
REMARKS	WILLOW ST DOUBLE PIPES		AST 0590 TIDANBONE TAMIS JOFT REMARIS BACH 1 5-56-0029 1 5-56-0029
650.9920 CONSTRUCTION AKING SLOPE STAKES LF	49 173 2,255 774 774 1,551 737 701	831 696 602 1,348 1,348 359 526 334 1,031 1,031 1,035 214 214 214 214 214 214 214 214 214 214	657.03 11 11 11 11 11 11 11 11 11
650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE ST LF			ING 654.0 PQ 654.0 PQ 654.0 PQ 664.0 PG 646.0 PC 646.0 PC 646.1 PC 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
650.5000 CONSTRUCTION STAKING BASE LF	49	222	DIMONOTURE SIGNI 532.5130.01 MONOTURE CANTURE TYPEII TYPEII FIGH EACH 1 1 1
650.4500 CONSTRUCTION AKING SUBGRADE LF	49 173	222	TROMBONE.AN 531.8990 ANCHOR ANCHOR ANCHOR SENULIES ON SFRUCTHES EACH 1 1
ST. LOCATION	WILLOW ST STH 23 LT LT LT LT LT RT RT	LT RT LT LT LT RT RT RT LT RT RT RT RT RT RT RT RT RT TT TT TT TT	531.5130 01 FOUNDATION SINGLESHATTO SINGLESHATT TYPE MG-III (G.S.RUCTURE) (D.S.60029) E.ACH 1 1
STATION	71+20 731+52 237+55 247+30 249+02 275+77 283+28 283+28 292+46	328-50 362-256 362-256 463-469 463-469 564-09 564-09 564-07 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 564-05 552-94-05 552-	531.2042 531.2042 42.1NCH 15 18 18
STATION TO	70+71 - 729+79 - 729+79 - 215+00 - 239+56 - 241+65 - 260+26 - 276+27 - 287+51 - 287+51 - 287+51	319+99 - 331+08 - 356+29 - 356+24 - 356+24 - 458+441 - 458+441 - 458+441 - 556+25 - 503+68 - 503+68 - 511+23 - 526+92 - 541+54 - 551+65 -	DR LOCATION 21.6' RT 29.9' RT 29.9' RT 29.9' RT
CATEGORY	0010 0010 0010 0010 0010 0010 0010 001	0010 0010 0010 0010 0010 0010 0010 001	STATION 30+608 31+458
			CATEGORY 0010 0010



Page 8 of 16

Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0206	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	44.000 LF	·	
0208	611.0430 Reconstructing Inlets	1.000 EACH		
0210	611.0624 Inlet Covers Type H	5.000 EACH	·	·
0212	611.0636 Inlet Covers Type HM-S	3.000 EACH		·
0214	611.1230 Catch Basins 2x3-FT	2.000 EACH		·
0216	611.2004 Manholes 4-FT Diameter	1.000 EACH	·	·
0218	611.2006 Manholes 6-FT Diameter	1.000 EACH	·	·
0220	611.3230 Inlets 2x3-FT	2.000 EACH	<u></u>	
0222	611.8110 Adjusting Manhole Covers	9.000 EACH		
0224	611.8115 Adjusting Inlet Covers	6.000 EACH		
0226	612.0406 Pipe Underdrain Wrapped 6-Inch	484.000 LF		
0228	614.0150 Anchor Assemblies for Steel Plate Beam Guard	8.000 EACH		. <u></u>
0230	614.0200 Steel Thrie Beam Structure Approach	41.200 LF	<u>.</u>	
0232	614.0370 Steel Plate Beam Guard Energy Absorbing Terminal	2.000 EACH	·	·
0234	614.0800 Crash Cushions Permanent	2.000 EACH		



Page 14 of 16

Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0392	650.6501 Construction Staking Structure Layout (structure) 02. B-56-235	1.000 EACH	·	
0394	650.6501 Construction Staking Structure Layout (structure) 03. B-56-236	1.000 EACH		·
0396	650.8000 Construction Staking Resurfacing Reference	61,823.000 LF		·
0398	650.8501 Construction Staking Electrical Installations (project) 01. 5080-02-74	1.000 EACH		·
0400	650.9000 Construction Staking Curb Ramps	38.000 EACH		
0402	650.9500 Construction Staking Sidewalk (project) 01. 5080-02-74	1.000 EACH	·	
0404	650.9911 Construction Staking Supplemental Control (project) 01. 5080-02-74	1.000 EACH	·	
0406	650.9911 Construction Staking Supplemental Control (project) 02. 5080-02-82	1.000 EACH	·	
0408	650.9920 Construction Staking Slope Stakes	18,833.000 LF		
0410	654.0102 Concrete Bases Type 2	1.000 EACH		
0414	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	1.000 EACH		
0416	657.0305 Poles Type 2	1.000 EACH		. <u> </u>
0422	657.0590 Trombone Arms 20-FT	1.000 EACH		
0424	690.0150 Sawing Asphalt	3,014.000 LF		



Page 15 of 16

Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0426	690.0250 Sawing Concrete	309.000 LF		
0428	715.0502 Incentive Strength Concrete Structures	3,438.000 DOL	1.00000	3,438.00
0430	740.0440 Incentive IRI Ride	46,352.000 DOL	1.00000	46,352.00
0432	999.2005.S Maintaining Bird Deterrent System (station) 01. 759+68	1.000 EACH	·	. <u></u>
0434	999.2005.S Maintaining Bird Deterrent System (station) 02. 763+71	1.000 EACH		·
0436	SPV.0060 Special 01. Adjusting Water Valves	8.000 EACH		
0438	SPV.0060 Special 02. Adjusting Sanitary Manhole Covers	4.000 EACH	·	·
0440	SPV.0060 Special 03. Cover Plates Left In Place	1.000 EACH		
0442	SPV.0060 Special 04. Concrete Base Type 1 Special	2.000 EACH	·	. <u></u>
0444	SPV.0060 Special 05. Management of Contaminated Groundwater	1.000 EACH	·	·
0446	SPV.0060 Special 06. Remove and Salvage Street Light	2.000 EACH	·	·
0448	SPV.0060 Special 07. Reinstall Street Light	2.000 EACH		
0450	SPV.0060 Special 08. Connect to Existing Storm Sewer Pipe	8.000 EACH	·	·
0452	SPV.0060 Special 09. Grading and Shaping for Curb Ramps	23.000 EACH	·	



Page 16 of 16

Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, 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
0454	SPV.0060	2.000		
	Special 10. Verify Landmark Reference Monuments	EACH	·	••
0456	SPV.0060	8.000		
	Special 11. Research and Locate Existing Land Parcel Monuments	EACH		••••
0458	SPV.0060	8.000		
	Special 12. Verify and Replace Existing Land Parcel Monuments	EACH	·	••
0460	SPV.0070	2,873.000		
	Special 01. Sprayed Asphaltic Surface Treatment	GAL		••••
0462	SPV.0165	757.000		
	Special 01. Concrete Sidewalk Special	SF	·	·
0464	SPV.0180	14,188.000		
	Special 01. High Friction Surface Treatment	SY		••••
0466	SPV.0195	20.000		
	Special 01. Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil	TON		••
	Section: 000	1	Total:	•••

Total Bid:



Wisconsin Department of Transportation

ary 7, 2024

Division of Transportation Systems Development

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

NOTICE TO ALL CONTRACTORS:

Proposal #03: 5080-02-74 Spring Green - Reedsburg USH 14 to CTH GG STH 23 Sauk County Telephone: (608) 266-1631 Facsimile (FAX): (608) 266-8459

5080-02-82 Spring Green - Reedsburg Structures B-56-235 & B-56-236 STH 23 Sauk County

Letting of February 13, 2024

This is Addendum No. 02, which provides for the following:

Special Provisions:

	Revised Special Provisions	
Article No.	Description	
3	Prosecution and Progress	

Schedule of Items:

	Deleted Bid Item	Quantities	8		
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
531.8990	Anchor Assemblies Poles on Structures	Each	1	-1	0

Plan Sheets:

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
145, 160	Miscellaneous Quantity sheet, a change to the mix acceptance table and remove mq that is not needed

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

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

ADDENDUM NO. 02 5080-02-74 February 7, 2024

Special Provisions

3. Prosecution and Progress

Delete entire section titled Culvert Pipes:

Remove entire section titled Milling, Cold-In-Place Recycling (CIR), and Lower Layer Paving:

Add the following as the fourth paragraph:

Milling and Lower Layer Paving in the Mill and Overlay Section, Non-CIR Section:

Pave the lower layer of HMA Pavement within 48 hours of milling operations. If the lower level HMA paving work is not completed within 48 hours, then cease all work on the project until the paving work is completed. Delays in the paving timeframe may be granted at the discretion of the engineer based on project conditions. No additional contract time will be granted while the work of the project is temporarily stopped waiting for the paving work to resume. These timeframes do not apply in Excavation Below Subgrade (EBS) areas.

Add the following as the seventh paragraph:

Guardrail Replacement:

Install guardrail within 5 calendar days or before noon on the Friday after removal of existing guardrail. Use drums to delineate the edge of roadway while the guardrail remains uninstalled.

Replace paragraph one under section titled Fish Spawning with the following:

There shall be no instream disturbance of Honey Creek as a result of construction activity under or for this contract, from September 15 to May 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of fish.

Schedule of Items Attached, dated February 7, 2024, are the revised Schedule of Items Pages 1 – 16.

Plan Sheets

The following $8\frac{1}{2} \times 11$ -inch sheets are attached and made part of the plans for this proposal: Revised: 145 and 160.

END OF ADDENDUM

ш

SHEET: 145

PLOT SCALE : 1:1

PLOT NAME :

MISCELLANEOUS QUANTITIES

PLOT DATE : January 29, 2024

COUNTY: SAUK

HWY: STH 23

PROJECT NO: 5080-02-74 FILE NAME : ...'030200_mq.pptx

							QUALITY MANAGEMENT PRC	DGRAM TO BE USED FOR:
LOCATION	STATION	MIXTURE USE:	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	141+73 - 456+39; 503+60 - 543+99; 544+72 - 754+90; 771+00 - 777+01	UPPER LAYER	4 MT 58-28 S	5 MT 58-28 S	11,010	1.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	141+72 - 456+39; 503+60 - 543+99; 544+72 - 754+90; 771+00 - 777+01	LOWER LAYER	CIR PAVEMENT	4 MT 58-28-5	15,410	1.75"	PWL INCENTIVE AIR VOIDS HMA	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	456+39 - 503+00	UPPERLAYER	4 MT 58-28 S	5 MT 58-28 S	525	1.25"	INCENTIVE DENSITY PVVL HMA PAVEMENT 460.2005 ACCEPTANCE BY CORING	NCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	456+39 - 503+00	LOWER LAYER	EXISTING HMA SURFACE / EXISTING GRAVEL SURFACE	4 MT 58-28-5	1,155	2.75" 5	INCENTIVE DENSITY PV/L HIMA PAVEMENT 460.2005 ACCEPTANCE BY CORING	NCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
VARYING SHOULDER WIDTH	141+73 - 456+39; 503+60 - 543+99; 544+72 - 754+90; 771+00 - 777+01	UPPERLAYER	4 MT 58-28 S	5 MT 58-28 S	4,738	1.25"	PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARYING SHOULDER WIDTH	141+72 - 456+39; 503+60 - 543+99; 544+72 - 754+90; 771+00 - 777+01	LOWER LAYER	CIR PAVEMENT	4 MT 58-28-5	6,623	1.75"	PWL INCENTIVE AIR VOIDS HMA	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARYING SHOULDER WIDTH	456+39 -503+00	UPPERLAYER	4 MT 58-28 S	5 MT 58-28 S	319	1.25"	INCENTIVE DENSITY PVVL HMA PAVEMENT 460.2005 ACCEPTANCE BY CORING	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARYING SHOULDER WIDTH	456+39 - 503+00	LOWER LAYER	EXISTING HMA SURFACE / EXISTING GRAVEL SURFACE	4 MT 58-28-5	675	2.75" 5	INCENTIVE DENSITY PV/L H/MA PAVEMENT 460.2005 ACCEPTANCE BY CORING	ACCEPTANCE TESTING BY THE LEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
NARIOUS	RURAL SIDEROADS	UPPERLAYER	4 MT 58-28 S	5 MT 58-28 S	514	1.25"	PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS	RURAL SIDEROADS	LOWER LAYER	EXISTING GRAVEL	4 MT 58-28-5	663	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS	ST. LUKES AVE, MAPLE ST, WESTBROOK DR, CHERRY ST, OAK ST, CLOVER ST, MAIN ST, CEDAR ST	UPPER LAYER	4 MT 58-28 S	5 MT 58-28 S	174	1.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS	ST. LUKES AVE, MAPLE ST, WESTBROOK DR, CHERRY ST, OAK ST, CLOVER ST, MAIN ST, CEDAR ST	LOWER LAYER	EXISTING HMA SURFACE / EXISTING GRAVEL SURFACE	4 MT 58-28-5	377	2.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS	WILLOW ST. RECONST	UPPER LAYER	4 MT 58-28 S	5 MT 58-28 S	38	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS	WILLOW ST. RECONST	LOWER LAYER	BASE AGGREGATE	4 MT 58-28-5	61	3"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
VARIOUS		PATH	BASE AGGREGATE	ASPHALTIC SURFACE	27	4" TOTAL	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
VARIOUS		C&G AREAS	BASE AGGREGATE	ASPHALTIC SURFACE	135	5" TOTAL	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
VARIOUS		CULVERT PATCHES	BASE AGGREGATE	ASPHALTIC SURFACE	252	6" TOTAL	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

PERCENT WITHIN LIMITS (PWL) MIXTURE USE TABLE

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	EMÅRKS	LLLOW ST	JBLE PIPES																										REMARKS		S-56-0029		
	0 ION STAKES R	M	DO																							657.0590		TROMBONE	ARMS 20-FT EACH	-	I		
	650.992(CONSTRUCTI STAKING SLOPE : LF	49	173	2,255	737	1,551	701	495 831	696	602 1 340	419 419	526	234	1,021	910 284	206	214	1.085	1,362	81	c I	1	1 1	17.193		657.0305			POLES TYPE 2 EACH	1	I	1	
	650.8000 STRUCTION STAKING RFACING REFERENCE LF	1	!	1		1	I		1	I		I		I		1	ł		I	1	36,126	4,058	21,038 601	61.823		657.0255	TRAN SFORMER BASES	BREAKAWAY 11 1/2-INCH BOLT	CIRCLE EACH	1	I	1	
<u>ON STAKING</u>	650.5000 VSTRUCTION CON AKING BASE RESU LF	49	173	1		I	I		1	-		-		-		I	I		-			-	1 1	222	<u> </u>	654.0102		CONCRETE BASES	9) TYPE 2 EACH	1	I	1	
CONSTRUCT	650.4500 (SONSTRUCTION COF KING SUBGRADE STA	49	173	1		I	1			I		-				-	ł		1			-	1 1	222	IROMBONE AND MC	001 52.5130.01	HAFT CANTLEVER	JPE) (STRUCTURE)	0,29) (01,5-56-0025		$\overline{\checkmark}$		$\left. \right\rangle$
	C STA	VILLOW ST	STH 23	LT DT	2 5	LT	11	I I	RT	LT	2 11	RT	RT	LT 57	LT R	RT	RT	5 5	RT	RT	PROJECT	PROJECT	PROJECT	OTAL 0010		2 531.513	FOUNDA' SINGLE-S	TYPE MO IAFT (STRUCTI	(01. S-564 EACH	-	1	1	
	STATION	71+20 V	731+52	237+55	249+02	275+77	283+28	292+46 328+30	338+04	362+26	459+60	463+69	506+09	536+47	536+02 544+07	544+10	546+68	561+90	577+49	732415	502+99	544+18	/54+90 777+01	F		531.204		DRILLING SH	42-INCH	I	18	18	
	TATION TO	- T2+07	729+79 -	215+00 -	241+65 -	260+26 -	276+27 -	- 16+/82	331+08 -	356+24 -	455+41 -	458+43 -	503+75 -	526+26 -	541+23 -	542+04 -	544+54 -	551+05 -	563+87 -	721+52 -		503+60 -							4 LOCATION	3 21.6'RT	3 29.9'RT	TOTAL 001	
	CATEGORY	0010	0010	0010	0010	0010	0010	0100	0010	0010	0100	0010	0100	0010	0100	0010	0010	0100	0010	00100	0100	0010	0010						CATEGORY STATIO	0010 30+60	0010 31+45		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0205 Grubbing	36.000 STA		
0004	203.0100 Removing Small Pipe Culverts	2.000 EACH		
0006	203.0220 Removing Structure (structure) 01. STA 730+57	1.000 EACH	·	
0008	203.0220 Removing Structure (structure) 02. STA 730+74	1.000 EACH	·	·
0010	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 01. B-56-137	1.000 EACH		
0012	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 02. B-56-138	1.000 EACH		·
0014	204.0100 Removing Concrete Pavement	79.000 SY		
0016	204.0110 Removing Asphaltic Surface	1,270.000 SY		
0018	204.0115 Removing Asphaltic Surface Butt Joints	2,117.000 SY		
0020	204.0120 Removing Asphaltic Surface Milling	239,885.000 SY		
0022	204.0130 Removing Curb	9.000 LF		
0024	204.0150 Removing Curb & Gutter	1,371.000 LF		
0026	204.0155 Removing Concrete Sidewalk	471.000 SY		
0028	204.0165 Removing Guardrail	12,902.000 LF		
0030	204.0195 Removing Concrete Bases	2.000 EACH	·	



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0210 Removing Manholes	1.000 EACH	·	·
0034	204.0220 Removing Inlets	4.000 EACH		
0036	204.0245 Removing Storm Sewer (size) 01. 12- Inch	8.000 LF		
0038	204.0245 Removing Storm Sewer (size) 02. 15- Inch	4.000 LF		·
0040	204.0245 Removing Storm Sewer (size) 03. 18- Inch	77.000 LF		·
0042	204.0245 Removing Storm Sewer (size) 04. 24- Inch	162.000 LF		·
0044	204.9060.S Removing (item description) 01. Inlet Covers	4.000 EACH	·	·
0046	204.9060.S Removing (item description) 02. Post	2.000 EACH	·	<u>-</u>
0048	204.9180.S Removing (item description) 01. Concrete Retaining Wall and Header	13.000 SY		
0050	205.0100 Excavation Common	10,679.000 CY		
0052	206.1001 Excavation for Structures Bridges (structure) 01. B-56-235	1.000 EACH		
0054	206.1001 Excavation for Structures Bridges (structure) 02. B-56-236	1.000 EACH		·
0056	208.0100 Borrow	10,530.000 CY		·
0058	210.1500 Backfill Structure Type A	678.000 TON		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 5080-02-74	1.000 EACH	·	;
0062	211.0700.S Prepare Foundation for CIR Base Layer (project) 01. 5080-02-74	1.000 EACH	·	;
0064	211.0800.S Base Repair for CIR Layer	562.000 CY	·	·
0066	213.0100 Finishing Roadway (project) 01. 5080-02-74	1.000 EACH	·	;
0068	213.0100 Finishing Roadway (project) 02. 5080-02-82	1.000 EACH	<u>.</u>	·
0070	305.0110 Base Aggregate Dense 3/4-Inch	11,640.000 TON	·	·
0072	305.0120 Base Aggregate Dense 1 1/4-Inch	7,522.000 TON		
0074	305.0500 Shaping Shoulders	481.000 STA		
0076	311.0110 Breaker Run	260.000 TON		
0078	312.0110 Select Crushed Material	4,251.000 TON		
0080	327.1000.S CIR Asphaltic Base Layer	222,485.000 SY		·
0082	415.0080 Concrete Pavement 8-Inch	90.000 SY		. <u></u>
0084	415.0410 Concrete Pavement Approach Slab	224.000 SY		
0086	416.0610 Drilled Tie Bars	33.000 EACH		
0088	450.4000 HMA Cold Weather Paving	486.000 TON	_	



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0090	455.0605 Tack Coat	25,748.000 GAL	·	
0092	455.0770.S Asphalt Stabilizing Agent	886.000 TON	·	
0094	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	2.000 EACH		
0096	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	4.000 EACH		
0098	460.2000 Incentive Density HMA Pavement	1,170.000 DOL	1.00000	1,170.00
0100	460.2005 Incentive Density PWL HMA Pavement	28,042.000 DOL	1.00000	28,042.00
0102	460.2007 Incentive Density HMA Pavement Longitudinal Joints	12,380.000 DOL	1.00000	12,380.00
0104	460.2010 Incentive Air Voids HMA Pavement	42,307.000 DOL	1.00000	42,307.00
0106	460.6224 HMA Pavement 4 MT 58-28 S	26,460.000 TON		
0108	460.6225 HMA Pavement 5 MT 58-28 S	17,662.000 TON	·	·
0110	465.0105 Asphaltic Surface	502.000 TON	·	
0112	465.0120 Asphaltic Surface Driveways and Field Entrances	75.000 TON	·	·
0114	465.0315 Asphaltic Flumes	10.000 SY		
0116	465.0520 Asphaltic Rumble Strips, Shoulder	107,031.000 LF	·	·
0118	465.0560 Asphaltic Rumble Strips, Centerline	49,904.000 LF		



Proposal

Proposal Schedule of Items

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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

Alt Mbr ID:

SECTION: 0001 Contract Items

Alt Set ID:

Approximate Item ID Line **Unit Price Bid Amount** Quantity and Number Description Units 0120 502.0100 573.000 CY **Concrete Masonry Bridges** 0122 502.3200 626.000 Protective Surface Treatment SY 0124 502.3210 208.000 **Pigmented Surface Sealer** SY 0126 503.0137 665.000 Prestressed Girder Type I 36W-Inch LF 0128 504.0900 39.000 **Concrete Masonry Endwalls** CY 0130 505.0400 11,650.000 Bar Steel Reinforcement HS Structures LB 0132 505.0600 68,320.000 Bar Steel Reinforcement HS Coated LB Structures 0134 506.2605 14.000 Bearing Pads Elastomeric Non-EACH Laminated 0136 506.4000 12.000 Steel Diaphragms (structure) 01. EACH B-56.235 0138 513.2001 98.000 **Railing Pipe** LF 0140 516.0500 52.000

SY Rubberized Membrane Waterproofing 0142 2.000 520.1018 Apron Endwalls for Culvert Pipe 18-Inch EACH 0144 520.1024 2.000 Apron Endwalls for Culvert Pipe 24-Inch EACH 0146 520.3318 28.000 Culvert Pipe Class III-A 18-Inch LF 0148 520.3324 64.000 Culvert Pipe Class III-A 24-Inch LF



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0150	522.0484 Culvert Pipe Reinforced Concrete Class IV 84-Inch	196.000 LF	·	·
0152	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	1.000 EACH	<u>.</u>	·
0154	525.0124 Culvert Pipe Corrugated Aluminum 24- Inch	2.000 LF		·
0156	525.0324 Apron Endwalls for Culvert Pipe Aluminum 24-Inch	1.000 EACH		·
0158	531.2042 Drilling Shaft 42-Inch	18.000 LF		
0160	531.5130 Foundation Single-Shaft Type MC-III (structure) 01. S-56-0029	1.000 EACH		
0164	532.5130 Monotube Cantilever Type III (structure) 01. S-56-0029	1.000 EACH		·
0166	550.1100 Piling Steel HP 10-Inch X 42 Lb	955.000 LF		
0168	601.0105 Concrete Curb Type A	8.000 LF		
0170	601.0405 Concrete Curb & Gutter 18-Inch Type A	33.000 LF		
0172	601.0411 Concrete Curb & Gutter 30-Inch Type D	1,474.000 LF		
0174	601.0588 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	210.000 LF	·	·
0176	601.0590 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	26.000 LF		
0178	601.0600 Concrete Curb Pedestrian	88.000 LF		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0180	602.0410 Concrete Sidewalk 5-Inch	5,548.000 SF		. <u></u>
0182	602.0415 Concrete Sidewalk 6-Inch	683.000 SF		. <u></u>
0184	602.0515 Curb Ramp Detectable Warning Field Natural Patina	358.000 SF	·	
0186	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	158.000 SF		·
0188	602.0810 Concrete Driveway 6-Inch	254.000 SY	·	·
0190	602.3010 Concrete Surface Drains	4.000 CY		
0192	606.0100 Riprap Light	2,935.000 CY		
0194	606.0200 Riprap Medium	23.000 CY	. <u></u> .	
0196	606.0300 Riprap Heavy	934.000 CY		
0198	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	16.000 LF	·	
0200	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	4.000 LF	·	
0202	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	130.000 LF		
0204	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	109.000 LF	·	
0206	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	44.000 LF		·



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0208	611.0430 Reconstructing Inlets	1.000 EACH		
0210	611.0624 Inlet Covers Type H	5.000 EACH		
0212	611.0636 Inlet Covers Type HM-S	3.000 EACH		
0214	611.1230 Catch Basins 2x3-FT	2.000 EACH		
0216	611.2004 Manholes 4-FT Diameter	1.000 EACH		
0218	611.2006 Manholes 6-FT Diameter	1.000 EACH		
0220	611.3230 Inlets 2x3-FT	2.000 EACH		
0222	611.8110 Adjusting Manhole Covers	9.000 EACH		
0224	611.8115 Adjusting Inlet Covers	6.000 EACH		
0226	612.0406 Pipe Underdrain Wrapped 6-Inch	484.000 LF		
0228	614.0150 Anchor Assemblies for Steel Plate Beam Guard	8.000 EACH		
0230	614.0200 Steel Thrie Beam Structure Approach	41.200 LF		
0232	614.0370 Steel Plate Beam Guard Energy Absorbing Terminal	2.000 EACH	·	
0234	614.0800 Crash Cushions Permanent	2.000 EACH		
0236	614.2300 MGS Guardrail 3	1,612.500 LF		
0238	614.2330 MGS Guardrail 3 K	9,162.500 L F		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0240	614.2350 MGS Guardrail Short Radius	485.500 LF		
0242	614.2500 MGS Thrie Beam Transition	472.800 LF		
0244	614.2610 MGS Guardrail Terminal EAT	38.000 EACH		
0246	614.2630 MGS Guardrail Short Radius Terminal	6.000 EACH		
0248	618.0100 Maintenance and Repair of Haul Roads (project) 01. 5080-02-74	1.000 EACH	. <u></u>	
0250	618.0100 Maintenance and Repair of Haul Roads (project) 02. 5080-02-82	1.000 EACH	·	·
0252	619.1000 Mobilization 01. 5080-02-74	1.000 EACH		
0254	619.1000 Mobilization 02. 5080-02-82	1.000 EACH		
0256	624.0100 Water	380.000 MGAL		·
0258	625.0500 Salvaged Topsoil	28,229.000 SY		
0260	628.1104 Erosion Bales	10.000 EACH		
0262	628.1504 Silt Fence	27,386.000 LF		
0264	628.1520 Silt Fence Maintenance	27,386.000 LF		·
0266	628.1905 Mobilizations Erosion Control	14.000 EACH		
0268	628.1910 Mobilizations Emergency Erosion Control	11.000 EACH		
0270	628.2004 Erosion Mat Class I Type B	13,337.000 SY		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82 Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0272	628.2008 Erosion Mat Urban Class I Type B	1,232.000 SY		·
0274	628.2027 Erosion Mat Class II Type C	13,661.000 SY	·	
0276	628.6005 Turbidity Barriers	704.000 SY		
0278	628.7015 Inlet Protection Type C	34.000 EACH		
0280	628.7504 Temporary Ditch Checks	25.000 LF		
0282	628.7555 Culvert Pipe Checks	9.000 EACH		
0284	629.0210 Fertilizer Type B	23.900 CWT		
0286	630.0120 Seeding Mixture No. 20	1,086.700 LB		·
0288	630.0140 Seeding Mixture No. 40	23.500 LB		·
0290	630.0200 Seeding Temporary	972.800 LB		·
0292	630.0500 Seed Water	983.700 MGAL		
0294	633.5100 Markers ROW	20.000 EACH		
0296	633.5200 Markers Culvert End	9.000 EACH		. <u></u>
0298	634.0614 Posts Wood 4x6-Inch X 14-FT	41.000 EACH		
0300	634.0616 Posts Wood 4x6-Inch X 16-FT	5.000 EACH		. <u></u>
0302	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	1.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82 Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0304	637.2210 Signs Type II Reflective H	29.840 SF		
0306	637.2230 Signs Type II Reflective F	19.000 SF	·	
0308	638.2102 Moving Signs Type II	63.000 EACH	·	
0310	638.2602 Removing Signs Type II	6.000 EACH		
0312	638.3000 Removing Small Sign Supports	50.000 EACH	·	·
0314	638.4000 Moving Small Sign Supports	7.000 EACH		
0316	642.5201 Field Office Type C	1.000 EACH	·	
0318	643.0300 Traffic Control Drums	7,120.000 DAY		
0320	643.0420 Traffic Control Barricades Type III	13,861.000 DAY		
0322	643.0705 Traffic Control Warning Lights Type A	21,744.000 DAY		
0324	643.0900 Traffic Control Signs	84,487.000 DAY	·	
0326	643.0920 Traffic Control Covering Signs Type II	16.000 EACH	·	. <u></u>
0328	643.1000 Traffic Control Signs Fixed Message	36.000 SF		
0330	643.1050 Traffic Control Signs PCMS	14.000 DAY		
0332	643.3165 Temporary Marking Line Paint 6-Inch	39,919.000 LF	·	
0334	643.3170 Temporary Marking Line Epoxy 6-Inch	39,919.000 LF		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0336	643.3350 Temporary Marking Crosswalk Removable Tape 6-inch	1,272.000 LF	·	
0338	643.3770 Temporary Marking Raised Pavement Marker Type II	529.000 EACH	·	
0340	643.5000 Traffic Control 01. 5080-02-74	1.000 EACH	·	·
0342	643.5000 Traffic Control 02. 5080-02-82	1.000 EACH	·	·
0344	644.1410 Temporary Pedestrian Surface Asphalt	1,617.000 SF		
0346	644.1430 Temporary Pedestrian Surface Plate	194.000 SF		
0348	644.1440 Temporary Pedestrian Surface Matting	1,617.000 SF		
0350	644.1601 Temporary Pedestrian Curb Ramp	344.000 DAY	·	·
0352	644.1605 Temporary Pedestrian Detectable Warning Field	184.000 SF	·	
0354	644.1810 Temporary Pedestrian Barricade	2,308.000 LF		
0356	645.0111 Geotextile Type DF Schedule A	150.000 SY		
0358	645.0120 Geotextile Type HR	1,756.000 SY	·	·
0360	645.0130 Geotextile Type R	9,772.000 SY		
0362	646.2020 Marking Line Epoxy 6-Inch	968.000 LF		
0364	646.2040 Marking Line Grooved Wet Ref Epoxy 6- Inch	194,105.000 LF		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0366	646.4020 Marking Line Epoxy 10-Inch	390.000 LF		
0368	646.6120 Marking Stop Line Epoxy 18-Inch	120.000 LF		
0370	646.6466 Cold Weather Marking Epoxy 6-Inch	51,535.000 LF	·	·
0372	646.6470 Cold Weather Marking Epoxy 10-Inch	98.000 LF		·
0374	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,402.000 LF		·
0376	646.8320 Marking Parking Stall Epoxy	144.000 LF		<u></u>
0378	646.9010 Marking Removal Line Water Blasting 4- Inch	245.000 LF	. <u></u>	;
0380	650.4000 Construction Staking Storm Sewer	6.000 EACH		<u></u>
0382	650.4500 Construction Staking Subgrade	1,994.000 LF	·	·
0384	650.5000 Construction Staking Base	1,994.000 LF		
0386	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,751.000 LF		·
0388	650.6000 Construction Staking Pipe Culverts	3.000 EACH		
0390	650.6501 Construction Staking Structure Layout (structure) 01. S-56-0029	1.000 EACH		
0392	650.6501 Construction Staking Structure Layout (structure) 02. B-56-235	1.000 EACH		·
0394	650.6501 Construction Staking Structure Layout (structure) 03. B-56-236	1.000 EACH		



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0396	650.8000 Construction Staking Resurfacing	61,823.000 LF	•	
0398	650.8501 Construction Staking Electrical Installations (project) 01. 5080-02-74	1.000 EACH	·	
0400	650.9000 Construction Staking Curb Ramps	38.000 EACH		
0402	650.9500 Construction Staking Sidewalk (project) 01. 5080-02-74	1.000 EACH		·
0404	650.9911 Construction Staking Supplemental Control (project) 01. 5080-02-74	1.000 EACH	·	
0406	650.9911 Construction Staking Supplemental Control (project) 02. 5080-02-82	1.000 EACH		
0408	650.9920 Construction Staking Slope Stakes	18,833.000 LF	·	·
0410	654.0102 Concrete Bases Type 2	1.000 EACH		·
0414	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	1.000 EACH		
0416	657.0305 Poles Type 2	1.000 EACH		
0422	657.0590 Trombone Arms 20-FT	1.000 EACH		
0424	690.0150 Sawing Asphalt	3,014.000 LF		
0426	690.0250 Sawing Concrete	309.000 LF		
0428	715.0502 Incentive Strength Concrete Structures	3,438.000 DOL	1.00000	3,438.00
0430	740.0440 Incentive IRI Ride	46,352.000 DOL	1.00000	46,352.00



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0432	999.2005.S Maintaining Bird Deterrent System (station) 01. 759+68	1.000 EACH		
0434	999.2005.S Maintaining Bird Deterrent System (station) 02. 763+71	1.000 EACH	·	·
0436	SPV.0060 Special 01. Adjusting Water Valves	8.000 EACH		·
0438	SPV.0060 Special 02. Adjusting Sanitary Manhole Covers	4.000 EACH	·	·
0440	SPV.0060 Special 03. Cover Plates Left In Place	1.000 EACH		·
0442	SPV.0060 Special 04. Concrete Base Type 1 Special	2.000 EACH	·	
0444	SPV.0060 Special 05. Management of Contaminated Groundwater	1.000 EACH	·	;
0446	SPV.0060 Special 06. Remove and Salvage Street Light	2.000 EACH	·	<u>.</u>
0448	SPV.0060 Special 07. Reinstall Street Light	2.000 EACH		
0450	SPV.0060 Special 08. Connect to Existing Storm Sewer Pipe	8.000 EACH		
0452	SPV.0060 Special 09. Grading and Shaping for Curb Ramps	23.000 EACH	·	·
0454	SPV.0060 Special 10. Verify Landmark Reference Monuments	2.000 EACH	·	
0456	SPV.0060 Special 11. Research and Locate Existing Land Parcel Monuments	8.000 EACH	·	·



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0458	SPV.0060	8.000		
	Special 12. Verify and Replace Existing Land Parcel Monuments	EACH		••••
0460	SPV.0070	2,873.000		
	Special 01. Sprayed Asphaltic Surface Treatment	GAL	·	·
0462	SPV.0165	757.000		
	Special 01. Concrete Sidewalk Special	SF	•	·
0464	SPV.0180	14,188.000		
	Special 01. High Friction Surface Treatment	SY	·	·
0466	SPV.0195	20.000		
	Special 01. Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil	TON		•
	Section: 000	1	Total:	•••
			Total Bid:	
			TULAI DIU.	•••



February 8, 2024

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:

Proposal #03: 5080-02-74 Spring Green - Reedsburg USH 14 to CTH GG STH 23 Sauk County 5080-02-82 Spring Green - Reedsburg Structures B-56-235 & B-56-236 STH 23 Sauk County

Letting of February 13, 2024

This is Addendum No. 03, which provides for the following:

Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	Each	4	-2	2

Schedule of Items

Attached, dated February 8, 2024, are the revised Schedule of Items Page 4.

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

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

END OF ADDENDUM



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Proposal ID: 20240213003 Project(s): 5080-02-74, 5080-02-82

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Alt Set ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0090	455.0605 Tack Coat	25,748.000 GAL	·	·
0092	455.0770.S Asphalt Stabilizing Agent	886.000 TON	·	·
0094	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	2.000 EACH		
0096	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	2.000 EACH	·	
0098	460.2000 Incentive Density HMA Pavement	1,170.000 DOL	1.00000	1,170.00
0100	460.2005 Incentive Density PWL HMA Pavement	28,042.000 DOL	1.00000	28,042.00
0102	460.2007 Incentive Density HMA Pavement Longitudinal Joints	12,380.000 DOL	1.00000	12,380.00
0104	460.2010 Incentive Air Voids HMA Pavement	42,307.000 DOL	1.00000	42,307.00
0106	460.6224 HMA Pavement 4 MT 58-28 S	26,460.000 TON		
0108	460.6225 HMA Pavement 5 MT 58-28 S	17,662.000 TON	·	·
0110	465.0105 Asphaltic Surface	502.000 TON		
0112	465.0120 Asphaltic Surface Driveways and Field Entrances	75.000 TON	·	
0114	465.0315 Asphaltic Flumes	10.000 SY		
0116	465.0520 Asphaltic Rumble Strips, Shoulder	107,031.000 LF		
0118	465.0560 Asphaltic Rumble Strips, Centerline	49,904.000 LF		