HIGHWAY WORK PROPOSAL

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

Proposal Number: 038

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	HIGHWAY
Forest	9165-13-71	N/A	Argonne - Nelma; Sth 70 To Michigan State Line	STH 055

ADDENDUM REQUIRED

ATTACHED AT BACK

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

Proposal Guaranty Required: $75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: February 14, 2023 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time 35 Working Days	
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

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

Notary Seal

For Department Use Only

Type of Work:
Grading, Base, Milling, Cold In-Place Recycling, Asphalt Pavement, Concrete Pavement, Culvert Pipe, Guardrail, Pavement Markings.

Notice of Award Dated	Date Guaranty Returned

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 all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

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

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

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

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

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

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

BID PREPARATION

Preparing the Proposal Schedule of Items

A. General

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

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

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

(3) The department will provide bidding information through the department's web site at:

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

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

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

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

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

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

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

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the 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™ web site.
2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid
4. Submit the bid before the hour and date the Notice to Contractors designates
5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.

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

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

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

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

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

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

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

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

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

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

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

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

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

Effective with March 2010 Letting

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.

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

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

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

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

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

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

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

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 9165-13-71, Argonne – Nelma, STH 70 to Michigan State Line, STH 55, Forest 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, 2023 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 (20220628)

2. Scope of Work.

The work under this contract shall consist of excavation common, removing asphaltic surface milling, cold in-place recycling, base aggregate dense, HMA pavement, rumble strips, culvert pipe, guardrail, riprap, marking, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2023 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

The Notice to Proceed will be issued such that work shall start no later than July 31, 2023, unless otherwise approved by the engineer.

Detours for Culvert Replacements

During replacement of the culverts, implement the detour shown on the plans. Reopen the roadway upon completion of the culverts. Complete asphaltic surface patching at culverts no later than 3 calendar days after reopening STH 55 to through traffic.

Implement the STH 55 detour one time for a maximum of 12 calendar days. Do not implement the detour prior to July 17, 2023.

Milling, Overlay, and Cold In-Place Recycling (CIR)

Construct STH 55 under traffic except when full closure is allowed during the culvert replacements. Additional work including milling, CIR, and overlay operations may occur during the detour. Complete culvert replacements prior to the CIR.

A milled surface is prohibited during the time periods specified in this section and in the Holidays and Special Events article.

Maintain the CIR surface with daily or regular maintenance and rolling and pave lanes carrying through traffic within 96 hours. A CIR surface is prohibited during the time periods specified in this section and in the Holidays and Special Events article.

Provide an even cross-sectional profile of each lane prior to reopening to traffic. Uneven lanes are not allowed except within a flagging operation.

Northern Long-eared Bat *(Myotis septentrionalis)*

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

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

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

The department has contracted with others to cut all required trees 3-inches or greater for this project prior to construction. Remove any downed trees and grub the stumps and any remaining vegetation within the identified grubbing limits.

If additional 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. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence or visual emergence survey. Notify the engineer if additional clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

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

4. Traffic.

General

Maintain a minimum of one travel lane during working hours. Reopen STH 55 to two-way traffic during non-working hours except when the detour is in place.

Maintain local and emergency traffic on STH 55 at all times.

Maintain access to Chequamegon – Nicolet National Forest lands and associated recreational areas.

Do not close the shoulders on both sides of STH 55 at the same time in each work area. Shoulder closures may remain during non-working hours.

Side Roads

Maintain full access to and from STH 55 at all side roads with the use of flagging operations to control traffic as required during work operations within and at the intersections unless otherwise allowed by the engineer. Maintain existing lane configurations on side roads when work is not occurring.

Driveways

Maintain access to all driveways. Coordinate daily access with property owners and businesses when work is occurring in front of each driveway.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

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

5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 55 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 26, 2023 to 6:00 AM Tuesday, May 30, 2023 for Memorial Day;
- From noon Friday, June 30, 2023 to 6:00 AM Wednesday, July 5, 2023 for Independence Day;
- From noon Friday, September 1, 2023 to 6:00 AM Tuesday, September 5, 2023 for Labor Day.

stp-107-005 (20210113)

6. Utilities.

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

stp-107-065 (20080501)

Frontier Communications of WI LLC has existing underground **communication** facilities along the left and right side of STH 55 throughout the project limits with crossings throughout and some overhead services.

Frontier Communications of WI LLC plans to relocate the existing underground communication facilities approximately 30-feet left of the STH 55 centerline and 4-feet below grade near Station 214+50 and Station 250+90 to accommodate the excavation for culvert replacements. This work is anticipated to be completed prior to construction. Frontier Communications of WI LLC plans to complete this work in November of 2022 and complete the relocation within 20 working days.

We Energies has overhead and underground **electric** distribution facilities along the left and right side of STH 55 throughout the project limits with crossings throughout. We Energies does not anticipate any conflicts with these facilities.

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

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Eric Gwidt at (920)-366-8896.

stp-107-054 (20210708)

8. 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 Eric Gwidt at (920) 366-8896. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

9. Environmental Protection - Dewatering.

Add the following to standard spec 107.18:

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

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

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

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

ncr-107-025 (20160401)

10. Environmental Protection, By-Pass Pumping.

Add the following to standard spec 107.18:

If by-pass pumping is required, the means and methods proposed to be used during construction shall be submitted for approval as part of the Erosion Control Implementation Plan for each location it is required. The submittal shall include how the intake will be managed to not cause an increase in the background level turbidity during pumping; equipment pumping rate capabilities; discharge energy dissipation; and erosion controls. For by-pass pumping that will extend beyond one working day, the submittal should also include how the work zone will be managed and protected should the pump fail; be shut down due to unacceptable water quality; or storm water flows exceed the pumping rate of equipment. After setup of the approved by-pass pumping operation, the contractor shall demonstrate that the means and methods will pump the water at an acceptable water quality before starting work that necessitates the by-pass pumping. The cost of all work and materials associated with by-pass pumping is incidental to the bid items the work is associated with. Erosion control devices beyond the discharge energy dissipation point will be paid for at the contract unit prices for the items that are included in the plan.

ner-107-035 (20180212)

11. Environmental Protection, Aquatic Exotic Species Control.

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

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

Use the following inspection and removal procedures:

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

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

12. 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 seven calendar days after the placement of topsoil.

ncr-107-050 (20141015)

13. Construction Over or Adjacent to Navigable Waters.

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

stp-107-060 (20171130)

14. Notice to Contractor – Contamination Beyond Construction Limits.

Others have completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following site(s):

1. Station 211+77 to 212+06 from 78 feet Left of centerline to 44 feet Left of centerline.

The contaminated soil and groundwater at the above site are expected to be beyond or below the excavation limits necessary to complete the work under this project. Do not allow construction operations at these locations to extend beyond the excavation limits indicated in the plans. If contaminated soils or underground storage tanks are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting: Eric Gwidt at (920) 366-8896.

~~ncr-107-030 (20110531)~~

15. Notice to Contractor – Groundwater Spring.

The existing groundwater spring located under and adjacent to STH 55 near Station 117+10 is utilized frequently by local residents as a drinking water source. Do not disturb this spring including any piping within the roadway or the discharge point along the roadside during construction operations. Do not park equipment along the roadway near this spring and do not impede off roadway parking along this segment of STH 55 except when work is occurring directly in the area of the spring.

16. Notice to Contractor – Detour Signing in Michigan.

Detour signing in Michigan is under the jurisdiction of Michigan DOT. WisDOT will apply for a permit to place the detour signing prior to the project. Follow all provisions of the permit and coordinate with Michigan DOT as necessary.

The Michigan DOT contact is Benjamin Feldhausen, Traffic and Safety Engineer, (906)-875-6644, FeldhausenB@michigan.gov.

17. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

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

Forest County Sheriff's Department
Wisconsin State Patrol
Michigan State Patrol
Forest County Highway Department
Town of Alvin
Crandon School District
Argonne Post Office

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

ncr-107-005 (20200729)

18. Prepare Foundation for CIR Base Layer 9165-13-71, Item 211.0700.S.

A Description

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

B (Vacant)

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
211.0700.S	Prepare Foundation for CIR Base Layer 9165-13-71	EACH

Replace standard spec 211.5.1 (4) with the following:

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

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

- Base Repair for CIR Layer.

stp-211-020 (20191121)

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

A Description

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

B (Vacant)

C Construction

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

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

Add the following to standard spec 211.3.5:

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

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

Remove soft and/or yielding areas of base to a maximum depth of 2-feet. All areas will be documented, and information will be provided to the engineer. If areas are found after paving operation begin, the engineer will be notified of locations. Excavated area will be filled and compacted with material that meets the material requirements of standard spec 305 and Base Aggregate Dense 1 ¼-inch, or standard spec 330 and Mill and Relay, or standard spec 465 and Asphaltic Surface.

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

D Measurement

The department will measure Base Repair for CIR Layer by the cubic yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
211.0800.S	Base Repair for CIR Layer	CY

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

stp-211-030 (20200629)

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

A Description

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

B Materials

B.1 Reclaimed Asphalt Pavement (RAP) Material

(1) The RAP material shall be milled from the existing roadway and processed in place.

(2) The RAP shall be free of contamination including a base material, aggregate shoulder material, concrete, silt, clay, or other deleterious materials unless specified in the plan.

(3) Rubberized crack filler, pavement markers, loop wires, fabric, or other materials shall be removed as observed from the roadway during the recycling process. Any residual materials shall be appropriately sized and homogenously blended with the RAP. No rubberized crack filler or fabric piece may have a dimension exceeding a length of 4 inches.

(4) The milled and processed material shall conform to the following gradation:

Sieve Size	Percent Passing
2”	100
1 ½”	98 to 100
1”	95 to 100

B.2 Stabilizing Agent

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

B.2.1 Foamed Asphalt

(1) Foamed asphalt shall be produced with a performance graded asphalt binder; without polymer modification; according to standard spec 455.

(2) Asphalt binder performance grade for foamed asphalt shall be PG 46-34 or PG 52-34. Ensure that the material is furnished by a supplier from the Combined State Binder Group Certified Supplier List.

(3) Asphalt binder shall be sufficiently heated to meet the mix design expansion and half-life criteria; not to exceed 375° F.

(4) Asphalt binder shall produce asphalt foam with a minimum expansion ratio of 8, and a half-life of no less than 6 seconds.

B.2.2 Water

(1) Water may be added to the RAP at the milling head and/or in a mixing chamber.

(2) Water added to the RAP, used for foaming asphalt, shall be free of sediment and deleterious materials.

B.3 Mixture Design

(1) The contractor shall be responsible for obtaining milled samples and/or cores for the project mix design.

(2) Core samples shall be obtained at a minimum frequency of 0.5 lane-mile. Cores shall be obtained from the area to be recycled including the shoulder. Samples obtained by coring should be enough to develop the mix design.

(3) Samples for mix design obtained by milling shall be taken from at least 3 different locations directly from the area to be recycled.

(4) All samples shall represent the entire depth of the layer to be recycled.

(5) Develop and submit a material sampling plan for review and approval a minimum of 5 business days prior to obtaining milled and/or cored samples.

(6) Material sampling prior to receipt of the engineer's notice to proceed shall require submittal and approval of an Application/Permit to Work on Highway Right-of-Way (DT1812).

(7) During material sampling operations, contractor insurance shall be as specified in standard spec 107, traffic control requirements shall be as specified in standard spec 107 and 643, and in the contract special provisions.

(8) Develop and submit a mix design with the optimal asphalt content 10 business days prior to the start of the CIR operation. This will be developed according to AASHTO MP 38-18 and PP 94-18; and additionally, will conform to the requirements listed in B.3.1. Submit mix design using WisDOT's provided CIR mix design template to the engineer and department's Bureau of Technical Services, Materials Management Section, Pavement Unit: DOTDLDTSDBTSPavementUnit@dot.wi.gov.

Table B.3.1 – Minimum Mix Design Requirements

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

*0.70 for mix designs requiring the addition of cement.

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

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

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

B.4 Quality Management Program

B.4.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan, including random numbers, to the engineer no later than 10 business days before beginning CIR activities. Construct the project as the plan provides.

(2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post it in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
3. A list of suppliers for all stabilizing agents.
4. A list of source locations for all water.
5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
6. Location of the QC laboratory, retained sample storage, and other documentation.
7. A summary of locations or quantities, selected randomly using ASTM Method D3665, to be tested under this provision.

B.4.2 Pre-CIR Construction Meeting

A minimum of 5 business days prior to the start of CIR construction, hold a pre-CIR construction meeting at a mutually agreed upon time and location. Attendance at the pre-CIR construction meeting is mandatory for the engineer, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

B.4.3 Personnel

(1) Provide HTCP Nuclear Density Technician I or ACT certified technician for the performance of field density and field moisture content testing.

(2) Provide HTCP Aggregate Technician I or ACT certified technician for material sampling and sieve analysis.

(3) A Transportation Materials Sampling (TMS) certified technician is allowed for materials sampling.

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

B.4.4 Equipment

(1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and applicable AASHTO and/or ASTM specifications and maintain a calibration record at the laboratory.

(2) Furnish nuclear gauges from the department's approved product list at:

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

(3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.

(4) Conform to AASHTO T310 and CMM 8.15 for density testing and gauge monitoring methods.

B.4.5 Quality Control (QC) Testing

(1) Roadway production lots will be defined as 4000 lane feet. Each roadway production lot will consist of two 2000 lane feet sublots. The contractor will notify the department before sampling.

(2) Gradation samples shall be taken at a random location at a minimum frequency of one per lot of production. Gradation samples shall be taken as representative of the full recycled depth. Samples may be obtained prior to or after the addition of stabilizing agent depending on the type of CIR equipment used in the project. For each sample report the gradation of the material, as determined according to AASHTO T27, for the Number 4 (4.75mm) sieve and larger.

(3) Conduct and report density testing at a minimum frequency of three individual random tests per sublot.

(4) Conduct and report mill depth checks at a random location at a minimum frequency of once per sublot.

(5) Measure and report stabilizing agent foaming properties (i.e., half-life and expansion ratio) of each new tanker load from the equipment's test nozzle or recycling unit. If the foaming properties do not meet the requirement as specified in B.2.1, take the necessary corrective action by adjusting the temperature of the stabilizing agent and/or foaming water content.

(6) Report stabilizing agent temperature at a minimum of one per each new tanker load.

(7) Report stabilizing agent foamed asphalt expansion ratio and half-life at random locations at a minimum frequency of once per sublot.

(8) Perform startup QC testing (milling depth, stabilizing agent, foaming properties, and stabilizing agent application rate) within the first 500 feet at the beginning of each day of production.

(9) Conduct and report daily moisture content of the finished CIR layer representing each day's placement. Moisture content shall be based on the average of three random tests, from each day's placement. The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Engineer-directed tests are an addition to the above three tests representing the day's placement.

(10) Once the section achieves 2.5% or less in moisture, the section is considered cured and additional moisture tests are not required unless directed by the engineer.

(11) The contractor shall provide a Daily Inspection Report within 48 hours to the engineer summarizing the following:

- daily beginning and ending stations,
- applicable mix design,
- stabilizing agent temperature,
- stabilizing agent foaming properties,
- sublot tests (mill depth check, density test, and gradation) locations and values, and
- lot roadway sample locations.
- moisture

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

B.4.6 Department Testing

B.4.6.1 General

(1) The department will conduct quality verification (QV) testing to validate the quality of the product and independent assurance (IA) testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project and provide test results to the contractor within 5 business days after the department obtains the sample.

B.4.6.2 Quality Verification (QV) Testing

(1) The department will have a technician, or ACT working under a technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.4.3 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling.

(2) The department will conduct random QV tests at the minimum frequency of 10% of the required QC tests. The department will observe the contractor's QC stabilizing agent foaming property test.

(3) The department's mill depth check, roadway gradation sample, and density test sites, will be at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will split each QV gradation sample, test half for QV, and retain the remaining half for 7 calendar days.

(4) The department will verify the contractor's moisture content values by testing a moisture content split sample at a frequency of at least one per day.

(5) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(6) The department will assess QV results by comparing them to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, a re-evaluation of the entire process must be completed before production can resume.

B.4.6.3 Independent Assurance (IA)

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing, including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.4.6.4.

B.4.6.4 Dispute Resolution

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

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

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

C Construction

C.1 General

(1) Unless the contract provides otherwise, keep the road open to traffic during construction.

(2) Perform CIR operations; only between the dates of May 15 and September 15; when the air temperature approximately 3 feet above grade, in the shade, and away from artificial heat sources is above 50°F and when the nighttime ambient air temperature is above 35°F the night prior and the following night, unless approved otherwise by the engineer.

(3) Do not perform CIR operations during inclement weather such as rain or fog; that will not allow proper mixing, placing, and/or compacting of the mixture.

(4) CIR operations and recycled pavement base layer curing shall be completed to allow adequate time for placement of surfacing according to calendar requirements of standard spec 450.3.2.1.

(5) The asphalt binder stabilizing agent application rate will be 2.00 percent with a field adjustment tolerance of +/- 0.30 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.

(6) The metered water added at the mill used for cooling and compaction shall be 2.00 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.

(7) If the stabilizing agent or water application rate from the mix design referenced in section B.3 is not within the range of 1.70 to 2.30 percent, at the department's direction, 500 feet test sections will be required as a comparison. The contractor's liability for the department's directed test sections will be waived. The department's Bureau of Technical Services Pavement Unit will be consulted on these test sections. No test section will be considered below 1.50 percent asphalt binder stabilizing agent.

C.2 Equipment

(1) Equipment used for CIR shall be subject to approval by the engineer.

(2) Tankers supplying hot stabilizing agent components shall be equipped to constantly monitor temperature within the tank.

C.2.1 Milling Machine

(1) The primary milling machines; not inclusive of pre-mill/wedge-cut milling units; shall be capable of milling the existing pavement at a minimum width of not less than 12.5 feet and to the depth shown on the plans, specified in the contract or directed by the engineer. A smaller milling machine may be used to mill paved shoulders and miscellaneous areas to increase the recycle width.

(2) The milling machines shall be equipped with automatic depth control, shall maintain constant cutting depth and width, uniform grade, and uniform slope.

(3) For processes not incorporating additional screening, sizing, or crushing; the milling machine shall be capable of producing RAP sized as specified in B.1.

(4) Use of a heating device to soften the pavement is not permitted.

C.2.2 Screening, Crushing, and Sizing Equipment

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

C.2.3 Mixing Unit

(1) Processed RAP shall be mixed with the stabilizing agent and water in a mixing unit; defined as the milling machine cutter housing, a separate mixing chamber, or a pugmill.

(2) The asphalt stabilizing agent shall be applied; using a computer-controlled additive system; uniformly at the predetermined application rate. The metering of the stabilizing agent must be monitored through a calibrated pump providing a continuous readout of quantities.

(3) The additive system shall contain separate pumping systems for adding stabilizing agent and water. Each system shall have an inspection or test nozzle for stabilizing agent and/or water sampling.

(4) The system shall be capable of producing a uniformly mixed homogeneous recycled pavement base layer mixture.

C.2.4 Paving Equipment

(1) The placement and shaping of the recycled pavement base layer mixture shall be completed using a self-propelled paver or screed integral to the recycling equipment meeting the requirements of standard spec 450.3.1.4; revised to exclude the requirement of an activated screed or strike-off assembly.

(2) The screed shall not be heated.

(3) If utilizing a self-propelled paver, the material shall be transferred directly into the paver hopper from the recycling equipment or with a pick-up device. When a pick-up device is used, the entire windrow shall be removed from the milled surface and transferred to the paver hopper.

C.2.5 Compaction Equipment

(1) Compaction equipment shall be self-propelled and meet the requirements of standard spec 450.3.1.5.

(2) The number, weight, and types of rollers shall be used as necessary to achieve the specified compaction. At a minimum, the following rollers shall be used:

1. At least one self-propelled double drum vibratory steel roller with a minimum weight of not less than 10 tons.
2. At least one self–propelled pneumatic-tired roller with a minimum weight of not less than 22 tons.

C.3 Constructing CIR

C.3.1 Preparation

(1) After any contract required surface milling, and immediately prior to commencing CIR operations, remove from the roadway, and up to 1 inch below the milled surface, any vegetation, standing water, loose crack filler, and any other deleterious materials.

(2) Inspect the pavement surface, after any contract required surface milling, for areas of yielding subgrade. Yielding areas will be repaired prior to CIR operations.

(3) Blade the existing base aggregate roadway shoulders away from the asphaltic surface edge to minimize contamination of the CIR base layer.

C.3.2 Processing and Placement of CIR Material

(1) Mill the existing pavement to the required depth and width indicated on the plans.

(2) Further process the milled RAP material as necessary by crushing, screening, and/or sizing to the gradation requirements of B.1.

(3) Blend the RAP material with the mix design specified proportions of stabilizing agent and water; produce a uniform and homogeneous recycled mixture.

(4) Spread the recycled mixture to the grade, elevations, and slopes specified on the plans; avoiding tearing or scarring of the recycled pavement base layer surface.

(5) Ensure proper material transfer, handling, and spreading to prevent material segregation. If segregation does occur behind the paver, the contractor shall take immediate steps to correct the problem. Corrective action may include adjusting the forward speed of the paving operation and adjusting the flow of material to paver. The contractor shall make adjustments until a satisfactory end-product has been obtained, as determined by the engineer.

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

C.4 Compaction

C.4.1 Control Strip Construction

(1) On the first day of production, construct a control strip to identify the target wet density for the CIR layer using a nuclear moisture-density gauge in backscatter measurement. Nuclear gauge test duration in backscatter measurement shall be for a total of one-minute test per location in the direction of paving. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel.

(2) After the construction of the control strip, the CIR process shall be permitted to continue until the project's first asphalt binder tanker truck is empty. Any further CIR process shall be halted till the completion of the test rolling.

(3) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 500 feet long and one full lane width. Begin the control strip at a location of at least 200 feet beyond the start of the project.

(4) Completed control strips may remain in-place to be incorporated into the final roadway cross-section.

(5) Construct additional control strips, at a minimum, when:

1. The CIR layer thickness changes in excess of 2.0 inches.
2. The percent of target wet density is less than 96% or exceeds 105.0%; and is outside the range of the 10 random measurements defining the control strip; on two consecutive sublots.
3. If there is a significant change in mix proportions, weather conditions, compaction equipment, or other controlling factors, the engineer may require the construction of new control strips to check target density.

(6) Construct control strips using equipment and methods representative of the operations to be used for constructing the CIR layer.

(7) After compacting the control strip with a minimum of three roller passes, mark and take three wet density measurements using a nuclear moisture-density gauge in backscatter mode at one random station. One density measurement representing the inside 1/3, one density measurement representing the middle 1/3, and one density measurement representing the outside 1/3 transversely across the traveled lane, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. Subsequent density measurements will be taken at the same three locations.

(8) After each subsequent pass of compaction equipment over the entirety of the control strip, take wet density measurements at the three marked locations. Continue compacting and testing until the increase in density measurements of individual locations is less than 2.0 lb/ft3, or the density measurements begin to decrease.

(9) Upon completion of control strip compaction, take 10 randomly located wet density measurements within the limits of the control strip, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. The final measurements recorded at the three locations under article paragraph (6) of this section may be included as 3 of the 10 measurements. Average the 10 measurements to obtain the control strip target density.

C.4.2 Compaction Requirements

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

C.5 Surface Requirements

(1) Prior to placement of the surface treatment, the engineer and contractor shall visually inspect the CIR layer for distresses including, but not limited to raveled areas, rutted areas, and areas of excess or deficient stabilizing agent, or deficient surface tolerance areas.

(2) Test the recycled pavement base layer surface at regular intervals, and engineer selected locations, using a 10-foot straightedge or other engineer-specified devices.

(3) The engineer may direct the repair of surface deviations greater than ½ inch between two surface contact points. High points shall be corrected by rerolling, trimming, milling, or grinding. Depressions may be corrected by having a tack coat applied and be filled with HMA immediately prior to placement of the surface treatment.

(4) Raveled areas, rutted areas, and areas of excess or deficient stabilizing agent shall be re-processed or repaired. Reprocessing shall consist of milling, blending of additional stabilizing agent, placement with a paver, and compaction with determined rolling patterns as determined by the control strip.

C.6 Maintaining the Work

(1) After compaction is complete, the contractor will determine when the CIR is stable to open to traffic.

(2) After opening to traffic, and prior to placement of the upper layer, the surface of the recycled base shall be maintained in a condition suitable for the safe movement of traffic.

(3) The recycled base and shoulders shall be protected and maintained from standing water, deleterious substances, and/or other damage.

(4) Any damage to the recycled base, excluding department-directed test sections, shall be repaired by the contractor prior to placement of the upper layer at no additional cost to the department.

C.7 Curing and Surfacing

C.7.1 Curing

(1) Application of a surface treatment or leveling/lower layer of HMA will not be allowed until the moisture content of the CIR layer reduces to 2.50 percent or less.

(2) If the moisture content of the CIR layer does not reduce to 2.50 percent; the surface treatment may be applied after the change in moisture content is less than 0.30 percentage points for three consecutive calendar days

(3) The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Moisture content testing by nuclear density shall only be used for informational purposes and not for acceptance. The department will obtain a sample(s) to verify the contractor's final moisture content values.

C.7.2 Tack Coat

(1) The surface shall be prepared, and tack coat applied meeting the requirements of standard spec 455.3.2.

(2) Tack coat application rate shall be 0.05 to 0.07 gal/SY. The engineer may adjust the tack coat application rate based on surface conditions.

(3) Use only emulsified asphalt material as tack coat specified in standard spec 455.2.5. Paving grade asphaltic tack coat shall not be used.

C.7.3 Surfacing

(1) Surfacing materials, equipment, and construction methods shall be according to the applicable sections of the standard specs or contract special provisions.

(2) Paving of final surfacing (for single layer) or leveling/lower layer of HMA on the cured CIR sections shall not be conducted until the moisture content in the CIR layer reduces to 2.50% or less.

(3) The final surfacing (for single layer) or leveling/lower layer shall be placed on the CIR layer within 10 calendar days once a section of the CIR layer is considered cured per section B.4.5.

(4) After any rain event, the excess moisture in the CIR layer shall be allowed to dry before paving the final surfacing (for single layer) or leveling/lower HMA layer. After a measurable rain event and prior to paving or resuming paving the CIR layer with final surfacing (for single layer) or leveling/lower layer of HMA, the contractor shall dig a hole full depth of the CIR at a location directed and observed by the engineer. The contractor shall record depth of standing water after 5 minutes. A plan to deal with standing water/potential bleeding shall be submitted by the contractor to the engineer prior to paving. The department can request a split-sample moisture at any time as specified in section B.4.5.

(5) The contractor is responsible for the prevention of water bleeding through the final surfacing (for single layer) or leveling/lower layer. Water bleeding through the final surfacing (for single layer) or leveling/lower layer is considered nonconforming work and will be handled according to standard spec 105.3.2.

D Measurement

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

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

E Payment

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

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

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

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

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

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

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

21. 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:

(1) 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.

(3) 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

(1) 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

(1) 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.

(3) 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.

(2) 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.

(2) 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.

(5) 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^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 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^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 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

(1) 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

(1) 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)

22. Asphaltic Surface.

Replace standard spec 465.2 (1) with the following:

Under the Asphaltic Surface bid item submit a mix design. Furnish asphaltic mixture meeting the requirements specified for HMA Pavement Type 4 LT 58-34 S for Project 9165-13-71 under standard spec 460.2; except the engineer will not require the contractor to conform to the quality management program specified under standard spec 460.2.8. Use tack coat as required under standard spec 450.3.2.7.

ncr-465-005 (20220530)

23. Pipe Culverts.

Replace standard spec 520.3.3(5) with the following:

Provide joint ties at all joints of circular or horizontal elliptical concrete culvert pipes, including endwalls.

ncr-520-005 (20180319)

24. Field Facilities.

Add the following to standard spec 642.3:

Set up the field office within 7 days after notice from the engineer.

Provide a parking area large enough to park a minimum of six cars directly adjacent to the field office. The parking area and approach to the field office shall be well drained and consist of a crushed base aggregate or an existing paved surface and shall be ready for use within seven days after the field office is set up.

ncr-642-005 (20160406)

25. Traffic Control.

Add the following to standard spec 643.3.1:

Lighting devices shall be covered or rendered inoperative when not in use.

Provide the engineer and law enforcement (police, sheriff and State Patrol) the current telephone number(s) that the contractor, or their representative, can be contacted at, at all times, in the event a safety hazard develops. Repair, replace, or restore the damaged or disturbed traffic control devices within two hours from the time notified or made aware of the damaged or disturbed traffic control devices.

Promptly replace all state-owned signs that are removed by the contractor due to interference with construction operations. At no time may stop signs be removed or moved without flag persons present.

Add the following to standard spec 104.6.1.2.2:

Provide a dedicated person or alternate method to guide traffic travelling alongside or near moving operations such as milling, paving, and shouldering.

ncr-643-005 (20190703)

26. Protective Thermoplastic Coating at Snowmobile Trail Crossings, Item SPV.0180.01.

A Description

This special provision describes furnishing and placing a three layer system of thermoplastic protective surface for HMA and concrete pavements at snowmobile crossings.

B Materials

Furnish the thermoplastic material listed below:

Geveko ViaTherm E4190-35 or Cleanosol E4190-35

A minimum of 10 working days prior to applying the thermoplastic coating, submit certification to the engineer verifying the product trade name and manufacturer. The supplier shall provide technical literature to the contractor with advice on storing, mixing, and applying, clean up, and disposing of excess materials.

C Construction

Delineate the area to be coated using a string line across the full pavement width. Sweep the surface of the area to be coated to be free of all dust, dirt, and debris. The surface shall be completely dry. Place the thermoplastic coating in three layers, with the first and third layers placed perpendicular to highway traffic and the second layer placed longitudinally with highway traffic.

The handling and placement of the thermoplastic material shall follow the manufacturer’s recommendations.

D Measurement

The department will measure Protective Thermoplastic Coating at Snowmobile Trail Crossings in area by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Protective Thermoplastic Coating at Snowmobile Trail Crossing	SY

Payment is full compensation for furnishing and hauling all materials, including thermoplastic material, silica sand; preparing the surface; mixing and applying the thermoplastic material; and removing and disposing of all excess materials.

ncr-600-005 (20200824)

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:

416.2.4 Concrete Pavement Repair and Replacement

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

(1) Except as specified in 416.3.6 for inlaid rumble strips, use grade C concrete as specified in 501.

(2) The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi.

416.2.5 Special High Early Strength Concrete Pavement Repair and Replacement

416.2.5.1 Composition and Proportioning of Concrete

Replace paragraph one with the following effective with the November 2022 letting:

(1) For the concrete mixture, use a minimum of 846 pounds of cementitious material per cubic yard of concrete. The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi. The contractor may add one or a combination of admixtures to the ingredients or to the mixture in order to obtain the required minimum strength and required air content. Do not retemper the concrete mixture.

455.2.4.3 Emulsified Asphalts

Replace paragraph one with the following effective with the November 2022 letting:

(1) Furnish material conforming, before dilution, to the following:

Anionic emulsified asphalts[1] ..... AASHTO M140
Cationic emulsified asphalts[1] ..... AASHTO M208
Polymer-modified cationic emulsified asphalts ..... AASHTO M316

[1] Non-tracking emulsified asphalts shall conform to TABLE 455-1 for the type and grade specified.

TABLE 455-1 Requirements for Non-Tracking Emulsified Asphalt

PRODUCT	ANTT	CNTT
Saybolt Viscosity at 77°F (25°C), (AASHTO T 59), SFS	15-100	15-100
Paddle Viscosity at 77°F (25°C), (AASHTO T 382), cPs[1]	30-200	30-200
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max	1 max
Residue by Distillation, 500 ± 10 °F (260 ± 5 °C), or Residue by Evaporation, 325 ± 5 °F (163 ± 3 °C), (AASHTO T 59), %	50 min	50 min
Sieve Test, No. 20 (850 µm), (AASHTO T 59), %	0.3	0.3
Penetration at 77°F (25°C), 100 g, 5 sec, (AASHTO T 49), dmm	10-40	10-40
Ash Content, (AASHTO T 111), %	1 max	1 max
Solubility in Trichlorethylene Test, (AASHTO T 44)[2]	97.5% min	97.5% min

[1] Paddle Viscosity (AASHTO T 382) may be run in lieu of Saybolt Viscosity (AASHTO T 59).

[2] The solubility in Trichlorethylene test (AASHTO T 44) may be run in lieu of Ash Content (AASHTO T 111).

455.2.5 Tack Coat

Replace paragraph one with the following effective with the November 2022 letting:

(1) Under the Tack Coat bid item, furnish type SS-1h, CSS-1h, QS-1h, CQS-1h, ANTT, CNTT, or modified emulsified asphalt with an “h” suffix, unless the contract specifies otherwise.

710.5.7 Corrective Action

710.5.7.1 Optimized Aggregate Gradations

Replace paragraph one with the following effective with the November 2022 letting:

(1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size, notify the other party immediately and do one of the following:

- Perform corrective action documented in the QC plan or as the engineer approves. Continue with the following:
  1. Document and provide corrective action results to the engineer as soon as they are available.
  2. Department will conduct two tests within the next business day after corrective action is complete.

     If blended aggregate gradations are within the tarantula curve limits by the second department test:
     - Continue with concrete production.
     - Include a break in the 4-point running average.
     - For Class I Pavements: The department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
  - If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract requires an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit a new optimized aggregate gradation mix design.
  - If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract does not require an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit either a new optimized aggregate gradation mix design or a combined aggregate gradation mix design.
- Submit a new optimized aggregate gradation mix design and perform the following:
  1. Restart control charts for the new mix design.
  2. Amend contractor Quality Control Plan

715.5 Payment

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

715.5.1 General

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

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

(2) Incentive payment may be more or less than the amount the schedule of items shows.

(3) The department will administer disincentives for strength under the Disincentive Strength Concrete Structures, Disincentive Strength Concrete Barrier, Disincentive Flexural Strength Concrete Pavement, and Disincentive Compressive Strength Concrete Pavement, administrative items.

(4) The department will adjust pay for each lot using PWL of the 28-day sublot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows:

- Compressive strength of 3700 psi for pavements.
- Flexural strength of 650 psi for pavements.
- Compressive strength of 4000 psi for structures and barrier.

(5) The department will not pay a strength incentive for concrete that is nonconforming in another specified property, for ancillary concrete accepted based on tests of class I concrete, or for high early strength concrete unless placed in pavement gaps as allowed under 715.3.1.2.2.

(6) Submit test results to the department electronically using MRS software. The department will verify contractor data before determining pay adjustments.

(7) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are incidental to the contract.

715.5.2 Pavements

715.5.2.1 Compressive

(1) The department will adjust pay for each lot using equation "QMP 3.01" as follows:

Percent within Limits (PWL)	Pay Adjustment (dollars per square yard)
>= 95 to 100	(0.1 x PWL) – 9.5
>= 85 to < 95	0
>= 30 to < 85	(1.5/55 x PWL) – 127.5/55
< 30	-1.50

(2) The department will not pay incentive if the lot standard deviation is greater than 400 psi compressive.

(3) For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 3700 psi compressive by $1.50 per square yard.

(4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.2.2 Flexural

(1) The department will adjust pay for each lot using equation "QMP 6.02" as follows:

Percent within Limits (PWL)	Pay Adjustment (dollars per square yard)
>= 95 to 100	(0.2 x PWL) – 19
>= 85 to < 95	0
>= 50 to < 85	(2.0/35 x PWL) – 170/35
< 50	-2.00

(2) The department will not pay incentive if the lot standard deviation is greater than 60 psi flexural.

(3) For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 650 psi flexural by $2.00 per square yard.

(4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.3 Structures and Cast-in-Place Barrier

(1) The department will adjust pay for each lot using equation "QMP 2.01" as follows:

Percent within Limits (PWL)	Pay Adjustment (dollars per square yard)
>= 99 to 100	10
>= 90 to < 99	0
>= 50 to < 90	(7/8 x PWL) – 78.75
< 50	-35

(2) The department will not pay incentive if the lot standard deviation is greater than 350 psi.

(3) For lots with less than 4 sublots, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 4000 psi by $35 per cubic yard.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

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

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

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

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

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

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

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

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

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

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

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

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

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

NON-DISCRIMINATION PROVISIONS

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

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

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

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

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

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

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

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

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

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

BUY AMERICA PROVISION

Buy America (as documented in M-22-11 from the Office of Management and Budget: https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf) 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: https://wisconsindot.gov/Documents/formdocs/dt4567.docx

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

Proposal ID: 20230214038 Project(s): 9165-13-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0205 Grubbing	2.000 STA	_____.____	_____.____
0004	203.0100 Removing Small Pipe Culverts	12.000 EACH	_____.____	_____.____
0006	204.0100 Removing Concrete Pavement	84.000 SY	_____.____	_____.____
0008	204.0110 Removing Asphaltic Surface	255.000 SY	_____.____	_____.____
0010	204.0115 Removing Asphaltic Surface Butt Joints	60.000 SY	_____.____	_____.____
0012	204.0120 Removing Asphaltic Surface Milling	88,790.000 SY	_____.____	_____.____
0014	204.0165 Removing Guardrail	470.000 LF	_____.____	_____.____
0016	204.0180 Removing Delineators and Markers	21.000 EACH	_____.____	_____.____
0018	205.0100 Excavation Common	4,473.000 CY	_____.____	_____.____
0020	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0022	211.0400 Prepare Foundation for Asphaltic Shoulders	587.000 STA	_____.____	_____.____
0024	211.0700.S Prepare Foundation for CIR Base Layer (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0026	211.0800.S Base Repair for CIR Layer	500.000 CY	_____.____	_____.____
0028	213.0100 Finishing Roadway (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0030	305.0110 Base Aggregate Dense 3/4-Inch	300.000 TON	_____.____	_____.____
0032	305.0120 Base Aggregate Dense 1 1/4-Inch	2,190.000 TON	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

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
0034	305.0500 Shaping Shoulders	146.000 STA	_____.____	_____.____
0036	327.1000.S CIR Asphaltic Base Layer	85,972.000 SY	_____.____	_____.____
0038	415.0070 Concrete Pavement 7-Inch	29.000 SY	_____.____	_____.____
0040	415.0410 Concrete Pavement Approach Slab	55.000 SY	_____.____	_____.____
0042	455.0605 Tack Coat	11,439.000 GAL	_____.____	_____.____
0044	455.0770.S Asphalt Stabilizing Agent	390.000 TON	_____.____	_____.____
0046	460.2000 Incentive Density HMA Pavement	5,890.000 DOL	1.00000	5,890.00
0048	460.5244 HMA Pavement 4 LT 58-34 S	9,190.000 TON	_____.____	_____.____
0050	465.0105 Asphaltic Surface	5,270.000 TON	_____.____	_____.____
0052	465.0110 Asphaltic Surface Patching	4.000 TON	_____.____	_____.____
0054	465.0450 Asphaltic Intersection Rumble Strips	75.000 SY	_____.____	_____.____
0056	520.3424 Culvert Pipe Class III-A Non-metal 24-Inch	94.000 LF	_____.____	_____.____
0058	522.0424 Culvert Pipe Reinforced Concrete Class IV 24-Inch	168.000 LF	_____.____	_____.____
0060	522.0430 Culvert Pipe Reinforced Concrete Class IV 30-Inch	82.000 LF	_____.____	_____.____
0062	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	12.000 EACH	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	4.000 EACH	_____.____	_____.____
0066	522.2419 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	102.000 LF	_____.____	_____.____
0068	522.2429 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	36.000 LF	_____.____	_____.____
0070	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	6.000 EACH	_____.____	_____.____
0072	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	2.000 EACH	_____.____	_____.____
0074	606.0200 Riprap Medium	52.000 CY	_____.____	_____.____
0076	614.2300 MGS Guardrail 3	312.500 LF	_____.____	_____.____
0078	614.2330 MGS Guardrail 3 K	187.500 LF	_____.____	_____.____
0080	614.2500 MGS Thrie Beam Transition	78.800 LF	_____.____	_____.____
0082	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.____	_____.____
0084	618.0100 Maintenance And Repair of Haul Roads (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0086	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0088	624.0100 Water	55.000 MGAL	_____.____	_____.____
0090	625.0100 Topsoil	3,510.000 SY	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

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
0092	628.1504 Silt Fence	4,450.000 LF	_____.____	_____.____
0094	628.1520 Silt Fence Maintenance	4,450.000 LF	_____.____	_____.____
0096	628.1905 Mobilizations Erosion Control	4.000 EACH	_____.____	_____.____
0098	628.1910 Mobilizations Emergency Erosion Control	4.000 EACH	_____.____	_____.____
0100	628.2004 Erosion Mat Class I Type B	1,845.000 SY	_____.____	_____.____
0102	628.2006 Erosion Mat Urban Class I Type A	1,225.000 SY	_____.____	_____.____
0104	628.2027 Erosion Mat Class II Type C	440.000 SY	_____.____	_____.____
0106	628.7504 Temporary Ditch Checks	120.000 LF	_____.____	_____.____
0108	628.7555 Culvert Pipe Checks	60.000 EACH	_____.____	_____.____
0110	628.7570 Rock Bags	85.000 EACH	_____.____	_____.____
0112	629.0210 Fertilizer Type B	2.300 CWT	_____.____	_____.____
0114	630.0130 Seeding Mixture No. 30	70.000 LB	_____.____	_____.____
0116	630.0500 Seed Water	80.000 MGAL	_____.____	_____.____
0118	633.5200 Markers Culvert End	46.000 EACH	_____.____	_____.____
0120	638.2102 Moving Signs Type II	5.000 EACH	_____.____	_____.____
0122	642.5201 Field Office Type C	1.000 EACH	_____.____	_____.____
0124	643.0300 Traffic Control Drums	786.000 DAY	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0126	643.0420 Traffic Control Barricades Type III	192.000 DAY	_____.____	_____.____
0128	643.0705 Traffic Control Warning Lights Type A	288.000 DAY	_____.____	_____.____
0130	643.0715 Traffic Control Warning Lights Type C	192.000 DAY	_____.____	_____.____
0132	643.0900 Traffic Control Signs	3,834.000 DAY	_____.____	_____.____
0134	643.0920 Traffic Control Covering Signs Type II	7.000 EACH	_____.____	_____.____
0136	643.1000 Traffic Control Signs Fixed Message	148.000 SF	_____.____	_____.____
0138	643.3105 Temporary Marking Line Paint 4-Inch	127,215.000 LF	_____.____	_____.____
0140	643.3150 Temporary Marking Line Removable Tape 4-Inch	700.000 LF	_____.____	_____.____
0142	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch	24.000 LF	_____.____	_____.____
0144	643.3960 Temporary Marking Removable Mask Out Tape 6-Inch	530.000 LF	_____.____	_____.____
0146	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0148	645.0120 Geotextile Type HR	161.000 SY	_____.____	_____.____
0150	646.1020 Marking Line Epoxy 4-Inch	60,900.000 LF	_____.____	_____.____
0152	646.4520 Marking Line Same Day Epoxy 4-Inch	44,550.000 LF	_____.____	_____.____
0154	646.9000 Marking Removal Line 4-Inch	560.000 LF	_____.____	_____.____
0156	650.4500 Construction Staking Subgrade	1,300.000 LF	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

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
0158	650.5000 Construction Staking Base	1,300.000 LF	_____._____	_____._____
0160	650.6000 Construction Staking Pipe Culverts	12.000 EACH	_____._____	_____._____
0162	650.7000 Construction Staking Concrete Pavement	16.000 LF	_____._____	_____._____
0164	650.8000 Construction Staking Resurfacing Reference	30,407.000 LF	_____._____	_____._____
0166	650.9911 Construction Staking Supplemental Control (project) 01. 9165-13-71	1.000 EACH	_____._____	_____._____
0168	650.9920 Construction Staking Slope Stakes	2,050.000 LF	_____._____	_____._____
0170	690.0150 Sawing Asphalt	1,360.000 LF	_____._____	_____._____
0172	690.0250 Sawing Concrete	16.000 LF	_____._____	_____._____
0174	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0176	740.0440 Incentive IRI Ride	23,050.000 DOL	1.00000	23,050.00
0178	SPV.0180 Special 01. Protective Thermoplastic Coating At Snowmobile Trail Crossings	393.000 SY	_____._____	_____._____

Section: 0001 Total: _____._____

Total Bid: _____._____

PLEASE ATTACH ADDENDA HERE

Wisconsin Department of Transportation

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

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

February 2, 2023

NOTICE TO ALL CONTRACTORS:

Proposal #38: 9165-13-71
Argonne – Nelma
STH 70 to Michigan State Line
STH 55
Forest County

Letting of February 14, 2023

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

Special Provisions:

Revised Special Provisions	
Article No.	Description
3	Prosecution and Progress.
6	Utilities.
20	Cold In-Place Recycling (CIR) Asphalt Base Layer, Item 327.1000.S; Asphalt Stabilizing Agent, Item 455.0770.S.

Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
204.0110	Removing Asphaltic Surface	SY	255	-35	220
204.0120	Removing Asphaltic Surface Milling	SY	88,790	-50	88,740
211.0400	Prepare Foundation for Asphaltic Shoulders	STA	587	3	590
305.0500	Shaping Shoulders	STA	146	-108	38
327.1000.S	Cold In-Place Recycling (CIR) Asphalt Base Layer	SY	85,972	-455	85,527
455.0605	Tack Coat	GAL	11,439	7	11,446
455.0770.S	Asphalt Stabilizing Agent	TON	390	-2	388
460.5244	HMA Pavement 4 LT 58-34 S	TON	9,190	10	9,200
465.0105	Asphaltic Surface	TON	5,270	25	5,295

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Quantity Added	Proposal Total After Addendum
450.400	HMA Cold Weather Paving	Ton	0	2,000	2,000

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
4	Removed the existing paved shoulder in one location of guardrail and adjusted "##" symbol to indicate the locations with no existing paved shoulders more clearly.
5-6	Adjusted the Shaping Shoulders labels, Prepare Foundation for Asphaltic Shoulders labels, and CIR widths along with notes and the milling table to add clarity to contractor questions.
14	Adjusted the dimensions and graphics of the paved shoulders to accommodate a consistent CIR width.
26	Adjusted the precision on a dimension shown for the thermoplastic coating to demonstrate the actual dimension of 7.5-feet.
36	Revised quantities in the Shaping Shoulders table and Removal Items tables.
37	Revised quantities in the Asphaltic Items table.

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

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

9165-13-71

February 2, 2023

Special Provisions

3. Prosecution and Progress.

Delete paragraph four.

Replace paragraph three under section titled **Milling, Overlay, and Cold In-Place Recycling (CIR)**

A CIR surface is prohibited during the time periods specified in this section and in the Holidays and Special Events article.

6. Utilities.

Replace paragraph two under section titled **Fronttier Communications of WI LLC** *with the following:*

Frontier Communications of WI LLC plans to relocate the existing underground communication facilities approximately 30-feet left of the STH 55 centerline and 4-feet below grade near Station 214+50 and Station 250+90 to accommodate the excavation for culvert replacements. This work is anticipated to be completed prior to construction. Frontier Communications of WI LLC plans to start this work in March 2023 and complete the relocation within 20 working days.

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

Replace the entire article with the following:

A Description

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

B Materials

B.1 Reclaimed Asphalt Pavement (RAP) Material

(1) The RAP material shall be milled from the existing roadway and processed in place.

(2) The RAP shall be free of contamination including base material (except where noted on the plan), aggregate shoulder material, concrete, silt, clay, or other deleterious materials unless specified in the plan.

(3) Rubberized crack filler, pavement markers, loop wires, fabric, or other materials shall be removed as observed from the roadway during the recycling process. Any residual materials shall be appropriately sized and homogenously blended with the RAP. No rubberized crack filler or fabric piece may have a dimension

exceeding a length of 4 inches.

(4) The milled and processed material shall conform to the following non-extracted gradation:

Sieve Size	Percent Passing
2”	100
1 ½”	98 to 100
1”	95 to 100

B.2 Stabilizing Agent

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

B.2.1 Foamed Asphalt

(1) Foamed asphalt shall be produced with a performance graded asphalt binder; without polymer modification; in accordance with standard spec 455.

(2) Asphalt binder performance grade for foamed asphalt shall be PG 46-34 or PG 52-34. Ensure that the material is furnished by a supplier from the Combined State Binder Group Certified Supplier List.

(3) Asphalt binder shall be sufficiently heated to meet the mix design expansion and half-life criteria; not to exceed 375° F.

(4) Asphalt binder shall produce asphalt foam with a minimum expansion ratio of 8 and a half-life of no less than 6 seconds.

B.2.2 Water

(1) Water may be added to the RAP at the milling head and/or in a mixing chamber.

(2) Water added to the RAP, used for foaming asphalt, shall be free of sediment and deleterious materials.

B.3 Mixture Design

(1) The contractor will be responsible for obtaining milled samples and/or cores for the project mix design.

(2) Core samples shall be obtained at a minimum frequency of 0.5 lane-mile. Cores shall be obtained from the area to be recycled including the shoulder. Samples obtained by coring should be enough to develop the mix design.

(3) Samples for mix design obtained by milling shall be taken from at least 3 different locations directly from the area to be recycled.

(4) All samples shall represent the entire depth of the layer to be recycled.

(5) Develop and submit a material sampling plan for review and approval a minimum of 5 business days prior to obtaining milled and/or cored samples.

(6) Material sampling prior to receipt of the engineer’s notice to proceed shall require submittal and approval of an Application/Permit to Work on Highway Right-of-Way (DT1812).

(7) During material sampling operations, contractor insurance will be as specified in standard spec 107, traffic control requirements will be as specified in standard spec 107 and 643, and in the contract special provisions.

(8) Develop and submit a mix design with the optimal asphalt content 10 business days prior to the start of the CIR operation. This will be developed according to AASHTO MP 38-18 and PP 94-18; and additionally, will conform to the requirements listed in B.3.1. Submit mix design using WisDOT’s provided CIR mix design template to the engineer and department’s Bureau of Technical Services, Materials Management Section, Pavement Unit.

Table B.3.1 – Minimum Mix Design Requirements

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

*0.70 for mix designs requiring the addition of cement.

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

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

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

B.4 Quality Management Program

B.4.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan, including random numbers, to the engineer no later than 10 business days before beginning CIR activities. Construct the project as the plan provides.

(2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post it in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
3. A list of suppliers for all stabilizing agents.
4. A list of source locations for all water.
5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
6. Location of the QC laboratory, retained sample storage, and other documentation.
7. A summary of locations or quantities, selected randomly using ASTM Method D3665, to be tested under this provision.

B.4.2 Pre-CIR Construction Meeting

A minimum of 5 business days prior to the start of CIR construction, hold a pre-CIR construction meeting at a mutually agreed upon time and location. Attendance at the pre-CIR construction meeting is mandatory for the project leader, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

B.4.3 Personnel

(1) Provide HTCP Nuclear Density Technician I or ACT certified technician for the performance of field density and field moisture content testing.

(2) Provide HTCP Aggregate Technician I or ACT certified technician for material sampling and sieve analysis.

(3) A Transportation Materials Sampling (TMS) certified technician is allowed for materials sampling.

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

B.4.4 Equipment

(1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and applicable AASHTO and/or ASTM specifications and maintain a calibration record at the laboratory.

(2) Furnish nuclear gauges from the department's approved product list at:

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

(3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.

(4) Conform to AASHTO T310 and CMM 8.15 for density testing and gauge monitoring methods.

B.4.5 Quality Control (QC) Testing

(1) Roadway production lots will be defined as 4000 lane feet. Each roadway production lot will consist of two 2000 lane feet sublots. The contractor will notify the department before sampling.

(2) Gradation samples shall be taken at a random location at a minimum frequency of one per lot of production. Gradation samples shall be taken as representative of the full recycled depth. Samples may be obtained prior to or after the addition of stabilizing agent depending on the type of CIR equipment used in the project. For each sample report the gradation of the material, as determined in accordance with AASHTO T27, for the Number 4 (4.75mm) sieve and larger.

(3) Conduct and report density testing at a minimum frequency of three individual random tests per sublot.

(4) Conduct and report mill depth checks at a random location at a minimum frequency of once per sublot.

(5) Measure and report stabilizing agent foaming properties (i.e. half-life and expansion ratio) of each new tanker load from the equipment's test nozzle or recycling unit. If the foaming properties do not meet the requirement as specified in B.2.1, take the necessary corrective action by adjusting the temperature of the stabilizing agent and/or foaming water content.

(6) Report stabilizing agent temperature at a minimum of one per each new tanker load.

(7) Report stabilizing agent foamed asphalt expansion ratio and half-life at random locations at a minimum frequency of once per sublot.

(8) Perform startup QC testing (milling depth, stabilizing agent, foaming properties, and stabilizing agent application rate) within the first 500 feet at the beginning of each day of production.

(9) Conduct and report daily moisture content of the finished CIR layer representing each day's placement. Moisture content shall be based on the average of three random tests, from each day's placement. The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Engineer-directed tests are an addition to the above three tests representing the day's placement.

(10) Once the section achieves 2.5% or less in moisture, the section is considered cured and additional moisture tests are not required unless directed by the engineer.

(11) The contractor shall provide a Daily Inspection Report within 48 hours to the engineer summarizing the following:

- daily beginning and ending stations,
- applicable mix design,
- stabilizing agent temperature,
- stabilizing agent foaming properties,
- sublot tests (mill depth check, density test, and gradation) locations and values, and
- lot roadway sample locations.
- moisture

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

B.4.6 Department Testing

B.4.6.1 General

(1) The department will conduct quality verification (QV) testing to validate the quality of the product and independent assurance (IA) testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project and provide test results to the contractor within 5 business days after the department obtains the sample.

B.4.6.2 Quality Verification (QV) Testing

(1) The department will have a technician, or ACT working under a technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.4.3 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling.

(2) The department will conduct random QV tests at the minimum frequency of 10% of the required QC

tests. The department will observe the contractor's QC stabilizing agent foaming property test.

(3) The department's mill depth check, roadway gradation sample, and density test sites, will be at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will split each QV gradation sample, test half for QV, and retain the remaining half for 7 calendar days.

(4) The department will verify the contractor's moisture content values by testing a moisture content split sample at a frequency of at least one per day.

(5) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(6) The department will assess QV results by comparing them to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, a re-evaluation of the entire process must be completed before production can resume.

B.4.6.3 Independent Assurance (IA)

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing, including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.4.6.4.

B.4.6.4 Dispute Resolution

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

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

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

C Construction

C.1 General

(1) Unless the contract provides otherwise, keep the road open to traffic during construction.

(2) Perform CIR operations; only between the dates of May 15 and September 15; when the air temperature approximately 3 feet above grade, in the shade, and away from artificial heat sources is above

50°F and when the nighttime ambient air temperature is above 35°F the night prior and following, unless approved otherwise by the engineer.

(3) Do not perform CIR operations during inclement weather; such as rain or fog; that will not allow proper mixing, placing, and/or compacting of the mixture.

(4) CIR operations and recycled pavement base layer curing shall be completed to allow adequate time for placement of surfacing in accordance with calendar requirements of standard spec 450.3.2.1.

(5) The asphalt binder stabilizing agent application rate will be 2.00 percent with a field adjustment tolerance of +/- 0.30 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.

(6) The metered water added at the mill used for cooling and compaction shall be 2.00 percent. Any changes within the +/- 0.30 percent tolerance from the 2.00 percent application rate will need to be documented with date, time, pavement temperature, location, reason, and new values and communicated to the engineer at the time the change occurs.

(7) If the stabilizing agent or water application rate from the mix design referenced in section B.3 is not within the range of 1.70 to 2.30 percent, at the department's direction, 500 feet test sections will be required as a comparison. The contractor's liability for the department's directed test sections will be waived. The department's Bureau of Technical Services Pavement Unit will be consulted on these test sections. No test section will be considered below 1.50 percent asphalt binder stabilizing agent.

C.2 Equipment

(1) Equipment used for CIR shall be subject to approval by the engineer.

(2) Tankers supplying hot stabilizing agent components shall be equipped to constantly monitor temperature within the tank.

C.2.1 Milling Machine

(1) The primary milling machines; not inclusive of pre-mill/wedge-cut milling units; shall be capable of milling the existing pavement at a minimum width of not less than 12.5 feet and to the depth shown on the plans, specified in the contract or directed by the engineer. A smaller milling machine may be used to mill paved shoulders and miscellaneous areas to increase the recycle width.

(2) The milling machines shall be equipped with automatic depth control, shall maintain constant cutting depth and width, uniform grade, and uniform slope.

(3) For processes not incorporating additional screening, sizing, or crushing; the milling machine shall be capable of producing RAP sized as specified in B.1.

(4) Use of a heating device to soften the pavement is not permitted.

C.2.2 Screening, Crushing, and Sizing Equipment

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

C.2.3 Mixing Unit

(1) Processed RAP shall be mixed with the stabilizing agent and water in a mixing unit; defined as the milling machine cutter housing, a separate mixing chamber, or a pugmill.

(2) The asphalt stabilizing agent shall be applied; using a computer-controlled additive system; uniformly at the predetermined application rate. The metering of the stabilizing agent must be monitored through a calibrated pump providing a continuous readout of quantities.

(3) The additive system shall contain separate pumping systems for adding stabilizing agent and water. Each system shall have an inspection or test nozzle for stabilizing agent and/or water sampling.

(4) The system shall be capable of producing a uniformly mixed homogeneous recycled pavement base layer mixture.

C.2.4 Paving Equipment

(1) The placement and shaping of the recycled pavement base layer mixture shall be completed using a self-propelled paver or screed integral to the recycling equipment meeting the requirements of standard spec 450.3.1.4; revised to exclude the requirement of an activated screed or strike-off assembly.

(2) The screed shall not be heated.

(3) If utilizing a self-propelled paver, the material shall be transferred directly into the paver hopper from the recycling equipment or with a pick-up device. When a pick-up device is used, the entire windrow shall be removed from the milled surface and transferred to the paver hopper.

C.2.5 Compaction Equipment

(1) Compaction equipment shall be self-propelled and meet the requirements of standard spec 450.3.1.5.

(2) The number, weight, and types of rollers shall be used as necessary to achieve the specified compaction. At a minimum, the following rollers shall be used:

1. At least one self-propelled double drum vibratory steel roller with a minimum weight of not less than 10 tons.
2. At least one self–propelled pneumatic-tired roller with a minimum weight of not less than 22 tons.

C.3 Constructing CIR

C.3.1 Preparation

(1) After any contract required surface milling, and immediately prior to commencing CIR operations, remove from the roadway, and up to 1 inch below the milled surface, any vegetation, standing water, loose crack filler, and any other deleterious materials.

(2) Inspect the pavement surface, after any contract required surface milling, for areas of yielding subgrade. Yielding areas will be repaired prior to CIR operations.

(3) Blade the existing base aggregate roadway shoulders away from the asphaltic surface edge to minimize contamination of the CIR base layer.

C.3.2 Processing and Placement of CIR Material

(1) Mill the existing pavement to the required depth and width indicated on the plans.

(2) Further process the milled RAP material as necessary by crushing, screening, and/or sizing to the gradation requirements of B.1.

(3) Blend the RAP material with the mix design specified proportions of stabilizing agent and water; produce a uniform and homogeneous recycled mixture.

(4) Spread the recycled mixture to the grade, elevations, and slopes specified on the plans; avoiding tearing or scarring of the recycled pavement base layer surface.

(5) Ensure proper material transfer, handling, and spreading to prevent material segregation. If segregation does occur behind the paver, the contractor shall take immediate steps to correct the problem. Corrective action may include adjusting the forward speed of the paving operation and adjusting the flow of material to paver. The contractor shall make adjustments until a satisfactory end-product has been obtained, as determined by the engineer.

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

C.4 Compaction

C.4.1 Control Strip Construction

(1) On the first day of production, construct a control strip to identify the target wet density for the CIR layer using a nuclear moisture-density gauge in backscatter measurement. Nuclear gauge test duration in backscatter measurement shall be for a total of one-minute test per location in the direction of paving. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel.

(2) After the construction of the control strip, the CIR process shall be permitted to continue until the project's first asphalt binder tanker truck is empty. Any further CIR process shall be halted till the completion of the test rolling.

(3) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 500 feet long and one full lane width. Begin the control strip at a location of at least 200 feet beyond the start of the project.

(4) Completed control strips may remain in place to be incorporated into the final roadway cross-section.

(5) Construct additional control strips, at a minimum, when:

1. The CIR layer thickness changes in excess of 2.0 inches.
2. The percent of target wet density is less than 96% or exceeds 105.0%; and is outside the range of the 10 random measurements defining the control strip; on two consecutive sublots.
3. If there is a significant change in mix proportions, weather conditions, compaction equipment, or other controlling factors, the engineer may require the construction of new control strips to check target density.

(6) Construct control strips using equipment and methods representative of the operations to be used for constructing the CIR layer.

(7) After compacting the control strip with a minimum of three roller passes, mark and take three wet density measurements using a nuclear moisture-density gauge in backscatter mode at one random station. One density measurement representing the inside 1/3, one density measurement representing the middle 1/3, and one density measurement representing the outside 1/3 transversely across the traveled lane, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. Subsequent density measurements will be taken at the same three locations.

(8) After each subsequent pass of compaction equipment over the entirety of the control strip, take wet density measurements at the three marked locations. Continue compacting and testing until the increase in density measurements of individual locations is less than 2.0 lb/ft^3, or the density measurements begin to decrease.

(9) Upon completion of control strip compaction, take 10 randomly located wet density measurements within the limits of the control strip, a minimum of 1 ½ feet from the center of the probe to the unrestricted edge of the CIR layer. The final measurements recorded at the three locations under article paragraph (6) of this section may be included as 3 of the 10 measurements. Average the 10 measurements to obtain the control strip target density.

C.4.2 Compaction Requirements

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

C.5 Surface Requirements

(1) Prior to placement of the surface treatment, the engineer and contractor shall visually inspect the CIR layer for distresses including, but not limited to raveled areas, rutted areas, and areas of excess or deficient stabilizing agent, or deficient surface tolerance areas.

(2) Test the recycled pavement base layer surface at regular intervals, and engineer selected locations, using a 10-foot straightedge or other engineer-specified devices.

(3) The engineer may direct the repair of surface deviations greater than ½ inch between two surface contact points. High points shall be corrected by rerolling, trimming, milling, or grinding. Depressions may be corrected by having a tack coat applied and be filled with HMA immediately prior to placement of the surface treatment.

(3) Raveled areas, rutted areas, and areas of excess or deficient stabilizing agent shall be re-processed or repaired. Reprocessing shall consist of milling, blending of additional stabilizing agent, placement with a paver, and compaction with determined rolling patterns as determined by the control strip.

C.6 Maintaining the Work

(1) After compaction is complete, the contractor will determine when the CIR is stable to open to traffic.

(2) After opening to traffic, and prior to placement of the upper layer, the surface of the recycled base shall be maintained in a condition suitable for the safe movement of traffic.

(3) The recycled base and shoulders shall be protected and maintained from standing water, deleterious substances, and/or other damage.

(4) Any damage to the recycled base, excluding department-directed test sections, shall be repaired by the contractor prior to placement of the upper layer at no additional cost to the department.

C.7 Curing and Surfacing

C.7.1 Curing

(1) Application of a surface treatment or leveling/lower layer of HMA will not be allowed until the moisture content of the CIR layer reduces to 2.50 percent or less.

(2) If the moisture content of the CIR layer does not reduce to 2.50 percent; the surface treatment may be applied after the change in moisture content is less than 0.30 percentage points for three consecutive calendar days.

(3) The moisture content shall be determined from a sample retrieved over the full depth of the CIR layer by weighting and drying to a constant weight using an oven at 230°±9°F. Moisture content testing by nuclear density shall only be used for informational purposes and not for acceptance. The department will obtain a sample(s) to verify the contractor’s final moisture content values.

C.7.2 Tack Coat

(1) The surface shall be prepared, and tack coat applied meeting the requirements of standard spec 455.3.2.

(2) Tack coat application rate shall be 0.05 to 0.07 gal/SY. The engineer may adjust the tack coat application rate based on surface conditions.

(3) Use only emulsified asphalt material as tack coat specified in standard spec 455.2.5. Paving grade asphaltic tack coat shall not be used.

C.7.3 Surfacing

(1) Surfacing materials, equipment, and construction methods shall be in accordance with the applicable sections of the standard specs or contract special provisions.

(2) Paving of final surfacing (for single layer) or leveling/lower layer of HMA on the cured CIR sections shall not be conducted until the moisture content in the CIR layer reduces to 2.50% or less.

(3) The final surfacing (for single layer) or leveling/lower layer shall be placed on the CIR layer within 10 calendar days once a section of the CIR layer is considered cured per section B.4.5.

(4) After any rain event, the excess moisture in the CIR layer shall be allowed to dry before paving the final surfacing (for single layer) or leveling/lower HMA layer. The contractor and the engineer should inspect the CIR layer to determine suitability for surfacing.

D Measurement

(1) The department will measure Cold In-Place Recycling (CIR) Asphalt Base Layer by the square yard,

acceptably completed.

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

E Payment

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

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

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

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

(4) The department will pay separately for removing or blading away of the adjacent shoulder material under the bid item Shaping Shoulders or Prepare Foundation for Asphaltic Shoulders as designated in the plan.

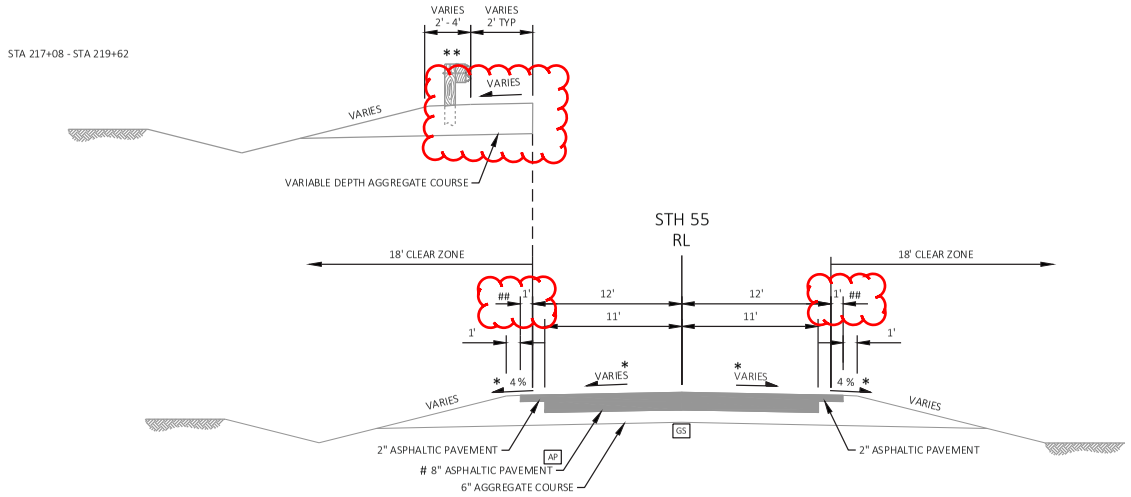
(5) The department will pay separately for preparation under the bid item Prepare Foundation for CIR Base Layer.

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

Schedule of Items
Attached, dated February 2, 2023, are the revised Schedule of Items Pages 1, 2, and 6.

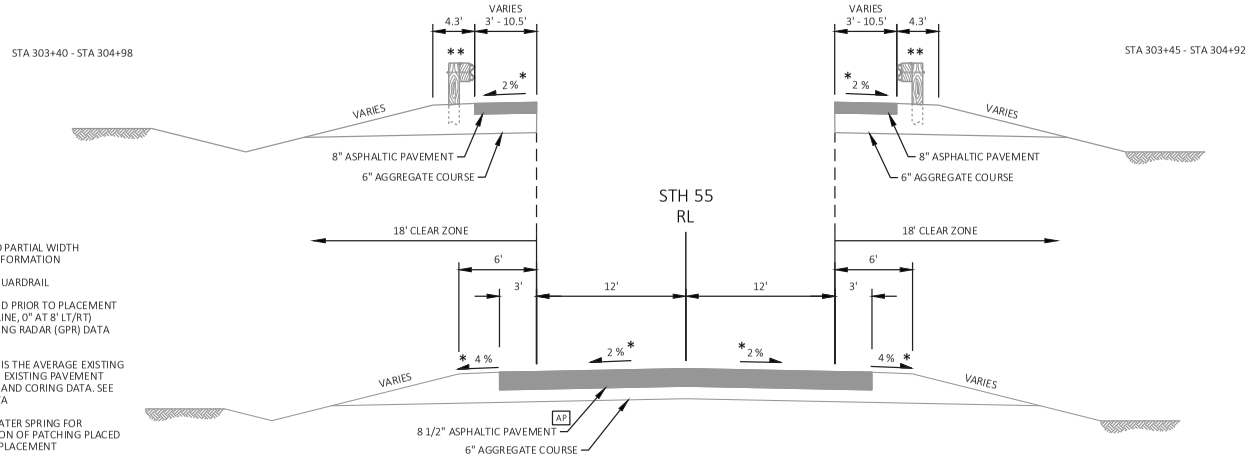
Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 4 – 6, 14, 26, 36, and 37.

END OF ADDENDUM



EXISTING TYPICAL SECTION

STA 0+83 - STA 287+35



EXISTING TYPICAL SECTION

STA 287+35 - STA 305+07

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION AND PARTIAL WIDTH OVERLAY, SEE SECTION 5 SHEETS FOR FOR CURVE INFORMATION

** SEE SECTION 5 PLANS FOR LOCATION OF EXISTING GUARDRAIL

\# EXISTING PAVEMENT CORING DATA WAS COMPLETED PRIOR TO PLACEMENT OF AN 8' WIDE VARIABLE DEPTH (1 1/4" AT CENTERLINE, 0" AT 8' LT/RT) ASPHALTIC SURFACE OVERLAY. GROUND-PENETRATING RADAR (GPR) DATA WAS OBTAINED AFTER THE PARTIAL OVERLAY

AP THE TYPICAL ASPHALTIC PAVEMENT DEPTH SHOWN IS THE AVERAGE EXISTING ASPHALTIC PAVEMENT DEPTH BASED ON GPR DATA. EXISTING PAVEMENT DEPTH RANGES FROM 5" TO 10 1/4" BASED ON GPR AND CORING DATA. SEE CONSTRUCTION DETAILS FOR GPR AND CORING DATA

GS SEE CONSTRUCTION DETAILS - EXISTING GROUNDWATER SPRING FOR PAVEMENT STRUCTURE AND LOCATION INFORMATION OF PATCHING PLACED DURING PREVIOUS GROUNDWATER SPRING PIPE REPLACEMENT

\## NO PAVED SHOULDER FROM STA 212+00 - STA 287+35

SEE PLAN VIEW CONSTRUCTION DETAILS FOR EXISTING CONCRETE APPROACH SLAB LOCATION

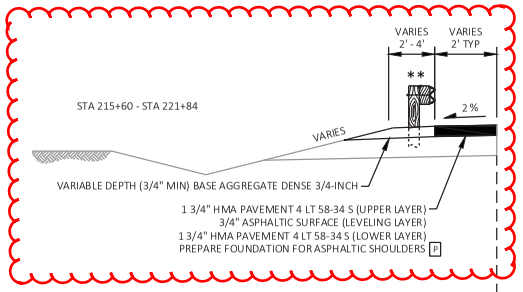
Addendum No. 01
ID 9165-13-71
Revised Sheet 4
February 2, 2023

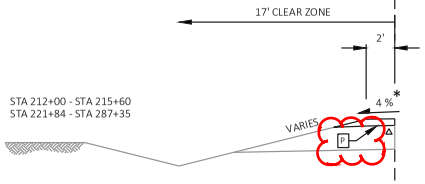
PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 4	E

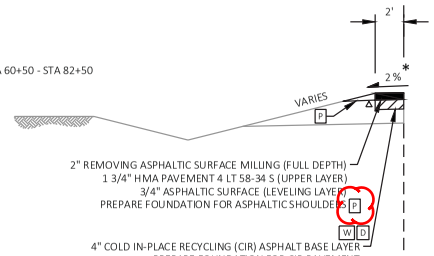
FILE NAME : P:\53XX\5387.DP.21.STH55.FOR\CADDS\91651371\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01

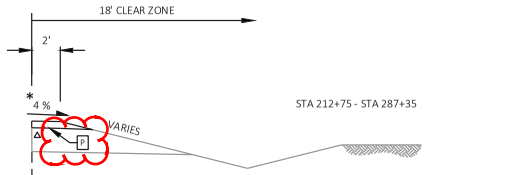
PLOT DATE : 1/31/2023 3:25 PM PLOT BY : ERIK OLESON PLOT NAME : PLOT SCALE : 1 IN:10 FT

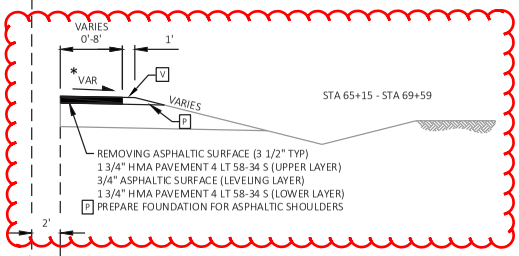
WISDOT/CADDS SHEET 42

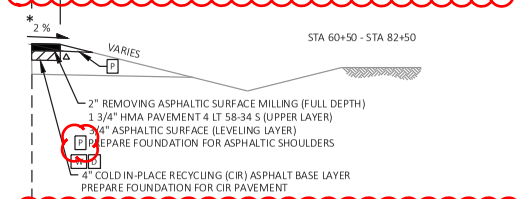


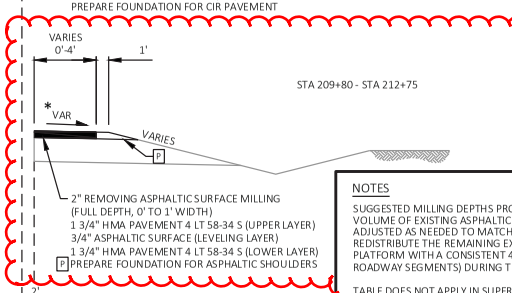


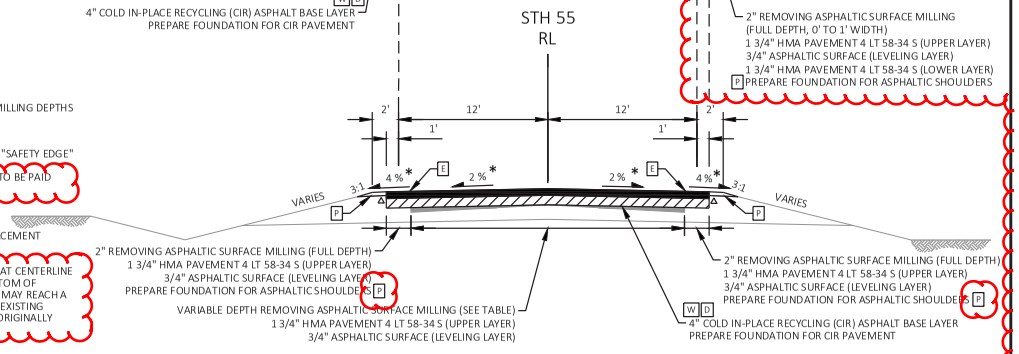












FINISHED TYPICAL SECTION

STA 0+83 - STA 112+80
STA 119+41 - STA 287+35

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION, SEE SECTION 5 FOR PLANS FOR CURVE INFORMATION AND SEE THE MILLING TABLE NOTES ON THIS SHEET FOR MILLING DEPTHS

** SEE SECTION 5 PLANS FOR LOCATION OF PROPOSED GUARDRAIL

Δ PAVEMENT SAFETY EDGE REQUIRED FOR PAVED SHOULDERS 3' OR LESS, SEE SDD "SAFETY EDGE"

P EXISTING AGGREGATE COURSE SHAPING, BLADING, AND REMOVAL (AS NEEDED) TO BE PAID UNDER THE PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS ITEM
REMOVE EXISTING PAVED SHOULDERS FULL DEPTH BEYOND 11' LT/RT

W TYPICAL WIDTH OF EXISTING PAVEMENT TO BE USED IN CIR IS 22', WIDTH OF PLACEMENT VARIES AS SHOWN

D TYPICAL DEPTH OF EXISTING MATERIAL TO BE INCORPORATED INTO CIR IS 7 3/4" AT CENTERLINE AND DEPTH VARIES ACROSS THE LANES TO YIELD A 2% CROSS SLOPE ALONG BOTTOM OF PROPOSED CIR, BASED ON EXISTING GPR AND CORING DATA THE CIR OPERATION MAY REACH A DEPTH BELOW THE EXISTING ASPHALTIC SURFACE IN SOME AREAS AND REQUIRE EXISTING AGGREGATE COURSE TO BE INCORPORATED INTO CIR LAYER FROM WITHIN THE ORIGINALLY CONSTRUCTED 11' PAVED LANES

E MATCH EXISTING ELEVATION AT EDGE OF LANE (TYP)

SIDE ROAD WORK WILL CONSIST OF 1 3/4" REMOVING ASPHALTIC SURFACE MILLING AND 1 3/4" OF HMA PAVEMENT 4 LT 58-34 S

V MATCH EXISTING DRIVEWAY SURFACE WITH HMA OR BASE AGGREGATE: STA 66+95 - STA 68+07

NOTES

SUGGESTED MILLING DEPTHS PROVIDED IN THE TABLE BELOW ARE INTENDED TO REMOVE EXCESS VOLUME OF EXISTING ASPHALTIC PAVEMENT NOT NEEDED DURING THE CIR PROCESS AND MAY BE ADJUSTED AS NEEDED TO MATCH FIELD CONDITIONS AND LEAVE REQUIRED VOLUMES FOR CIR, REDISTRIBUTE THE REMAINING EXISTING ASPHALTIC PAVEMENT ACROSS THE PROPOSED PAVING PLATFORM WITH A CONSISTENT 4" DEPTH AND A 2% CROSS SLOPE (IN NON-SUPERELEVATED ROADWAY SEGMENTS) DURING THE CIR PROCESS

TABLE DOES NOT APPLY IN SUPERELEVATED CURVES, MILL 2 1/2" (APPROXIMATE) OF EXISTING ASPHALTIC SURFACE ACROSS FULL PAVEMENT WIDTH IN SUPERELEVATED CURVES

ALTERNATE METHODS AND DEPTHS OF MILLING MAY BE UTILIZED BY THE CONTRACTOR IF APPROVED BY THE ENGINEER

IF AN ALTERNATIVE MILLING METHOD IS PROPOSED WITH A UNIFORM 2% MILLED CROSS SLOPE, IT IS ANTICIPATED THE MILLING DEPTH MAY RANGE FROM 2" TO 2 3/4" DEPENDING ON THE FINISHED WIDTH OF CIR LAYER

LOCATION	REMOVING ASPHALTIC SURFACE MILLING DEPTH (APPROXIMATE)	
	CENTERLINE	11' LT OR RT
STA 0+83 - STA 60+50, LT & RT	0"	4 3/4"
STA 60+50 - STA 82+50, LT & RT	0"	4"
STA 82+50 - STA 112+80, LT & RT	0"	4 3/4"
STA 119+41 - STA 212+75, RT	0"	4 3/4"
STA 119+41 - STA 212+00, LT	0"	4 3/4"
STA 212+00 - STA 287+35, LT	0"	5 1/2"
STA 212+75 - STA 287+35, RT	0"	5 1/2"

Addendum No. 01
ID 9165-13-71
Revised Sheet 5
February 2, 2023

PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : P:\53XX\5387.DP.21.STH55.FOR\CADDS\91651371\SHEETSPLAN\020301-TS.DWG
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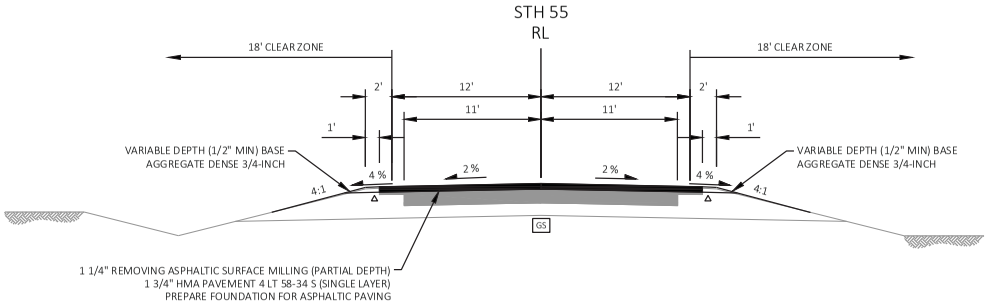
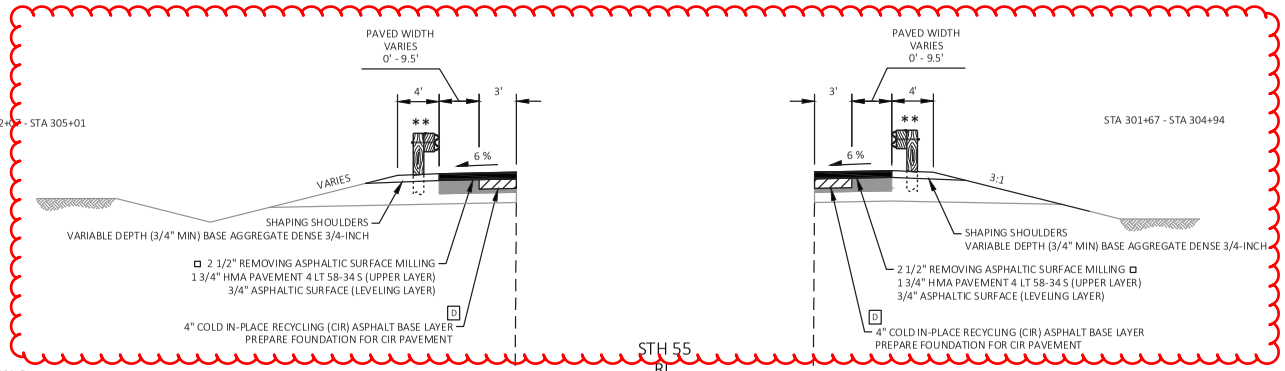
PLOT DATE : 1/31/2023 3:25 PM
PLOT BY : ERIK OLESON
PLOT NAME :
PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION
STA 112+80 - STA 119+41



NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION, SEE SECTION 5 FOR PLANS FOR CURVE INFORMATION

** SEE SECTION 5 PLANS FOR LOCATION OF PROPOSED GUARDRAIL, SEE GUARDRAIL REPLACEMENT CONSTRUCTION DETAIL FOR GUARDRAIL LAYOUT INFORMATION

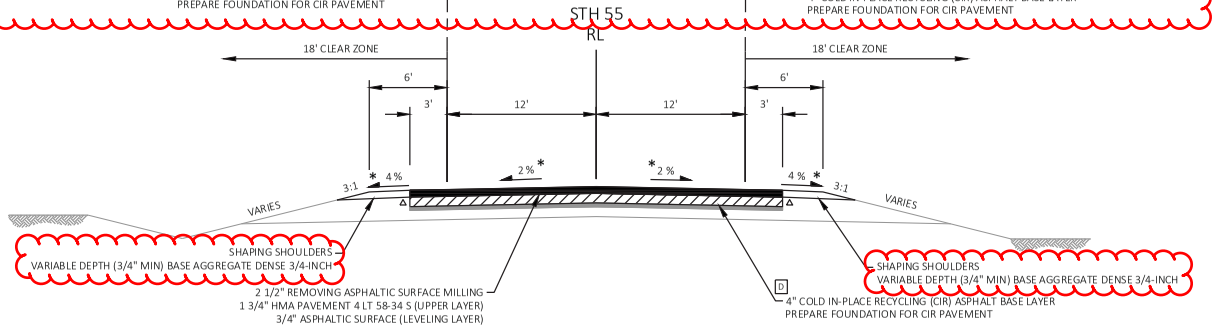
△ PAVEMENT SAFETY EDGE REQUIRED FOR PAVED SHOULDERS 3' OR LESS, SEE SDD "SAFETY EDGE"

□ FROM STA 302+59 - STA 303+85, RT AND STA 303+06 - STA 303+69, LT PROPOSED PAVED SHOULDER TAPERS ARE WIDER THAN EXISTING PAVED SHOULDERS, COMPLETE WIDENING WORK WITH THE FOLLOWING ITEMS:
1 3/4" HMA PAVEMENT 4 LT 58-34 S (UPPER LAYER)
3/4" ASPHALTIC SURFACE (LEVELING LAYER)
1 3/4" HMA PAVEMENT 4 LT 58-34 S (LOWER LAYER)
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
SEE PLAN VIEW CONSTRUCTION DETAILS FOR PROPOSED CONCRETE APPROACH SLAB LOCATION

D BASED ON EXISTING GPR AND CORING DATA THE CIR OPERATION IS NOT ANTICIPATED TO REACH A DEPTH BELOW THE EXISTING ASPHALTIC SURFACE. IF AGGREGATE IS ENCOUNTERED WITHIN THE ORIGINALLY CONSTRUCTED 30' PAVED WIDTH, THE CIR OPERATION WILL REQUIRE EXISTING AGGREGATE COURSE TO BE INCORPORATED INTO THE CIR LAYER.

GS SEE CONSTRUCTION DETAILS - EXISTING GROUNDWATER SPRING FOR MILL DEPTH TRANSITION AND ADDITIONAL INFORMATION

SIDE ROAD WORK WILL CONSIST OF 1 3/4" REMOVING ASPHALTIC SURFACE MILLING AND 1 3/4" OF HMA PAVEMENT 4 LT 58-34 S



FINISHED TYPICAL SECTION
STA 287+35 - STA 305+07

Addendum No. 01
ID 9165-13-71
Revised Sheet 6
February 2, 2023

PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 6	E

2

LEGEND

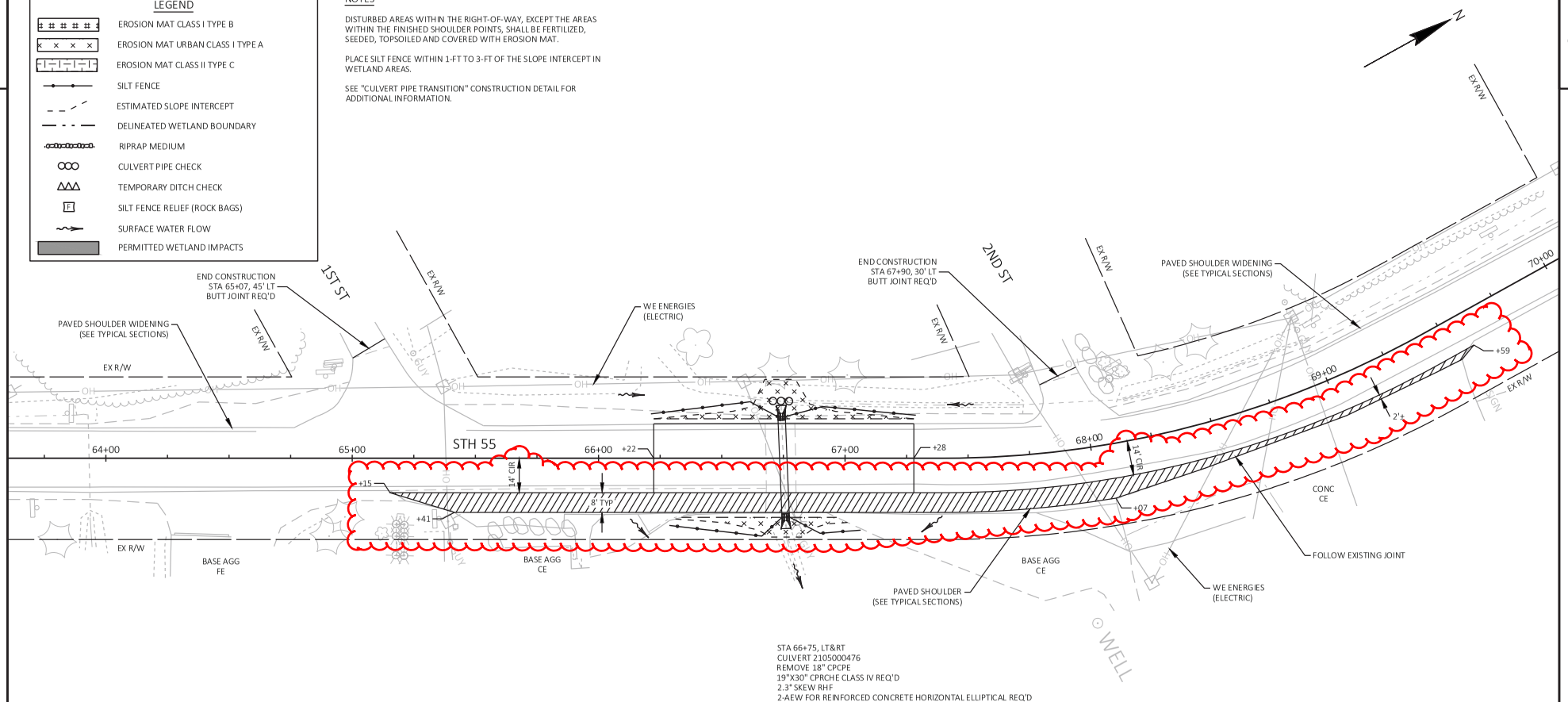
- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- ESTIMATED SLOPE INTERCEPT
- DELINEATED WETLAND BOUNDARY
- RIPRAP MEDIUM
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS.

SEE "CULVERT PIPE TRANSITION" CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION.



STA 66+75, LT&RT
CULVERT 2105000476
REMOVE 18" CPCPE
19"X30" CPRCHE CLASS IV REQ'D
2:3° SKEW RHF
2-AEW FOR REINFORCED CONCRETE HORIZONTAL ELLIPTICAL REQ'D
MARKERS FOR CULVERT END REQ'D

Addendum No. 01
ID 9165-13-71
Revised Sheet 14
February 2, 2023

PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	CONSTRUCTION DETAILS - GUARDRAIL REPLACEMENTS	SHEET 14	E

FILE NAME : P:\53XX\5387.DP.21.STH55.FOR\CADDS\91651371\SHEETSPLAN\021004-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 1/26/2023 11:23 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

Addendum No. 01
ID 9165-13-71
Revised Sheet 26
February 2, 2023

2

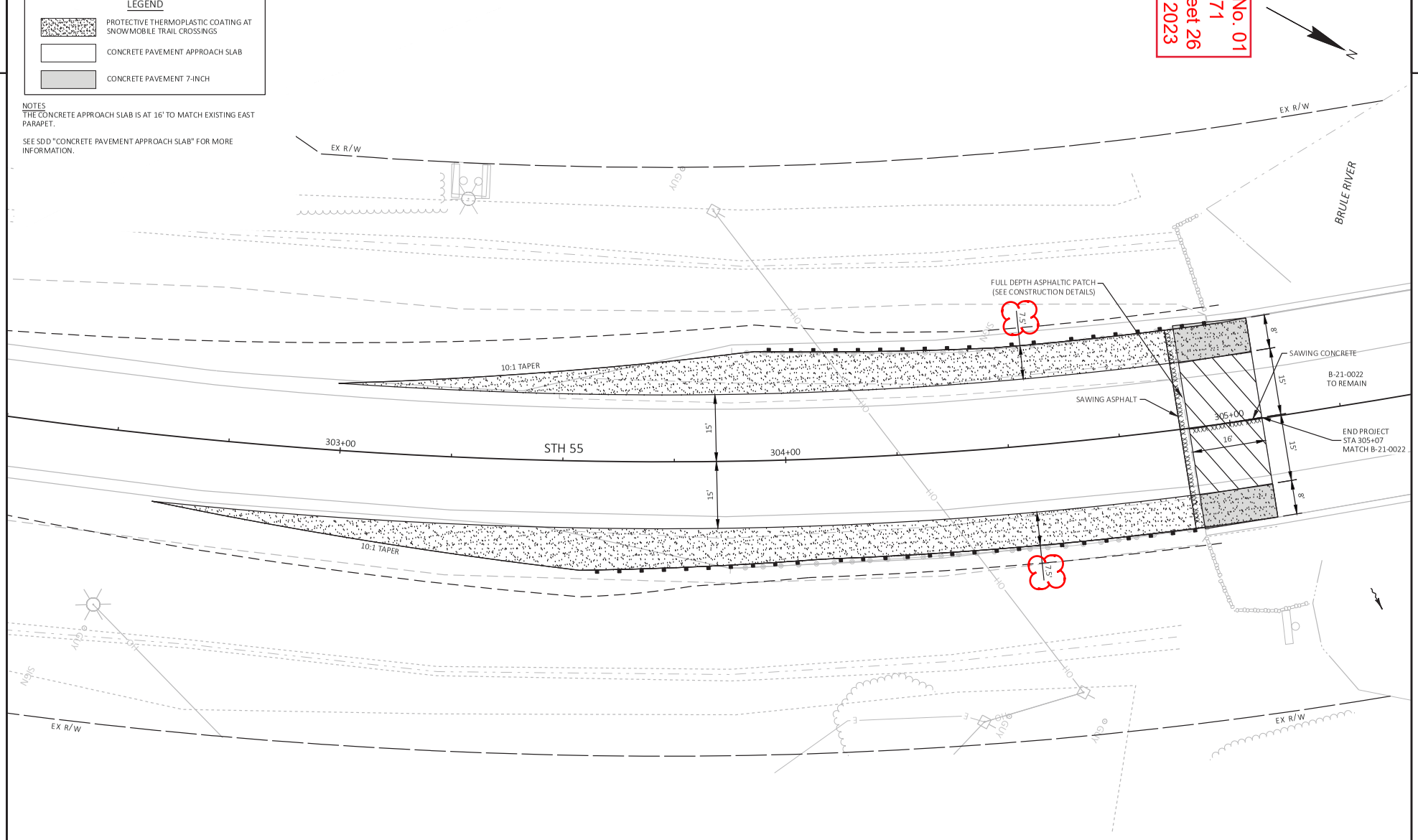
2

LEGEND

- PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSINGS
- CONCRETE PAVEMENT APPROACH SLAB
- CONCRETE PAVEMENT 7-INCH

NOTES
THE CONCRETE APPROACH SLAB IS AT 16' TO MATCH EXISTING EAST PARAPET.

SEE SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR MORE INFORMATION.



PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	CONSTRUCTION DETAILS - APPROACH SLAB REPLACEMENT AND THERMOPLASTIC COATING	SHEET 26	E

FILE NAME : P:\53XX\5387.DP.21.STH55.FOR\CADDS\91651371\SHEETSPLAN\021004-CD.DWG
LAYOUT NAME - 13
PLOT DATE : 1/26/2023 11:23 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT

CLEARING AND GRUBBING ITEMS

STATION		STATION	OFFSET	CLEARING STA	201.0205 GRUBBING STA
157+50	-	157+71	RT	--	--
194+11	-	194+22	LT&RT	--	--
209+51	-	209+67	LT	--	--
214+29	-	214+57	RT	--	--
216+44	-	216+66	LT	--	1
218+56	-	221+54	LT	--	1
250+84	-	250+94	LT	--	--
272+78	-	273+18	LT&RT	--	--
TOTALS				--	2

NOTE:
THE STATION RANGES WITHOUT QUANTITIES ARE INCIDENTAL CLEARING AND GRUBBING OF LIGHT BRUSH, SHRUBS, OTHER VEGETATION, AND TREES LESS THAN 3-INCHES IN DIAMETER

REMOVING SMALL PIPE CULVERT ITEMS

STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0180* REMOVING DELINEATORS AND MARKERS EACH	COMMENTS
66+75	LT&RT	1	2	18-INCH CPCPE
118+89	LT&RT	1	1	24-INCH CPCA
146+63	LT&RT	1	--	18-INCH X 24-INCH CPCA
157+61	LT&RT	1	1	24-INCH CPCA
170+36	LT&RT	1	--	24-INCH CPCA
194+18	LT&RT	1	--	24-INCH CPCS
209+76	LT&RT	1	--	30-INCH CPCA
214+46	LT&RT	1	1	24-INCH CPCA
219+08	LT&RT	1	1	24-INCH CPCA
250+88	LT&RT	1	--	24-INCH CPCS
270+99	LT&RT	1	--	24-INCH CPCA
272+95	LT&RT	1	--	24-INCH CPCA
TOTALS		12	6	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVAL ITEMS

STATION		STATION	OFFSET	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0+83	-	60+50	LT&RT	--		10	17,240
60+50	-	82+50	LT&RT	--	210	19	6,900
82+50	-	212+00	LT&RT	--		15	38,220
212+00	-	287+35	LT&RT	--	--	5	20,280
287+35	-	304+91	LT&RT	--	10	10	6,000
304+91	-	305+07	LT&RT	84	--	--	--
TOTALS				84	220	60	88,740

SHAPING SHOULDERS

STATION		STATION	OFFSET	305.0500 STA
287+35	-	305+07	LT&RT	38
TOTAL				38

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EARTHWORK

DIVISION	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON (NOTE 1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (NOTE 2)	AVAILABLE MATERIAL (NOTE 3)	UNEXPANDED FILL	EXPANDED FILL (NOTE 4)	MASS ORDINATE +/- (NOTE 5)
			CY	CY	CY	CY	CY FACTOR 1.25	CY
1	STA 66+22 - STA 67+28	CULVERT 2105000476	265	39	226	--	--	226
1	STA 118+36 - STA 119+41	CULVERT 2105000479	217	39	178	--	--	178
1	STA 146+10 - STA 147+16	CULVERT 2105000480	205	39	166	--	--	166
1	STA 157+08 - STA 158+13	CULVERT 2105000481	364	39	325	--	--	325
1	STA 169+83 - STA 170+88	CULVERT 2105000482	263	39	224	--	--	224
1	STA 193+65 - STA 194+72	CULVERT 2105000484	205	39	166	--	--	166
1	STA 209+15 - STA 210+37	CULVERT 2105000485	301	39	262	--	--	262
1	STA 213+92 - STA 214+99	CULVERT 2105000486	291	39	252	--	--	252
1	STA 218+56 - STA 219+61	CULVERT 2105000487	405	39	366	--	--	366
1	STA 250+35 - STA 251+41	CULVERT 2105000489	212	39	173	--	--	173
1	STA 270+37 - STA 271+61	CULVERT 2105000491	588	39	549	--	--	549
1	STA 272+42 - STA 273+48	CULVERT 2105000492	506	39	467	--	--	467
SUBTOTALS			3,822	468	3,354	0	0	3,354
2	STA 214+81 - STA 222+63	CTH A GUARDRAIL, LT	304	188	116	29	37	79
2	STA 302+07 - STA 305+01	BRULE RIVER GUARDRAIL, LT	182	72	110	5	5	105
2	STA 301+68 - STA 304+95	BRULE RIVER GUARDRAIL, RT	165	82	83	72	90	-7
SUBTOTALS			651	342	309	106	132	177
PROJECT TOTALS			4,473	810	3,663	106	132	3,531

NOTES:
1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL = (AREA OF PROJECT PAVEMENT) * (TYPICAL DEPTH)
3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
4) EXPANDED FILL FACTOR = (UNEXPANDED FILL) * (FILL FACTOR)
5) MASS ORDINATE = AVAILABLE MATERIAL - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

BASE AGGREGATE ITEMS

STATION	TO	STATION	OFFSET	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	COMMENTS
66+22	-	67+27	LT&RT	1	171	CULVERT REPLACEMENT
112+80	-	119+41	LT&RT	20	--	MAINLINE
118+36	-	119+41	LT&RT	5	146	CULVERT REPLACEMENT
146+10	-	147+16	LT&RT	5	148	CULVERT REPLACEMENT
157+08	-	158+13	LT&RT	5	146	CULVERT REPLACEMENT
169+83	-	170+88	LT&RT	5	146	CULVERT REPLACEMENT
193+65	-	194+72	LT&RT	5	149	CULVERT REPLACEMENT
209+15	-	210+37	LT&RT	5	170	CULVERT REPLACEMENT
213+92	-	214+99	LT&RT	8	155	CULVERT REPLACEMENT
215+60	-	221+84	LT	44	135	GUARDRAIL
218+56	-	219+61	LT&RT	8	152	CULVERT REPLACEMENT
250+35	-	251+41	LT&RT	8	154	CULVERT REPLACEMENT
270+37	-	271+61	LT&RT	9	180	CULVERT REPLACEMENT
272+42	-	273+48	LT&RT	8	154	CULVERT REPLACEMENT
287+35	-	302+07	LT&RT	108	--	MAINLINE
302+07	-	304+91	LT&RT	58	176	GUARDRAIL
304+91	-	305+07	LT&RT	--	9	APPROACH SLAB
TOTALS				300	2,190	

ASPHALTIC ITEMS

STATION	TO	STATION	OFFSET	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING (9165-13-71) EACH	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	211.0700.S.01 PREPARE FOUNDATION FOR CIR BASE LAYER (9165-13-71) EACH	211.0800.S BASE REPAIR FOR CIR LAYER CY	327.1000.S COLD IN-PLACE RECYCLING (CIR) ASPHALT BASE LAYER SY	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	455.0770.S ASPHALT STABILIZING AGENT TON	460.5244 HMA PAVEMENT 4 LT 58-34 S TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0450 ASPHALTIC INTERSECTION RUMBLE STRIPS SY	COMMENTS
0+83	-	60+50	LT&RT	--	122	--	--	17,238	--	2,148	77	1,755	752	--	75	MAINLINE PAVING
60+50	-	82+50	LT&RT	--	44	--	--	6,844	--	915	31	750	320	--	--	MAINLINE PAVING
65+15	-	69+59	RT	--	--	--	--	--	--	18	--	60	13	--	--	DRIVEWAY
66+22	-	67+27	LT&RT	--	--	--	--	--	--	39	--	--	130	--	--	CULVERT REPLACEMENT
82+50	-	112+80	LT&RT	--	60	--	--	8,753	--	1,091	40	891	384	--	--	MAINLINE PAVING
112+80	-	119+41	LT&RT	1	14	--	--	--	--	139	--	194	--	--	--	MAINLINE PAVING
118+36	-	119+41	LT&RT	--	--	--	--	--	--	30	--	--	120	--	--	CULVERT REPLACEMENT
119+41	-	212+00	LT&RT	--	184	--	--	26,748	--	3,431	123	2,805	1,201	--	--	MAINLINE PAVING
146+10	-	147+16	LT&RT	--	--	--	--	--	--	31	--	--	120	--	--	CULVERT REPLACEMENT
157+08	-	158+13	LT&RT	--	--	--	--	--	--	30	--	--	120	--	--	CULVERT REPLACEMENT
169+83	-	170+88	LT&RT	--	--	--	--	--	--	30	--	--	120	--	--	CULVERT REPLACEMENT
193+65	-	194+72	LT&RT	--	--	--	--	--	--	31	--	--	120	--	--	CULVERT REPLACEMENT
209+15	-	210+37	LT&RT	--	--	--	--	--	--	36	--	--	140	--	--	CULVERT REPLACEMENT
209+80	-	212+75	RT	--	4	--	--	--	--	6	--	22	7	--	--	PAVED SHOULDER WIDENING
212+00	-	287+35	LT&RT	--	152	--	--	20,093	--	2,534	90	2,070	887	--	--	MAINLINE PAVING
213+92	-	214+99	LT&RT	--	--	--	--	--	--	29	--	--	112	--	--	CULVERT REPLACEMENT
215+60	-	221+84	LT	--	7	--	--	--	--	17	--	26	6	--	--	GUARDRAIL PAVING
218+56	-	219+61	LT&RT	--	--	--	--	--	--	28	--	--	110	--	--	CULVERT REPLACEMENT
250+35	-	251+41	LT&RT	--	--	--	--	--	--	28	--	--	111	--	--	CULVERT REPLACEMENT
270+37	-	271+61	LT&RT	--	--	--	--	--	--	38	--	--	148	--	--	CULVERT REPLACEMENT
272+42	-	273+48	LT&RT	--		--	--	--	--	28	--	--	111	--	--	CULVERT REPLACEMENT
287+35	-	304+90	LT&RT	--		--	--	5,850	--	722	26	589	253	--	--	MAINLINE PAVING
302+59	-	304+90	LT&RT	--	3	--	--	--	--	46	--	38	13	--	--	GUARDRAIL PAVING
304+88	-	304+90	LT&RT	--	--	--	--	--	--	1	--	--	--	4	--	APPROACH SLAB PATCHING
PROJECT				--	--	1	500	--	2,000	--	--	--	--	--	--	--
TOTALS				1	590	1	500	85,527	2,000	11,446	388	9,200	5,295	4	75	

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CULVERT PIPE MARKER ITEMS

STATION	OFFSET	204.0180* REMOVING DELINEATORS AND MARKERS EACH	633.5200* MARKERS CULVERT END EACH
11+13	LT&RT	1	2
23+60	LT&RT	1	2
34+23	LT&RT	1	2
46+90	LT&RT	1	2
64+03	LT&RT	2	2
71+16	LT&RT	2	2
81+75	LT&RT	2	2
176+42	LT&RT	1	2
237+60	LT&RT	1	2
266+52	LT&RT	2	2
291+67	LT&RT	1	2
TOTALS		15	22

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CULVERT PIPE ITEMS

STATION	OFFSET	520.3424 CULVERT PIPE CLASS III-A NON-METAL 24-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0430 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	522.2429 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH LF	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	522.2629 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH	633.5200* MARKERS CULVERT END EACH
66+75	LT&RT	--	--	--	--	--	38	--	2	--	2
118+89	LT&RT	--	--	--	--	--	32	--	2	--	2
146+63	LT&RT	--	--	--	--	--	32	--	2	--	2
157+61	LT&RT	--	40	--	2	--	--	--	--	--	2
170+36	LT&RT	--	36	--	2	--	--	--	--	--	2
194+18	LT&RT	--	30	--	2	--	--	--	--	--	2
209+76	LT&RT	--	--	52	--	2	--	--	--	--	2
214+46	LT&RT	--	--	--	--	--	--	36	--	2	2
219+08	LT&RT	44	--	--	2	--	--	--	--	--	2
250+88	LT&RT	--	--	30	--	2	--	--	--	--	2
270+99	LT&RT	--	62	--	2	--	--	--	--	--	2
272+95	LT&RT	50	--	--	2	--	--	--	--	--	2
TOTALS		94	168	82	12	4	102	36	6	2	24

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE:
1) CULVERT PIPE INVERTS ARE SHOWN ON CROSS SECTIONS

CONCRETE PAVEMENT APPROACH SLAB ITEMS

LOCATION	STATION	TO	STATION	OFFSET	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	415.0070 CONCRETE PAVEMENT 7-INCH SY
B-21-0022	304+91	-	305+07	LT&RT	55	29
TOTALS					55	29

PROJECT NO: 9165-13-71	HWY: STH 55	COUNTY: FOREST	MISCELLANEOUS QUANTITIES	SHEET 37	E

FILE NAME : P:\53XX\5387.DP.21.STH55.FOR\CADDS\91651371\SHEETSPLAN\030201-MQ.DWG
LAYOUT NAME - 02
PLOT DATE : 1/26/2023 3:29 PM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

Proposal ID: 20230214038 Project(s): 9165-13-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0205 Grubbing	2.000 STA	_____.____	_____.____
0004	203.0100 Removing Small Pipe Culverts	12.000 EACH	_____.____	_____.____
0006	204.0100 Removing Concrete Pavement	84.000 SY	_____.____	_____.____
0008	204.0110 Removing Asphaltic Surface	220.000 SY	_____.____	_____.____
0010	204.0115 Removing Asphaltic Surface Butt Joints	60.000 SY	_____.____	_____.____
0012	204.0120 Removing Asphaltic Surface Milling	88,740.000 SY	_____.____	_____.____
0014	204.0165 Removing Guardrail	470.000 LF	_____.____	_____.____
0016	204.0180 Removing Delineators and Markers	21.000 EACH	_____.____	_____.____
0018	205.0100 Excavation Common	4,473.000 CY	_____.____	_____.____
0020	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0022	211.0400 Prepare Foundation for Asphaltic Shoulders	590.000 STA	_____.____	_____.____
0024	211.0700.S Prepare Foundation for CIR Base Layer (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0026	211.0800.S Base Repair for CIR Layer	500.000 CY	_____.____	_____.____
0028	213.0100 Finishing Roadway (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0030	305.0110 Base Aggregate Dense 3/4-Inch	300.000 TON	_____.____	_____.____
0032	305.0120 Base Aggregate Dense 1 1/4-Inch	2,190.000 TON	_____.____	_____.____

Proposal ID: 20230214038 Project(s): 9165-13-71

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
0034	305.0500 Shaping Shoulders	38.000 STA	_____._____	_____._____
0036	327.1000.S CIR Asphaltic Base Layer	85,527.000 SY	_____._____	_____._____
0038	415.0070 Concrete Pavement 7-Inch	29.000 SY	_____._____	_____._____
0040	415.0410 Concrete Pavement Approach Slab	55.000 SY	_____._____	_____._____
0042	455.0605 Tack Coat	11,446.000 GAL	_____._____	_____._____
0044	455.0770.S Asphalt Stabilizing Agent	388.000 TON	_____._____	_____._____
0046	460.2000 Incentive Density HMA Pavement	5,890.000 DOL	1.00000	5,890.00
0048	460.5244 HMA Pavement 4 LT 58-34 S	9,200.000 TON	_____._____	_____._____
0050	465.0105 Asphaltic Surface	5,295.000 TON	_____._____	_____._____
0052	465.0110 Asphaltic Surface Patching	4.000 TON	_____._____	_____._____
0054	465.0450 Asphaltic Intersection Rumble Strips	75.000 SY	_____._____	_____._____
0056	520.3424 Culvert Pipe Class III-A Non-metal 24-Inch	94.000 LF	_____._____	_____._____
0058	522.0424 Culvert Pipe Reinforced Concrete Class IV 24-Inch	168.000 LF	_____._____	_____._____
0060	522.0430 Culvert Pipe Reinforced Concrete Class IV 30-Inch	82.000 LF	_____._____	_____._____
0062	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	12.000 EACH	_____._____	_____._____

Proposal ID: 20230214038 Project(s): 9165-13-71

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
0158	650.5000 Construction Staking Base	1,300.000 LF	_____.____	_____.____
0160	650.6000 Construction Staking Pipe Culverts	12.000 EACH	_____.____	_____.____
0162	650.7000 Construction Staking Concrete Pavement	16.000 LF	_____.____	_____.____
0164	650.8000 Construction Staking Resurfacing Reference	30,407.000 LF	_____.____	_____.____
0166	650.9911 Construction Staking Supplemental Control (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0168	650.9920 Construction Staking Slope Stakes	2,050.000 LF	_____.____	_____.____
0170	690.0150 Sawing Asphalt	1,360.000 LF	_____.____	_____.____
0172	690.0250 Sawing Concrete	16.000 LF	_____.____	_____.____
0174	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0176	740.0440 Incentive IRI Ride	23,050.000 DOL	1.00000	23,050.00
0178	SPV.0180 Special 01. Protective Thermoplastic Coating At Snowmobile Trail Crossings	393.000 SY	_____.____	_____.____
0180	450.4000 HMA Cold Weather Paving	2,000.000 TON	_____.____	_____.____

Section: 0001 Total: _____.____

Total Bid: _____.____

Wisconsin Department of Transportation

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

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

February 10, 2023

NOTICE TO ALL CONTRACTORS:

Proposal #38: 9165-13-71
Argonne – Nelma
STH 70 to Michigan State Line
STH 55
Forest County

Letting of February 14, 2023

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

Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (+)	Proposal Total After Addendum
305.0110	Base Aggregate Dense 3/4-Inch	Ton	300	535	835

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
36	Revised quantities in the base aggregate dense table.

Schedule of Items
Attached, dated February 10, 2023, are the revised Schedule of Items Page 1.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 36

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

CLEARING AND GRUBBING ITEMS

STATION	TO	STATION	OFFSET	CLEARING STA	201.0205 GRUBBING STA
157+50	-	157+71	RT	--	--
194+11	-	194+22	LT&RT	--	--
209+51	-	209+67	LT	--	--
214+29	-	214+57	RT	--	--
216+44	-	216+66	LT	--	1
218+56	-	221+54	LT	--	1
250+84	-	250+94	LT	--	--
272+78	-	273+18	LT&RT	--	--
TOTALS				--	2

NOTE:
THE STATION RANGES WITHOUT QUANTITIES ARE INCIDENTAL CLEARING AND GRUBBING OF LIGHT BRUSH, SHRUBS, OTHER VEGETATION, AND TREES LESS THAN 3-INCHES IN DIAMETER

REMOVING SMALL PIPE CULVERT ITEMS

STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0180* REMOVING DELINEATORS AND MARKERS EACH	COMMENTS
66+75	LT&RT	1	2	18-INCH CPCPE
118+89	LT&RT	1	1	24-INCH CPCA
146+63	LT&RT	1	--	18-INCH X 24-INCH CPCA
157+61	LT&RT	1	1	24-INCH CPCA
170+36	LT&RT	1	--	24-INCH CPCA
194+18	LT&RT	1	--	24-INCH CPCS
209+76	LT&RT	1	--	30-INCH CPCA
214+46	LT&RT	1	1	24-INCH CPCA
219+08	LT&RT	1	1	24-INCH CPCA
250+88	LT&RT	1	--	24-INCH CPCS
270+99	LT&RT	1	--	24-INCH CPCA
272+95	LT&RT	1	--	24-INCH CPCA
TOTALS		12	6	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVAL ITEMS

STATION	TO	STATION	OFFSET	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0+83	-	60+50	LT&RT	--	--	10	17,240
60+50	-	82+50	LT&RT	--	210	19	6,900
82+50	-	212+00	LT&RT	--	--	15	38,230
212+00	-	287+35	LT&RT	--	--	5	20,280
287+35	-	304+91	LT&RT	--	10	10	6,090
304+91	-	305+07	LT&RT	84	--	--	--
TOTALS				84	220	60	88,740

EARTHWORK

DIVISION	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON (NOTE 1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (NOTE 2)	AVAILABLE MATERIAL (NOTE 3)	UNEXPANDED FILL	EXPANDED FILL (NOTE 4)	MASS ORDINATE +/- (NOTE 5)
			CY	CY	CY	CY	CY FACTOR 1.25	CY
1	STA 66+22 - STA 67+28	CULVERT 2105000476	265	39	226	--	--	226
1	STA 118+36 - STA 119+41	CULVERT 2105000479	217	39	178	--	--	178
1	STA 146+10 - STA 147+16	CULVERT 2105000480	205	39	166	--	--	166
1	STA 157+08 - STA 158+13	CULVERT 2105000481	364	39	325	--	--	325
1	STA 169+83 - STA 170+88	CULVERT 2105000482	263	39	224	--	--	224
1	STA 193+65 - STA 194+72	CULVERT 2105000484	205	39	166	--	--	166
1	STA 209+15 - STA 210+37	CULVERT 2105000485	301	39	262	--	--	262
1	STA 213+92 - STA 214+99	CULVERT 2105000486	291	39	252	--	--	252
1	STA 218+56 - STA 219+61	CULVERT 2105000487	405	39	366	--	--	366
1	STA 250+35 - STA 251+41	CULVERT 2105000489	212	39	173	--	--	173
1	STA 270+37 - STA 271+61	CULVERT 2105000491	588	39	549	--	--	549
1	STA 272+42 - STA 273+48	CULVERT 2105000492	506	39	467	--	--	467
SUBTOTALS			3,822	468	3,354	0	0	3,354
2	STA 214+81 - STA 222+63	CTH A GUARDRAIL, LT	304	188	116	29	37	79
2	STA 302+07 - STA 305+01	BRULE RIVER GUARDRAIL, LT	182	72	110	5	5	105
2	STA 301+68 - STA 304+95	BRULE RIVER GUARDRAIL, RT	165	82	83	72	90	-7
SUBTOTALS			651	342	309	106	132	177
PROJECT TOTALS			4,473	810	3,663	106	132	3,531

NOTES:
1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL = (AREA OF PROJECT PAVEMENT) * (TYPICAL DEPTH)
3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
4) EXPANDED FILL FACTOR = (UNEXPANDED FILL) * (FILL FACTOR)
5) MASS ORDINATE = AVAILABLE MATERIAL - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

Addendum No. 02
ID 9165-13-71
Revised Sheet 36
February 10, 2023

SHAPING SHOULDERS

STATION	TO	STATION	OFFSET	305.0500 STA
287+35	-	305+07	LT&RT	38
TOTAL				38

BASE AGGREGATE ITEMS

STATION	TO	STATION	OFFSET	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	COMMENTS
0+83	-	287+35	LT&RT	522	--	MAINLINE
66+22	-	67+27	LT&RT	1	171	CULVERT REPLACEMENT
118+36	-	119+41	LT&RT	5	146	CULVERT REPLACEMENT
146+10	-	147+16	LT&RT	5	148	CULVERT REPLACEMENT
157+08	-	158+13	LT&RT	5	146	CULVERT REPLACEMENT
169+83	-	170+88	LT&RT	5	146	CULVERT REPLACEMENT
193+65	-	194+72	LT&RT	5	149	CULVERT REPLACEMENT
209+15	-	210+37	LT&RT	5	170	CULVERT REPLACEMENT
213+92	-	214+99	LT&RT	8	155	CULVERT REPLACEMENT
215+60	-	221+84	LT	75	135	GUARDRAIL
218+56	-	219+61	LT&RT	8	152	CULVERT REPLACEMENT
250+35	-	251+41	LT&RT	8	154	CULVERT REPLACEMENT
270+37	-	271+61	LT&RT	9	180	CULVERT REPLACEMENT
272+42	-	273+48	LT&RT	8	154	CULVERT REPLACEMENT
287+35	-	302+07	LT&RT	108	--	MAINLINE
302+07	-	304+91	LT&RT	58	175	GUARDRAIL
304+91	-	305+07	LT&RT	--	9	APPROACH SLAB
TOTALS				835	2,190	

Proposal ID: 20230214038 Project(s): 9165-13-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0205 Grubbing	2.000 STA	_____.____	_____.____
0004	203.0100 Removing Small Pipe Culverts	12.000 EACH	_____.____	_____.____
0006	204.0100 Removing Concrete Pavement	84.000 SY	_____.____	_____.____
0008	204.0110 Removing Asphaltic Surface	220.000 SY	_____.____	_____.____
0010	204.0115 Removing Asphaltic Surface Butt Joints	60.000 SY	_____.____	_____.____
0012	204.0120 Removing Asphaltic Surface Milling	88,740.000 SY	_____.____	_____.____
0014	204.0165 Removing Guardrail	470.000 LF	_____.____	_____.____
0016	204.0180 Removing Delineators and Markers	21.000 EACH	_____.____	_____.____
0018	205.0100 Excavation Common	4,473.000 CY	_____.____	_____.____
0020	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0022	211.0400 Prepare Foundation for Asphaltic Shoulders	590.000 STA	_____.____	_____.____
0024	211.0700.S Prepare Foundation for CIR Base Layer (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0026	211.0800.S Base Repair for CIR Layer	500.000 CY	_____.____	_____.____
0028	213.0100 Finishing Roadway (project) 01. 9165-13-71	1.000 EACH	_____.____	_____.____
0030	305.0110 Base Aggregate Dense 3/4-Inch	835.000 TON	_____.____	_____.____
0032	305.0120 Base Aggregate Dense 1 1/4-Inch	2,190.000 TON	_____.____	_____.____