# **HIGHWAY WORK PROPOSAL**

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

# ():32

HIGHWAY

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION
	<u>OTATET ROOLOT</u>		TRODEOT DECORA HOR

Jackson

7560-05-74

N/A

Blair - Merrillan; Trempealeau/Jackson STH 095 Co Ln to IH 94

# 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: \$100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: December 12, 2023 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time 50 Working Days	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 Title)

Type of Work:

# For Department Use Only

Excavation, Base, HMA Pavement, Culvert Pipes, Curb and Gutter, Sidewalk, Beam Guard, Pavement Marking.

Notice of Award Dated

Date Guaranty Returned

(Bidder Signature)

(Print or Type Bidder Name)

# 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 Express<sup>TM</sup> 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 Express<sup>TM</sup> 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 Express<sup>TM</sup> web site.
  - 2. Use Expedite<sup>TM</sup> software to enter a unit price for every item in the schedule of items.
  - 3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid
  - 4. Submit the bid before the hour and date the Notice to Contractors designates
  - 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:

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

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

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

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

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite □ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  - 1. The check code printed on the bottom of the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same on each page.
  - 2. The check code printed on the printout of the Expedite<sup>TM</sup> 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, a	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 p	ayment to be made; we jointly and severally bind ourselves, our
heirs, executors, administrators, successors and assigns. The con	dition of this obligation is that the Principal has submitted a bid
proposal to the State of Wisconsin acting through the Department o	f 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)
ame of Surety
lame of Contractor
ertificate 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 7560-05-74, Blair – Merrillan, Trempealeau/Jackson Co Ln to IH 94, STH 95, Jackson 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 removing asphalt surface milling, HMA pavement, beamguard replacement, rumble strips, culvert pipe replacement, curb ramp replacement, pavement markings and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

# 3. **Prosecution and Progress.**

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

Provide the time frame for construction of the project within the 2024 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

# Work Restrictions

Once the existing pavement surface has been milled and then milled and relayed, traffic will be allowed to run on milled and relayed surface for a maximum of 96 hours before the new layer of HMA pavement must in place.

Construct the HMA pavement layers so that a single longitudinal cold joint only exists at the centerline of the roadway.

Do not remove side road butt joint transitions until 24 hours prior to side road paving.

#### Northern Long-eared Bat (Myotis septentrionalis)

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

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

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

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

# 4. Traffic.

Conduct the construction sequence, including the associated traffic control, as detailed in the Construction Staging section of the plans, and as described in this Traffic article. The project will be completed using two stages:

Keep STH 95 open to through traffic at all times. Utilize flagging operations and advanced warning signing per applicable Standard Detail Drawing as needed to complete work under this contract. Only one flagging operation at a time can be performed within the project limits without prior approval of the engineer. If more than one flagging operation will be used there is a minimum distance of 1 mile between flagging operations required. Per SDD Traffic Control for Lane Closure with Flagging Operation, if the distance between flaggers exceeds 2 miles, a pilot car will be required.

Maintain two-way traffic during non-working hours. Maintain traffic on a minimum 11-foot wide lane, on a minimum surface of milled pavement. Maintain two-way traffic on a minimum 22-foot wide roadway, on a minimum surface of milled pavement, unless operations are actively being flagged. Maintain side road connections on a minimum surface of milled pavement.

Provide access to all commercial, private, and field entrances at all times along STH 95, unless written permission can be obtained from the property owner two business days in advance of closing the access. Restore private entrances with a minimum gravel surface by the end of each working day.

Conduct operations in a manner that will cause the least interference to traffic and pedestrian movements and access with and adjacent to the construction activities. Maintain access to pedestrian crossings at one crossing per block. Utilize pavement gaps to accommodate this, or provide suitable, ADA-compliant temporary access. Do not remove existing side street pavement until close timing of placing the proposed pavement or provide suitable ADA-compliant temporary access. This temporary access construction is incidental to the contract. Do not disrupt parallel pedestrian movements on STH 95 on more than one side within the same time period.

One week prior to project construction place one portable changeable message sign (PCMS) on each end of the project notifying motorist of upcoming work.

Panel 1

ROADWORK STARTING XX/XX/XX

#### 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 less than 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 or greater)	MINIMUM NOTIFICATION
Lane and shoulder 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 95 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)

There are underground and overhead utility facilities located within the project limits. Coordinate construction activities with a call to Diggers Hotline and/or a direct call to the utilities that have facilities in the area as required per statutes.

Use caution to ensure the integrity of underground utility facilities and maintain OSHA code clearances from overhead facilities at all times.

#### Village of Hixton – Water

The Village of Hixton will replace two water valves and two hydrants. All work will be completed prior to STH 95 roadway construction.

The 1078/field contact for Village of Hixton – Water is Jim Simonson, (715) 963-3732 office, jimsimonson@tcc.coop.

WE Energies - Gas/Petroleum relocations and adjustments of the following facilities will be made:

- STA 730+00 STA 734+00: Main will be replaced closer to the right-of-way.
- STA 734+00 STA 740+00: Main will be replaced closer to the right-of-way.

WE Energies relocated its facilities in May 2023. Contact Travis Kahl at (715) 410-0656 or by email <u>travis.kahl@we-energies.com</u>.

The following utility owners have facilities within the project area; however, no adjustments are anticipated:

- AT&T Legacy Communication Line
- Brightspeed Communication Line
- Dairyland Power Cooperative Electricity
- Hixton Wastewater Treatment Facility Sewer
- Jackson Electric Cooperative Electricity
- Northern Natural Gas Company Gas/Petroleum
- Riverland Energy Cooperative Electricity
- Tri-county Communications Cooperative Communication Line
- Xcel Energy Electricity

# 7. Railroad Insurance and Coordination - Wisconsin Central Ltd (CN).

#### **A** Description

Comply with standard spec 107.17 for all work affecting Wisconsin Central Ltd (CN) property and any existing tracks.

#### A.1 Railroad Insurance Requirements

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Wisconsin Central Ltd and Its Parents (CN).

Notify evidence of the required coverage, and duration to Matthew Turner, Public Projects Officer, 1625 Depot Street, Stevens Point, WI 54481; Telephone (715) 345-2503; E-mail: <u>Matthew.turner@cn.ca.</u>

Also send a copy to the following: Anna Davey, NW Region Railroad Coordinator; 1701 N 4th Street, Superior, WI 54880; Telephone (715) 392-7960; E-mail: <u>anna.davey@dot.wi.gov.</u>

Include the following information on the insurance document:

- Project ID: 7560-05-74
- Project Location: Springfield, WI
- Route Name: STH 95, Jackson County
- Crossing ID: 913796W
- Railroad Subdivision: Whitehall Sub
- Railroad Milepost: 164.46
- Work Performed on or within 50' of RR right-of-way: Mill and overlay up to RR crossing surface

# A.2 Train Operation

Approximately 1 through freight trains operate daily at up to 10 mph. There are approximately 6 switching movements daily at this location.

#### A.3 Names and Addresses of Railroad Representatives for Consultation and Coordination

#### **Construction Contact**

Matthew Turner, Public Works Officer; 1625 Depot Street, Stevens Point, WI 54481; Telephone (715) 345-2503; E-mail <u>matthew.turner@cn.ca</u> for consultation on railroad requirements during construction.

Amend standard spec 108.4 to include the railroad in the distribution of the initial bar chart, and monthly schedule updates. The bar chart shall specifically show work involving coordination with the railroad.

#### **Flagging Contact**

Submit by US Mail a "Request for Flagging Services and Cable Location" form with prepayment to: Flagging-US, 17641 South Ashland Avenue, Homewood, IL 60430; <u>Flagging\_US@CN.CA</u>. The form can be obtained at:

#### https://www.cn.ca/en/safety/utility-installations/

Requests for flagging and cable locates can take up to five business days after the railroad receives the paperwork. Reference the Wisconsin Milepost and Subdivision located in A.1. Advise Wisconsin Central Ltd (CN) that the flagging services are to be billed at the rate for a public highway project.

#### **Cable Locate Contact**

In addition to contacting Diggers Hotline, follow the procedure listed under Flagging Contact.

Wisconsin Central Ltd (CN) will only locate railroad owned facilities buried in the railroad right-of-way. The railroad does not locate any other utilities.

#### A.4 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions, and will be accomplished without cost to the contractor. None

#### A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

stp-107-026 (20230113)

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

The department has assumed coverage under the U.S. Army Corps of Engineers Section 404 Transportation Regional General Permit (TRGP). The department has determined that a pre-construction notification (permit application) to U.S. Army Corps of Engineers and their written verification of TRGP coverage is not necessary for this project.

A copy of the Section 404 Transportation Regional General Permit can be obtained on USACE's website:

#### https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RGP/Transportation.pdf

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 pre-construction notification (permit application) and written verification from U.S. Army Corps of Engineers under the Section 404 Transportation Regional General permit is required. If written verification under the TRGP is necessary, submit a pre-construction notification to U.S. Army Corps of Engineers and obtain written verification of permit coverage 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 written verification of permit coverage. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit request.

# 9. Information to Bidders, WPDES General Construction Storm Water Discharge Permit.

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Dan Rambo at (715) 514-7255. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

# 10. Archaeological Site.

BJA-0061 (Town of Curran Cemetery) site is located approximately Station 522+70 to 524+20, RT within the limits shown on the plans.

47JA187 (Sedelbauer Site) site is located approximately Station 700+00 to 704+00, LT within the limits shown on the plans.

47JA41 (Nettleton) site is located approximately 800 feet beyond End of Project station within the limits shown on the plans.

Notify the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities beyond the existing right-of-way limits. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.

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

stp-107-220 (20180628)

# 11. Erosion Control.

Add the following to standard spec 107.20:

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

Replace topsoil on disturbed areas, including spot locations such as cross drains, driveways, guardrail and terminals, and intersections, immediately after grading is completed within those areas. Complete finishing operations, which includes seed, fertilizer, erosion mat, mulch, and any other permanent erosion control measures required, within 7 calendar days after the placement of topsoil.

ncr-107-050 (20141015)

# 12. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

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

Jackson County Sheriff's Department	(715) 284-5357
Wisconsin State Patrol	(715) 845-1143
Village of Hixton	(715) 963-3732
Black River Falls School District	(715) 284-4357
Hixton Post Office	(715) 963-3443

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

# 13. Temporary Lane Shift During Culvert Work, Item 208.1500.S.

#### A Description

This special provision describes the construction of a temporary lane shift to maintain traffic with a onelane roadway around culvert work.

#### B (Vacant)

# **C** Construction

Place fill and base aggregate dense as needed to maintain traffic through the lane shift.

Furnish materials and construct conforming to the following standard specs:

Common excavation, material removal, and disposal	205
Borrow	208
Base Aggregate Dense	305

Do pertinent construction staking according to standard spec 650 for the temporary lane shift.

Construct to appropriate widths and material thicknesses. Remove materials once the lane shift is no longer needed to maintain traffic.

#### **D** Measurement

The department will measure Temporary Lane Shift During Culvert Work as a single unit for each temporary roadway, 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	
208.1500.S	Temporary Lane Shift During Culvert Work	EACH	

Payment is full compensation for placing, removing and disposal of fill material, including any base aggregate dense used for the driving surface, and associated construction staking.

The department will pay separately for traffic control and erosion control items.

stp-208-010 (20210708)

# 14. QMP HMA Pavement Nuclear Density.

#### A Description

Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

- <sup>(1)</sup> This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 except as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
  - 1. Selection of test sites.
  - 2. Testing.
  - 3. Necessary adjustments in the process.
  - 4. Process control inspection.
- <sup>(3)</sup> Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures.

#### https://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/

#### **B** Materials

#### **B.1 Personnel**

<sup>(1)</sup> Nuclear gauge owners and personnel using nuclear gauges shall comply with WisDOT requirements according to 460.3.3 and CMM 8-15.

# **B.2 Testing**

<sup>(1)</sup> Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Conform to CMM 8-15.10.4 for test duration and gauge placement.

# **B.3 Equipment**

# B.3.1 General

- (1) Furnish nuclear gauges according to CMM 8-15.2.
- (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

#### **B.3.2 Comparison of Nuclear Gauges**

#### B.3.2.1 Comparison of QC and QV Nuclear Gauges

(1) Compare QC and QV nuclear gauges according to CMM 8-15.7.

#### B.3.2.2 Comparison Monitoring

(1) Conduct reference site monitoring for both QC and QV gauges according to CMM 8-15.

# **B.4 Quality Control Testing and Documentation**

#### **B.4.1 Lot and Sublot Requirements**

# B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.1.
- (3) Determine random testing locations according to CMM 8-15.10.3.

# B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.2.
- (3) Determine random testing locations according to CMM 8-15.10.3.

#### **B.4.2 Pavement Density Determination**

# **B.4.2.1 Mainline Traffic Lanes and Appurtenances**

- (1) Calculate the average sublot densities using the individual test results in each sublot.
- (2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.
- <sup>(3)</sup> If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay as specified in standard spec 460.5.2.2.

#### **B.4.2.2 Mainline Shoulders**

#### B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

#### B.4.2.2.2 Width of 5 Feet or Less

- (1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- <sup>(2)</sup> If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

# B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

# **B.4.2.4 Documentation**

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

# **B.4.3 Corrective Action**

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- <sup>(2)</sup> The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be as specified in standard spec 105.3.
- <sup>(5)</sup> Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.
- (6) If two consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

# **B.5 Department Testing**

#### **B.5.1 Verification Testing**

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.
- (2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft<sup>3</sup> of the QC sublot average, use the QC tests for acceptance.
- <sup>(5)</sup> If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft<sup>3</sup> each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft<sup>3</sup>, use the original QC tests for acceptance.
- <sup>(6)</sup> If the QV and QC sublot averages differ by more than 1.0 lb/ft<sup>3</sup> after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

# **B.5.2 Independent Assurance Testing**

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

#### **B.6 Dispute Resolution**

<sup>(1)</sup> The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.

- (2) The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- (3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

#### **B.7** Acceptance

- (1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.
  - C (Vacant)
  - D (Vacant)
  - E Payment
  - E.1 QMP Testing
- <sup>(1)</sup> Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

#### E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives as specified in standard spec 460.5.2.2.

#### E.3 Incentive for HMA Pavement Density

(1) The department will administer density incentives as specified in standard spec 460.5.2.3.

stp-460-020 (20181119)

# 15. 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 CMM 836. 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 CMM 815.7 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 CMM 815.8. 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/ft<sup>3</sup>. 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/ft<sup>3</sup>. 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 <sup>[1]</sup>	- 0.5
Air Voids	-1.5 & +2.0
VMA in percent <sup>[2]</sup>	- 1.0
Maximum specific gravity	+/- 0.024

<sup>[1]</sup> 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.

<sup>[2]</sup> 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 VALUE FOR AIR VOIDS AND DENSITY	TEST STRIP APPROVAL	MATERIAL CONFORMANCE	POST-TEST STRIP ACTION
Both PWL ≥ 75	Approved <sup>1</sup>	Material paid for according to Section E	Proceed with Production
50 <u>&lt;</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

<sup>1</sup> 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  $\geq$  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)
≥ 90 to 100	PF = ((PWL – 90) * 0.4) + 100
<u>≥</u> 50 to < 90	(PWL * 0.5) + 55
<50	50% <sup>[1]</sup>

where, PF is calculated per air voids and density, denoted PF<sub>air voids</sub> & PF<sub>density</sub>

<sup>[1]</sup> 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>	WP
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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# 16. 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

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

<sup>(3)</sup> Perform sampling from the truck box and three-part splitting of HMA samples according to CMM 836. 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 CMM 836. Additional handling instructions for retained samples are found in CMM 836.

<sup>(4)</sup> 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 AASHTO T 30.
- Asphalt content (AC) in percent.

Determine AC using one of the following methods:

- AC by ignition oven according to AASHTO T 308 as modified in <u>CMM 836.6.3.6</u>. If the department is using an ignition oven to determine AC, conform to <u>CMM 836.6.3.7</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>CMM 836.6.3.7.2 Table 836-2</u> and conform to <u>CMM 836.6.3.7.3</u>.
- AC by chemical extraction according to AASHTO T 164 Method A or B.
- AC by automated extraction according to ASTM D8159 as modified in CMM 836.6.3.1.
- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166 as modified in CMM 836.6.5.
- Maximum specific gravity (Gmm) according to AASHTO T 209 as modified in CMM 836.6.6.
- Air voids (V<sub>a</sub>) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R35.

<sup>(5)</sup> Lot size shall consist of 3750 tons with sublots of 750 tons. Test each design mixture at a frequency of 1 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.

<sup>(6)</sup> Conduct field tensile strength ratio tests, without freeze-thaw conditioning cycles, on each qualifying mixture according to 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

<sup>(1)</sup> 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):

ITEM	ACTION LIMITS	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	
AC in percent	-0.3	-0.5
Va		- 1.5 & +2.0
VMA in percent <sup>[1]</sup>	- 0.5	-1.0

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

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

<sup>(3)</sup> 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.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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

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

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

<sup>(3)</sup> 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.

<sup>(4)</sup> 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

<sup>(1)</sup> HTCP-certified department personnel will obtain QV random samples by directly supervising HTCPcertified 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.

<sup>(2)</sup> 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.

<sup>(3)</sup> The department will perform all testing conforming to the following standards:

- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166 as modified in CMM 836.6.5.
- Maximum specific gravity (Gmm) according to AASHTO T 209 as modified in CMM 836.6.6.
- Air voids (Va) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R 35.
- Asphalt Content (AC) in percent determined by ignition oven method according to AASHTO T308 as modified in CMM 836.6.3.6 and conforming to CMM 836.6.3.7, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to ASTM D8159 as modified in CMM 836.6.3.1.

<sup>(4)</sup> 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.

Replace standard spec 460.2.8.3.1.7 Dispute Resolution with the following:

#### 460.2.8.3.1.7 Data Analysis for Volumetrics

<sup>(1)</sup> 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.

<sup>(2)</sup> 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 4<sup>th</sup> and 5<sup>th</sup> 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:

<sup>[1]</sup> 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).

<sup>[2]</sup> 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.

<sup>[3]</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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

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

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

<sup>(7)</sup> 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

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

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> 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

<sup>(1)</sup> 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.

<sup>(2)</sup> 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

<sup>(1)</sup> 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:

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]

#### PAY FACTOR FOR HMA PAVEMENT AIR VOIDS & DENSITY

where PF is calculated per air voids and density, denoted PF<sub>air voids</sub> & PF<sub>density</sub>.

<sup>[1]</sup> 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.

<sup>(2)</sup> 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.

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

\*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

<sup>(4)</sup> 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.

<sup>(5)</sup> 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:

#### DISINCENTIVE PAY REDUCTION FOR HMA PAVEMENT DENSITY

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 <sup>[1]</sup>	

<sup>[1]</sup> 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.

<sup>(6)</sup> 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]

<sup>(1)</sup> 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 ASTM D8159 as modified in CMM 836.6.3.1.

<sup>(2)</sup> 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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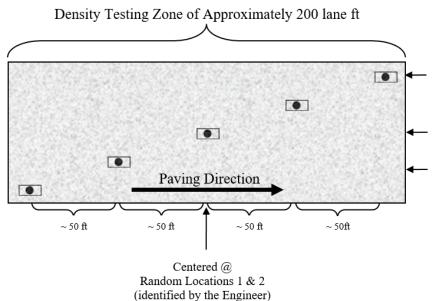
# 17. Appendix A.

# 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

# Figure 1: Nuclear/Core Correlation Location Layout

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 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) 1<sup>st</sup> one-minute reading and (b) 2<sup>nd</sup> 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 AASHTO R79 as modified by CMM 836.6.10 prior to using specimens for in-place density determination according to AASHTO T 166 as modified by CMM 836.6.5.

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.

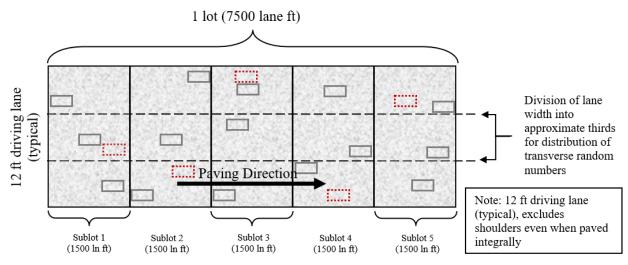


Figure 4: Locations of main lane HMA density testing (QC=solid lines, QV=dashed)

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 CMM 815 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 2 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 AASHTO T166 as modified in CMM 836.6.5. 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 CMM 836 except as modified here.

Delete CMM 836.4 Sampling Hot Mix Asphalt and replace with the following to update sublot tonnages:

### 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 CMM 836.4.1 and 836.4.2. 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 ASTM Method D-3665 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 CMM 836.5.2.

# **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:

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

stp-460-055 (20230113)

# 18. 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.

	F	Percent of Target Ma	aximum Density	
Layer	Uncol	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 <sup>[1]</sup>	90[1]	91.5 <sup>[1]</sup>	91.5 <sup>[1]</sup>
Upper	90	90	91.5	91.5

TABLE B-1 MINIMUM REQUIRED LONGITUDINAL JOINT DENSITY

<sup>[1]</sup> 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:

- <sup>(5)</sup> 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

(1) 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:

<sup>(1)</sup> 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	\$0.40
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 <sup>[1]</sup>

<sup>[1]</sup> 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.

- <sup>(2)</sup> 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

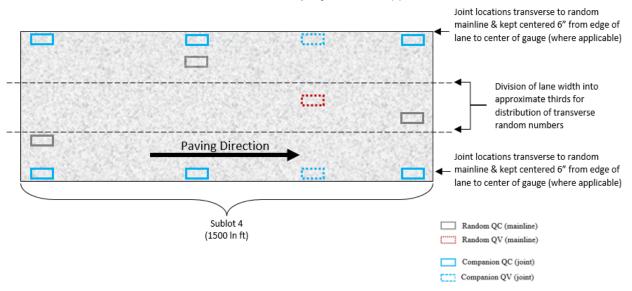
The department will administer disincentives under the Disincentive Density HMA Pavement Longitudinal Joints administrative item.

### 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>&gt;</u> 90.5	<u>&gt;</u> 91.5	<u>&gt;</u> 92.5	<u>&gt;</u> 92.5	\$0.40
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>&gt;</u> 90.0	<u>&gt;</u> 91.0	<u>&gt;</u> 92.0	<u>&gt;</u> 92.0	\$0.40
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 (20230113)

# 19. Material Transfer Vehicle, Item 460.9000.S.

# A Description

This special provision describes providing Material Transfer Vehicles (MTV) and operators for use during HMA upper layer paving operations of the travel lanes as shown in the plan or as directed by the engineer.

### **B** Materials

Furnish a self-propelled MTV with the ability to remix, maintain constant temperature, and continually feed the paver hopper. MTV storage capacity shall be adequate to provide continuous forward movement of the paver. Coordinate paver speed to match the delivery of material and capacity of the MTV to minimize stopping of the paver.

### **C** Construction

Ensure that an operator stays with the MTV at all times during moving operations. Keep the paver's hopper full at all times and the MTV's hopper filled such that the conveying augers are never exposed to avoid segregation of the material. Placement of HMA upper layer pavement in the travel lanes will not be allowed without the MTV. Tie ins of intersections, shoulders paved separately, and other non-travel lane areas will not require the use of the MTV.

### **D** Measurement

The department will measure Material Transfer Vehicle once for the contract, acceptably completed, regardless the number of vehicles in use.

### E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:		
ITEM NUMBER	DESCRIPTION	UNIT
460.9000.S	Material Transfer Vehicle	EACH

Payment is full compensation for furnishing all material transfer vehicles and operators.

stp-460-900 (20230113)

# 20. Culvert Pipe Liners, 24-Inch, Item 520.9700.S.01; Culvert Pipe Liners, 36-Inch, Item 520.9700.S.02; Cleaning Culvert Pipes for Liner Verification, Item 520.9750.S.

### **A** Description

This special provision describes providing, verifying, and pressure grouting culvert pipe liners for circular culverts.

### **B** Materials

### **B.1 General**

Provide flow calculations at the preconstruction conference. Use contractor-proposed liner properties, the Manning's coefficients listed on the department's approved products list, and base calculations on existing culvert sizes and liner sizes the plans show. For host pipes use a maximum Manning's coefficient of 0.013 for concrete pipe and 0.024 for corrugated metal pipes. Ensure that pipes when lined have a capacity within ±5% of the original full flow capacity of the pipe.

### **B.2 Flexible Pipe Liner**

Use liners with a Manning's coefficient value published on the department's approved products list. Upon delivery provide manufacturer certificates of compliance certifying that the liners conform to the following:

Ріре Туре	ASTM/AASHTO Designation	ASTM D3350 Resin
High Density Polyethylene (HDPE)		
Profile Wall Pipe	ASTM F894	345463C
Solid Wall Pipe	ASTM F714	345463C
Polyvinylchloride (PVC)	ASTM F949	
Steel Reinforced Polyethylene (SRPE)	ASTM F2562 AASHTO M335 (12- to 60-in. Dia,) AASHTO MP40 (66- to 120-in. Dia,)	345463C

# B.3 Grout

# B.3.1 Cement

Furnish cement meeting the requirements of standard spec 501.2.4.1 for Type I or II Portland Cement.

# B.3.2 Fly Ash

Furnish Class C or F Fly Ash meeting the requirements of standard spec 501.2.4.2.2.

# B.3.3 Sand

Furnish natural sand meeting the fine aggregate requirements of standard spec 501.2.7.2 and the size requirements of standard spec 501.2.7 except the percent passing the number 200 sieve shall be 0-5 percent by weight.

### B.3.4 Water

Furnish water meeting the requirements of standard spec 501.2.6.

### B.3.5 Mix Design

Use the basic proportions of dry materials per cubic yard of grout as follows:

- Cement 100 pounds
- Fly Ash 400 pounds
- Fine Aggregate 2600 pounds

Air entraining and chemical admixtures to control fluidity of the grout are allowable. Ten days before placement, furnish to the engineer a design mix detailing all components and their proportions in the mix.

# **B.3.6 Cellular Grout**

Alternatively, the contractor may use, or if the manufacturer recommends, an engineer-approved commercial cellular concrete grout conforming to the following:

Cement	ASTM C150	Type I or II
Density	ASTM C495 (no oven drying)	50 pcf min
Compressive Strength	ASTM C495	300 psi @ 28 day min 100 psi in 24 hours
Shrinkage	ASTM	1% by volume
Flow	ASTM C939	35 sec max

# **C** Construction

### C.1 General

As soon as possible after contract execution, survey existing culvert pipes to determine which culverts need cleaning in order to verify the required liner diameter and length. Notify the engineer before cleaning to confirm payment under the Cleaning Culvert Pipes for Liner Verification bid item.

Coordinate with the engineer to field verify culvert diameter and length, shape, material, and condition before ordering the liners.

Obtain easements, if necessary, for installing long sections of pipe.

# C.2 Excavating and Cleaning

Before inserting the liner, clean and dry the pipe. Excavate and pump as required to remove debris and other materials that would interfere with the placement or support of the inserted liner. Dispose of and replace unserviceable endwalls as the engineer directs.

### C.3 Flow Diversion

Maintain drainage at and through worksite during construction according to standard specs 107.20, 205 and 520. Use existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Provide, operate, and maintain pumps to bypass flow or dewater during construction as necessary. Unless otherwise approved by the engineer, dewater by bypassing or diverting flow during bulkheading and grouting operations. Provide a plan for controlling flow and dewatering (including sediment treatment as required) as part of the project EQIP.

### **C.4 Placing Liners**

Unload liners using slings and boom-type trucks or equivalents. Do not use chains or wire rope to handle liners and do not dump liners from the trucks when unloading.

Install liners such that the alignment and invert lie true to the lines, grades, and elevations in the plan. In absence of plan details, install liners horizontally to provide even annular space between the host pipe and sides of the liner. Install liners vertically with the invert as close to the host pipe invert as possible.

Obtain additional easements, if necessary, for installing long sections of liner.

Connect joints and install the liner per the manufacturer's recommendations and this part.

### C.5 Pressure Grouting

Furnish a written plan for grouting the annular space between the host pipe and culvert pipe liner to the engineer for acceptance. Furnish the grouting plan prior to or at the project preconstruction conference so that it can be reviewed and discussed. At a minimum, the grouting plan shall consist of the following:

- Intended grout mix(es)
- Testing methods and frequency
- Pumping equipment and pressure regulation
- Intended grout staging
- Grout monitoring
- Bracing/floatation control

Include a description of staging in the grouting plan. Based on the length and slope of the host culvert, multiple stages may be required to minimize external loads on the culvert pipe liner. Develop the staging plan with the manufacturer based on the recommended maximum loading for the culvert pipe liner and the condition of the host culvert. Unless approved by the manufacturer, in no case shall a single lift of grout exceed 1/3rd the pipe external diameter at any point in the pour.

After the liner is in place, fill the area between the original culvert and the liner completely with grout per the accepted grouting plan. Block, grout in lifts, or otherwise secure liners to prevent floatation or deformation of the liner while grouting. Grout ports can be fabricated to allow placement of anti-floatation bracing or spacers.

Use a grout plant that is capable of accurately measuring, proportioning, mixing, and discharging by volume and at discharge pressures the liner manufacturer recommends. Do not exceed manufacturer-specified maximum pressures. Place grout in lifts to prevent exceeding maximum allowable pressures and to prevent flotation.

Use grout and witness ports to vent grouting and monitoring grouting progress. Plug ports as necessary as grout reaches them.

Do not remove any bracing inside of the liner until the grouting process is complete.

# C.6 Assembly, Floatation, and Deflection Mitigation

Damage or misalignment due to assembly, floatation or deformation during grouting, or otherwise resulting from workmanship will be mitigated at the contractor's expense.

### C.7 Site Restoration

Replace pipe sections damaged or collapsed during installation or grouting operations. Restore the grade to its original or improved cross section. Dispose of waste material.

### **D** Measurement

The department will measure the Culvert Pipe Liners bid items by the linear foot measured in place for each culvert location, acceptably completed.

The department will measure Cleaning Culvert Pipes for Liner Verification as each culvert, acceptably cleaned. The department will only measure culverts the engineer approves for payment.

### E Payment

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

	DESCRIPTION	UNIT
520.9700.S.01	Culvert Pipe Liners 24-Inch	LF
520.9700.S.02	Culvert Pipe Liners 36-Inch	LF
520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH

Payment for the Culvert Pipe Liners bid items is full compensation for providing pipe liners; obtaining easements; for excavation; for pumping to bypass flow, to clean pipes, for liner insertion or for grouting; for shoring and dewatering; for cleaning the existing pipe before liner installation; for pressure grouting; for replacing contractor-damaged pipe and endwalls; and for restoring the grade and disposing of waste materials.

The department will pay the contractor \$150 per cubic yard for grout required in excess of 110 percent of the theoretical quantity required to fill the space between the inside diameter of the existing pipe and the outside diameter of the liner.

Payment for Cleaning Culvert Pipes for Liner Verification is full compensation for cleaning required to verify liner length and diameter; for excavation; for pumping to bypass flow, to dewater, or to remove debris; and for disposing of waste material.

The department will pay separately for replacing unserviceable endwalls not rendered unserviceable by contractor operations under the appropriate contract endwall bid item, or absent the appropriate item as extra work.

stp-520-015 (20230113)

# 21. Cover Plates Temporary, Item 611.8120.S.

### A Description

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

# **B** Materials

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

### C (Vacant)

### **D** Measurement

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

### E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:		
ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

Payment is full compensation for furnishing, installing, and removing the cover plates. The steel plates shall become the property of the contractor when no longer needed in the contract work.

stp-611-006 (20151210)

# 22. Cleaning Ditch, Item SPV.0060.01.

# **A** Description

This special provision describes minor grading, cleaning and finishing existing ditch flow lines to restore the conveyance of storm water as shown on the plans, according to the pertinent requirements of the standard specifications, and as hereinafter provided.

# **B** (Vacant)

# **C** Construction

Grade and shape the ditch flow line as necessary to restore and allow unimpeded flow at inlet and outlet of each culvert pipe location. Do not excavate deeper than one foot nor disturb an overall lateral width greater than 10 feet. Grade and trim the lateral areas of disturbance to produce uniform side slope surfaces. Dispose of surplus material according to standard spec 205.3.12.

### **D** Measurement

The department will measure Cleaning Ditch, completed according to the contract 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	Cleaning Ditch	EACH

Payment is full compensation for all brush clearing, excavating, grading, shaping, compacting, and restoring the ditch flow line; furnishing and placing fill, topsoil, fertilizer, seed, and mulch; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work. Erosion control items will be measured and paid for separately.

# 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

- <sup>(1)</sup> 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.
- <sup>(2)</sup> 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.
- <sup>(3)</sup> 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.

# 310 Open Graded Base

# 310.2 Materials

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

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

### TABLE 310-01 COARSE AGGREGATE (% passing by weight) AASHTO No. 67<sup>[1]</sup>

AASHIU NO. 671			
	COARSE AGGREGATE (% PASSING by WEIGHT)		
SEIVE	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

<sup>[1]</sup> 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.
- <sup>(3)</sup> 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.
- <sup>(3)</sup> 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:

# Effective with November 2023 Letting

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<sub>mb</sub>) 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:

<sup>(5)</sup> 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:

<sup>(3)</sup> 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.

AASHTO No. 4 <sup>[1]</sup>			
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		

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

<sup>[1]</sup> 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.

INE AGGREGATE GRADATION
FINE AGGREGATE (% PASSING by WEIGHT)
100
90 - 100
-
45 - 85
-
5 - 30
0 - 10
<=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 <u>416.3.7</u> 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 <u>320.3</u>.

# ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1<sup>st</sup> 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 <a href="mailto:paul.ndon@dot.wi.gov">paul.ndon@dot.wi.gov</a> 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 M-22-11 from the Office of Management and Budget: <u>https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf</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 smelting forward in the manufacturing process) must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America.

The exemption of 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 OMB M-22-11 and as referenced in CMM 228.5) must comply with Buy America. No exemptions (0.0%) are allowed.

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

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



Page 1 of 8

Proposal ID: 202312120	34 Project(s):	7560-05-74
	Federal ID(s):	N/A
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	5.000 STA		
0004	201.0205 Grubbing	5.000 STA		
0006	203.0100 Removing Small Pipe Culverts	6.000 EACH		
0008	204.0110 Removing Asphaltic Surface	241.000 SY		
0010	204.0115 Removing Asphaltic Surface Butt Joints	2,815.000 SY		
0012	204.0120 Removing Asphaltic Surface Milling	181,483.000 SY		
0014	204.0150 Removing Curb & Gutter	294.000 LF		
0016	204.0155 Removing Concrete Sidewalk	121.000 SY		
0018	205.0100 Excavation Common	3,816.000 CY		
0020	208.1500.S Temporary Lane Shift During Culvert Work	6.000 EACH		·
0022	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 7560-05-74	1.000 EACH		
0024	213.0100 Finishing Roadway (project) 01. 7560- 05-74	1.000 EACH	. <u> </u>	·
0026	305.0110 Base Aggregate Dense 3/4-Inch	3,932.000 TON		
0028	305.0120 Base Aggregate Dense 1 1/4-Inch	2,137.000 TON		
0030	305.0500 Shaping Shoulders	16.000 STA	;	·



Page 2 of 8

Proposal ID: 20231212034	Project(s):	7560-05-74
F	ederal ID(s):	N/A
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	416.0610 Drilled Tie Bars	36.000 EACH		
0034	450.4000 HMA Cold Weather Paving	500.000 TON		
0036	455.0605 Tack Coat	22,189.000 GAL		
0038	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	2.000 EACH	;	. <u></u>
0040	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	2.000 EACH		·
0042	460.2000 Incentive Density HMA Pavement	8,510.000 DOL	1.00000	8,510.00
0044	460.2005 Incentive Density PWL HMA Pavement	11,390.000 DOL	1.00000	11,390.00
0046	460.2007 Incentive Density HMA Pavement Longitudinal Joints	41,080.000 DOL	1.00000	41,080.00
0048	460.2010 Incentive Air Voids HMA Pavement	15,000.000 DOL	1.00000	15,000.00
0050	460.6645 HMA Pavement 5 MT 58-34 V	15,462.000 TON	i	
0052	460.8644 HMA Pavement 4 SMA 58-34 V	18,039.000 TON	i	. <u></u>
0054	460.9000.S Material Transfer Vehicle	1.000 EACH	i	. <u></u>
0056	465.0105 Asphaltic Surface	1,788.000 TON		. <u></u>
0058	465.0110 Asphaltic Surface Patching	320.000 TON		
0060	465.0120 Asphaltic Surface Driveways and Field Entrances	144.000 TON		·



Proposal Schedule of Items

Page 3 of 8

Proposal ID: 2023121203	4 Project(s): 7560-05-74	
	Federal ID(s): N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	465.0560 Asphaltic Rumble Strips, Centerline	41,868.000 LF		
0064	504.0900 Concrete Masonry Endwalls	10.000 CY	·	
0066	520.1024 Apron Endwalls for Culvert Pipe 24-Inch	2.000 EACH	·	
0068	520.1036 Apron Endwalls for Culvert Pipe 36-Inch	2.000 EACH	. <u></u>	
0070	520.3324 Culvert Pipe Class III-A 24-Inch	74.000 LF		
0072	520.3336 Culvert Pipe Class III-A 36-Inch	62.000 LF	·	
0074	520.8700 Cleaning Culvert Pipes	19.000 EACH	·	
0076	520.9700.S Culvert Pipe Liners (size) 01. 24-INCH	70.000 LF		
0078	520.9700.S Culvert Pipe Liners (size) 02. 36-INCH	154.000 LF		
0080	520.9750.S Cleaning Culvert Pipes for Liner Verification	3.000 EACH		. <u></u>
0082	522.1500 Pipe Cattle Pass Reinforced Concrete	60.000 LF		
0084	522.2329 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45- Inch	66.000 LF		
0086	522.2419 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30- Inch	120.000 LF		
0088	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	4.000 EACH	. <u></u>	



Page 4 of 8

Proposal ID: 20231212034	Project(s): 7560-05-74
Fe	ederal ID(s): N/A
SECTION: 0001 C	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0090	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	2.000 EACH		·
0092	601.0411 Concrete Curb & Gutter 30-Inch Type D	294.000 LF		
0094	601.0600 Concrete Curb Pedestrian	43.000 LF		
0096	602.0405 Concrete Sidewalk 4-Inch	1,293.000 SF		
0098	602.0505 Curb Ramp Detectable Warning Field Yellow	50.000 SF		·
0100	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	65.000 SF		·
0102	611.0430 Reconstructing Inlets	1.000 EACH	·	·
0104	611.0624 Inlet Covers Type H	1.000 EACH	<u>.</u>	i
0106	611.8115 Adjusting Inlet Covers	4.000 EACH	i	i
0108	611.8120.S Cover Plates Temporary	1.000 EACH		
0110	614.0920 Salvaged Rail	1,843.000 LF	i	<u>.</u>
0112	614.2300 MGS Guardrail 3	646.800 LF	;	
0114	614.2350 MGS Guardrail Short Radius	62.500 LF	·	
0116	614.2500 MGS Thrie Beam Transition	630.400 LF	·	
0118	614.2610 MGS Guardrail Terminal EAT	15.000 EACH		·



Page 5 of 8

Proposal ID: 20231212034	Project(s): 7560-05-74	
F	ederal ID(s): N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0120	614.2630 MGS Guardrail Short Radius Terminal	3.000 EACH		ii
0122	618.0100 Maintenance And Repair of Haul Roads (project) 01. 7560-05-74	1.000 EACH	. <u> </u>	·
0124	619.1000 Mobilization	1.000 EACH	ii	i
0126	624.0100 Water	59.000 MGAL	. <u></u>	
0128	625.0500 Salvaged Topsoil	12,250.000 SY		
0130	627.0200 Mulching	1,950.000 SY		
0132	628.1504 Silt Fence	2,500.000 LF		
0134	628.1520 Silt Fence Maintenance	2,500.000 LF		
0136	628.1905 Mobilizations Erosion Control	5.000 EACH		
0138	628.1910 Mobilizations Emergency Erosion Control	3.000 EACH		
0140	628.2002 Erosion Mat Class I Type A	10,000.000 SY		
0142	628.2006 Erosion Mat Urban Class I Type A	430.000 SY		
0144	628.7015 Inlet Protection Type C	26.000 EACH		
0146	628.7504 Temporary Ditch Checks	200.000 LF	<u>.</u>	
0148	628.7555 Culvert Pipe Checks	70.000 EACH		
0150	629.0210 Fertilizer Type B	8.000 CWT		



Page 6 of 8

Proposal ID: 20231212034	Project(s): 7560-05-74	
	Federal ID(s): N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0152	630.0120 Seeding Mixture No. 20	315.000 LB	i	
0154	630.0140 Seeding Mixture No. 40	12.000 LB	<u>.</u>	<u>.</u>
0156	630.0200 Seeding Temporary	330.000 LB	i	
0158	633.5200 Markers Culvert End	12.000 EACH	i	
0160	638.2102 Moving Signs Type II	19.000 EACH		
0162	638.4000 Moving Small Sign Supports	19.000 EACH	<u>.</u>	i
0164	642.5001 Field Office Type B	1.000 EACH		
0166	643.0300 Traffic Control Drums	1,945.000 DAY	<u>.</u>	
0168	643.0410 Traffic Control Barricades Type II	70.000 DAY		
0170	643.0715 Traffic Control Warning Lights Type C	375.000 DAY	<u>.</u>	ii
0172	643.0900 Traffic Control Signs	2,526.000 DAY	i	i
0174	643.1050 Traffic Control Signs PCMS	28.000 DAY	i	ii
0176	643.3165 Temporary Marking Line Paint 6-Inch	81,903.000 LF	i	i
0178	643.3350 Temporary Marking Crosswalk Removable Tape 6-inch	298.000 LF	. <u> </u>	
0180	643.5000 Traffic Control	1.000 EACH		
0182	644.1430 Temporary Pedestrian Surface Plate	1,324.000 SF		



Page 7 of 8

Proposal ID: 20231212034	Project(s): 7560-05-74
	Federal ID(s): N/A
SECTION: 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0184	644.1601 Temporary Pedestrian Curb Ramp	112.000 DAY		
0186	644.1810 Temporary Pedestrian Barricade	300.000 LF		
0188	646.2040 Marking Line Grooved Wet Ref Epoxy 6- Inch	129,579.000 LF	<u>.</u>	
0190	646.4820 Marking Line Same Day Epoxy 10-Inch	963.000 LF	. <u> </u>	·
0192	646.5020 Marking Arrow Epoxy	1.000 EACH		
0194	646.5120 Marking Word Epoxy	1.000 EACH		
0196	646.5320 Marking Railroad Crossing Epoxy	2.000 EACH		
0198	646.6020 Marking Stop Line Epoxy 12-Inch	73.000 LF		
0200	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	496.000 LF	i	
0202	646.8120 Marking Curb Epoxy	56.000 LF		
0204	646.8220 Marking Island Nose Epoxy	3.000 EACH		
0206	650.6000 Construction Staking Pipe Culverts	6.000 EACH		
0208	650.8000 Construction Staking Resurfacing Reference	51,344.000 LF	·	
0210	650.9000 Construction Staking Curb Ramps	9.000 EACH		
0212	650.9500 Construction Staking Sidewalk (project) 01. 7560-05-74	1.000 EACH	<u>.</u>	



Page 8 of 8

Proposal ID: 20231212034	Project(s):	7560-05-74
	Federal ID(s):	N/A
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	650.9911	1.000		
	Construction Staking Supplemen Control (project) 01. 7560-05-74	tal EACH		
0216	690.0150	500.000		
	Sawing Asphalt	LF	·	·
0218	690.0250	25.000		
	Sawing Concrete	LF		
0220	740.0440	38,538.000		
	Incentive IRI Ride	DOL	1.00000	38,538.00
0222	SPV.0060	15.000		
	Special 01. Cleaning Ditch	EACH	··	·
	Sec	ion: 0001	Total:	
			Total Bid:	

# PLEASE ATTACH ADDENDA HERE



# **Wisconsin Department of Transportation**

November 28, 2023

Division of Transportation Systems Development

Bureau of Project Development 4822 Madison Yards Way, 4<sup>th</sup> Floor South Madison, WI 53705

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

# NOTICE TO ALL CONTRACTORS:

# **Buy America Provision Addendum #01**

# Letting of December 12, 2023

Attached is a copy of the revised Buy America Provision that are included in all proposals in the December 12, 2023 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

# **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 project<sup>1</sup>; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below \$500,000<sup>2</sup>

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.

<sup>1</sup> 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).



December 6, 2023

#### Division of Transportation Systems Development

Bureau of Project Development 4822 Madison Yards Way, 4<sup>th</sup> Floor South Madison, WI 53705

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

# NOTICE TO ALL CONTRACTORS:

## Proposal #34: 7560-05-74 Blair - Merrillan Trempealeau/Jackson Co Ln to IH 94 STH 95 Jackson County

### Letting of December 12, 2023

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

#### Plan Sheets:

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
8	Typical Sections – Added note clarifying the pavement mixes that can be used for side roads and intersections
9	Typical Sections – Added note clarifying the pavement mixes that can be used for side roads and intersections
10	Typical Sections – Added note clarifying the pavement mixes that can be used for side roads and intersections
12	Construction Details – Added note clarifying the pavement mixes that can be used for side roads and intersections
35	Miscellaneous Quantities – Added note clarifying the pavement mixes that can be used for side roads and intersections

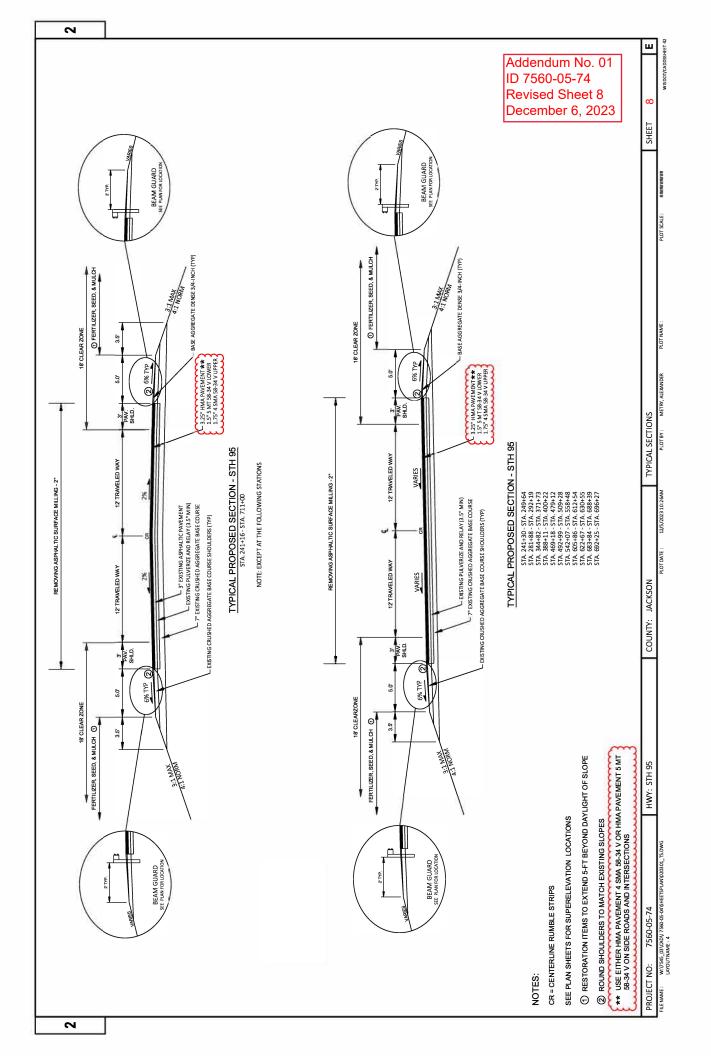
The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

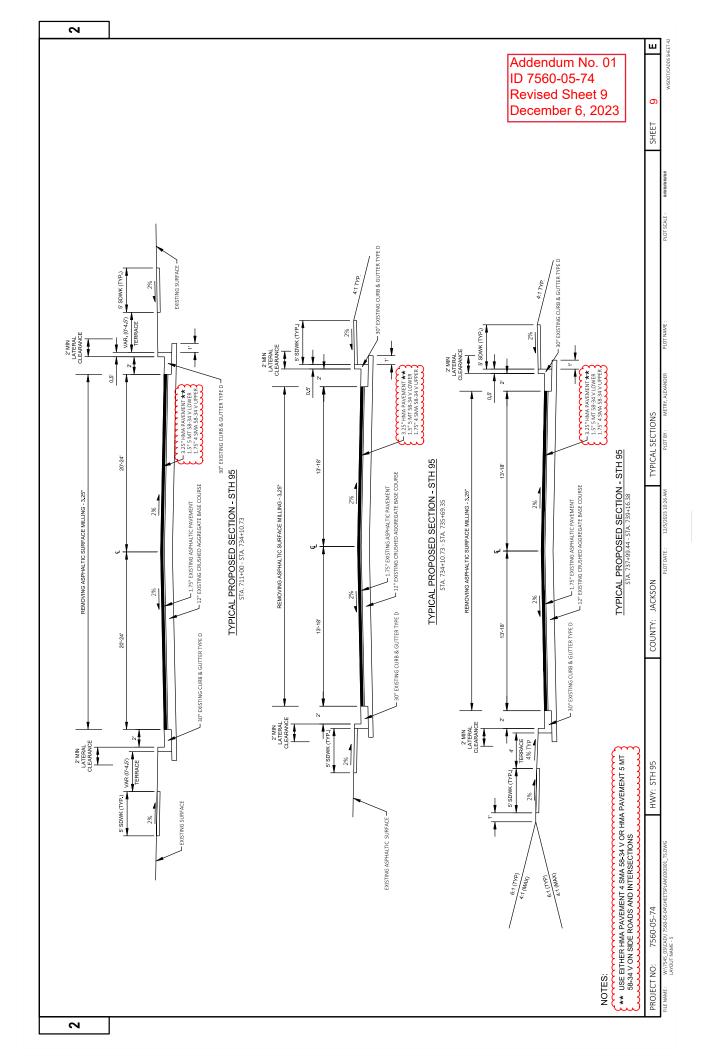
Sincerely,

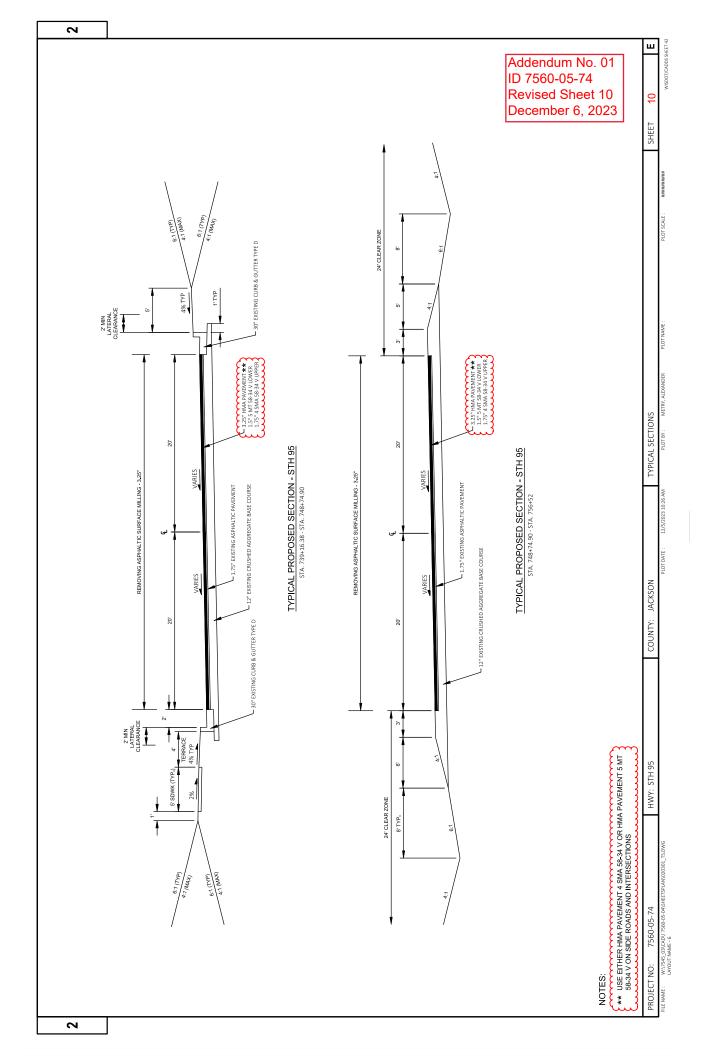
Mike Coleman

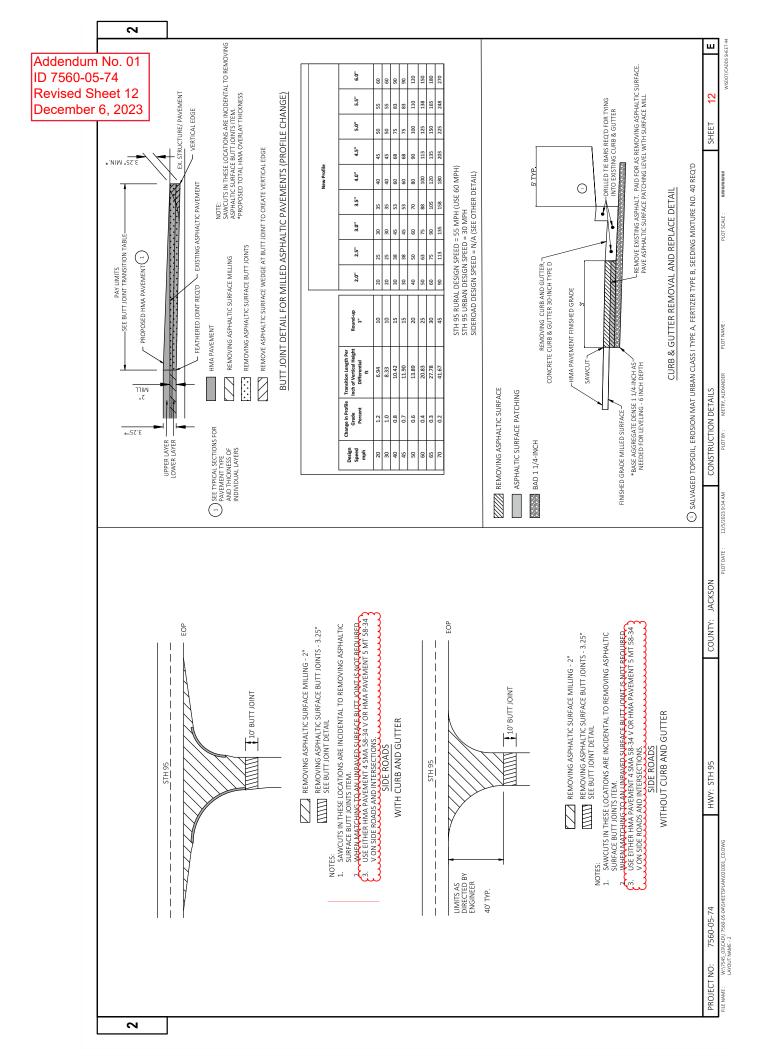
Proposal Development Specialist Proposal Management Section

END OF ADDENDUM









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			0)	260+19	50+195	314+U0	310+18	373+71	511+95	690438	711+00	735+69	756+52	310+10	345+16	3/5+03	497+70	558+33	595+45	627+21	683+55			742.11	744-46					70+00/	764067		** USE EITHER HMA PAVEMENT 4 SMA 58-34 V OR HMA PAVEMENT			LOCATION	2-12FT DRIVING LANES	2-12FT DRIVING	2 PAVED	SHOULDERS	2 PAVED SHOULDERS	
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December 7, 2023

#### Division of Transportation Systems Development

Bureau of Project Development 4822 Madison Yards Way, 4<sup>th</sup> Floor South Madison, WI 53705

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

# NOTICE TO ALL CONTRACTORS:

## Proposal #34: 7560-05-74, WISC 20231212034 Blair - Merrillan Trempealeau/Jackson Co Ln to IH 94 STH 95 Jackson County

## Letting of December 12, 2023

This is Addendum No. 02, which provides for the following:

### Schedule of Items:

	Revised Bid Item	Quantitie	S		
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
205.0100	Excavation Common	CY	3816	836	4652
690.0150	Sawing Asphalt	LF	500	140	640

### Plan Sheets:

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
33	Miscellaneous Quantities – Updated Excavation Common in Excavation Summary Table
42	Miscellaneous Quantities – updated Sawing Asphalt item quantity
154	Earthwork Summary – Updated quantities in tables
155	Earthwork Summary – Updated quantities in tables
156	Earthwork Summary – Updated quantities in tables

#### Schedule of Items

Attached, dated December 7, 2023, are the revised Schedule of Items Pages 1 and 8.

## Plan Sheets

The following  $8\frac{1}{2} \times 11$ -inch sheets are attached and made part of the plans for this proposal: Revised: 33, 42, 154, 155 & 156

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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DENSE 1 1/4-INCH 305.0120 TON TON	+06         STH         95         373         CULVERT         REPLACEMENT           +74         STH         95         346         CULVERT         REPLACEMENT           +18         STH         95         486         CULVERT         REPLACEMENT           +18         STH         95         369         CULVERT         REPLACEMENT           +71         STH         95         300         CULVERT         REPLACEMENT           +55         STH         95         419         CULVERT         REPLACEMENT           +55         STH         95         UNDISTRIBUTED         UNDISTRIBUTED	ID 7560- Revised	ım No. 02 05-74 Sheet 33 er 7, 2023			<u>NUTES.</u> (4) COLUMION EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMINS. ITEM NUMBER 205.0100 (1) SOLVIVAED MINING DE MAYEMENT MATERIA IL DECH IN CLIT	(2) ARK WALLO (VIDE ARK MUNI MANUMALUS MALLO OLD MALLO OLD ). (3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE,	CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL. (4) SALVAGED/UNUSABLE PAVEMENT MATTERIAL	(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL	(6) EXPANDED FILL FACTOR = 1.3 לא דור אמאפר כאסוטוועדיד - כאס - מידע כאו כיוו אידה רכוס דוור הועונוסאו וחינו כיוו אודודע ואוחיבאידה אוו דערכהם	OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.	(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED	ARE FOR GENERAL INFORMATION ONLY. Ant on inimitatic from the above tage from cupic value (continue fee indited on the fee	(9) ALL QUANTITIES FRUMITIE ABOVE LABLE ARE IN CUBIC TARUS (CY) UNLESS NUTED UTHERWISE.			
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	STATION		258+00	258+50	259+00	259+50	260+00	260+50	261+00	261+48.552 262+00	001202	DIVISION 2 - ALIC	280+00	281+06 281+06	DIVISION 3 - ALIO		314+00	314+10	314+68	<u>_</u>	318+14 318+65 93	319+18	DIVISION 5 - ALIO		323+16.799	323+/U	DIVISION 6 - ALIGNMENT - STH95	394+50	395+00	395+50	396+00	396+50	397+00	398+00	398+50	399+00	399+50	400+00	401+00 401		PROJEC	FILE NAME :	

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ROCK) * FILL FACTOR)]				
D EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED I SS IN FILL - EXPANDED ROCK) * FILL FACTORJ) DED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTORJ)				
CUT INCLUDES SALVAGED/UNUSABLE PAYEMENT MATERIAL THIS DOES NOT SHOW UP IN CROSS SECTIONS DOES NOT INCLUDE UNUSABLE PAYEMENT EXC VOLUME WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW) MILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW) REDUCED MASKH EXCAVATION THAT CAN BE USED IN FILL REDUCED MASKH SALOR MASKH IS DO BE BACKFILLED WITH COMMON OR BORROW: [CUT - SALVAGED PAYT - EXPANDED EBS] - [[FILL - REDUCED BASKH IN FILL - REDUCED BES IN FILL FAMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [[CUT - SALVAGED PAYT - EXPANDED EBS] - [[FILL - REDUCED BASKH IN FILL - REDUCED EBS IN FILL FAMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [[CUT - SALVAGED PAYT - EXPANDED MASSH EXC - EXPANDED ROCK] * FILL FACTOR]] IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - REDUCED EBS) - ([FILL - EXPANDED ROCK] * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - REPUCED EBS] - ([FILL - EXPANDED ROCK] * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - RADUCED EBS] - ([FILL - EXPANDED ROCK] * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED BOCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED BOCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED BOCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED ROCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED ROCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED ROCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED ROCK) * FILL FACTOR]] IF MASSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAYT - (FILL - EXPANDED ROCK) * FILL FACTOR]]] IF MASSH AND EBS				
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Notes:         CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL           1-CUT         1-CUT           2-SALVAGED/UNUSABLE PAVEMENT MATERIAL         THIS DOES NOT SHOW UP IN REOSS SECTORS           3-FILL         2-SALVAGED/UNUSABLE PAVEMENT EXC VOLUME           4-EXPANDED MARSH BACKFILL         DOES NOT INCLUDES SALVAGED/UNUSABLE PAVEMENT EXC VOLUME           3-FILL         DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME           4-EXPANDED MARSH BACKFILL         WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORRY           5-EXDANDED BASS         WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORRY           6-REDUCED MARSH IN FILL         REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL           7-EDUCED BASS         WILL BE BACKFILLED WITH GRANULAR BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:           8-MASS ORDINATE         FMARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW:	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES			DDO 1507 NO. 7560 05 71
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## Proposal Schedule of Items

Page 1 of 8

Proposal ID: 20231212034	Project(s): 7560-05-74
I	Federal ID(s): N/A
<b>SECTION:</b> 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	5.000 STA		••
0004	201.0205 Grubbing	5.000 STA		<u>-</u>
0006	203.0100 Removing Small Pipe Culverts	6.000 EACH	·	<u>-</u>
0008	204.0110 Removing Asphaltic Surface	241.000 SY		<u>-</u>
0010	204.0115 Removing Asphaltic Surface Butt Joints	2,815.000 SY	<u>-</u>	<u>-</u>
0012	204.0120 Removing Asphaltic Surface Milling	181,483.000 SY		
0014	204.0150 Removing Curb & Gutter	294.000 LF		
0016	204.0155 Removing Concrete Sidewalk	121.000 SY		
0018	205.0100 Excavation Common	4,652.000 CY		
0020	208.1500.S Temporary Lane Shift During Culvert Work	6.000 EACH		
0022	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 7560-05-74	1.000 EACH	;;	·
0024	213.0100 Finishing Roadway (project) 01. 7560-05-74	1.000 EACH	·	·
0026	305.0110 Base Aggregate Dense 3/4-Inch	3,932.000 TON		
0028	305.0120 Base Aggregate Dense 1 1/4-Inch	2,137.000 TON		
0030	305.0500 Shaping Shoulders	16.000 STA	·	·



## **Proposal Schedule of Items**

Page 8 of 8

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Proposal ID: 20231212	034 Project(s):	7560-05-74
	Federal ID(s):	N/A
<b>SECTION:</b> 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	650.9911	1.000		
	Construction Staking Supplemental Control (project) 01. 7560-05-74	EACH		·
0216	690.0150	640.000		
	Sawing Asphalt	LF	·	··
0218	690.0250	25.000		
	Sawing Concrete	LF	·	··
0220	740.0440	38,538.000		
	Incentive IRI Ride	DOL	1.00000	38,538.00
0222	SPV.0060	15.000		
	Special 01. Cleaning Ditch	EACH	·	·
	Section	: 0001	Total:	

Total Bid: