

**Updated 2/5/2026**

# **FEDERAL PROJECT**

## BIDDING INSTRUCTIONS

### FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening:

#### For a Paper Bid:

- a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Offer, Agreement & Award form, e) a Bid Guaranty, (if required), and f) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

#### For an Electronic Bid:

**NOTE: Not all projects accept Electronic Bids. Please review the Notice to Contractors and see if it specifically states that Electronic Bids will be accepted.**

- a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other Certifications or Bid requirements listed in the Bid Documents as due by Bid opening.
3. Include prices for all items in the Schedule of Items (excluding non-selected alternates).
  4. Bid Guaranty acceptable forms are:
    - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
    - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
    - c) an electronic bid bond submitted with an electronic bid.
  5. If a paper Bid is to be sent, "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

### IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form, and submit with your bid. If you are submitting your bid electronically, you must FAX the form to (207) 624-3431. This is a curable defect.

*If you need further information regarding Bid preparation, call the DOT Contracts Section at (207) 624-3410.*

*For complete bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, March 2020 Edition.*

February 5, 2026  
Supersedes April 28, 2017

# NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled and allow for an electronic downloading of bid packages from our website, while continuing to maintain an optional plan holders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments must fill out the on-line plan holder registration form and provide an email address to the MDOT Contracts mailbox at: [MDOT.contracts@maine.gov](mailto:MDOT.contracts@maine.gov). Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Guy Berthiaume at [guy.berthiaume@maine.gov](mailto:guy.berthiaume@maine.gov).

# NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

*This should not be much of a change for those of you who use Federal Express or similar services.*

Hand-carried Bids may be in one envelope as before, and should be marked with the following information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

October 16, 2001

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION**  
Bid Guaranty-Bid Bond Form

**KNOW ALL MEN BY THESE PRESENTS THAT** \_\_\_\_\_

\_\_\_\_\_, of the City/Town of \_\_\_\_\_ and State of \_\_\_\_\_

as Principal, and \_\_\_\_\_ as Surety, a

Corporation duly organized under the laws of the State of \_\_\_\_\_ and having a usual place of

Business in \_\_\_\_\_ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of \_\_\_\_\_, for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of \_\_\_\_\_

\_\_\_\_\_ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

WITNESS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WITNESS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PRINCIPAL:

By \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

SURETY:

By \_\_\_\_\_

By: \_\_\_\_\_

Name of Local Agency: \_\_\_\_\_

# NOTICE

Bidders:

Please use the attached “Request for Information” form when submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI’s may be faxed to 207-624-3431, submitted electronically through the Departments web page of advertised projects by selecting the RFI tab on the project details page or via e-mail to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov).

These are the only allowable mechanisms for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

When submitting RFIs by Email please follow the same guidelines as stated on the “Request for Information” form and include the word “RFI” along with the Project name and Identification number in the subject line.

## RFI No: \_\_\_\_\_

**Date** \_\_\_\_\_ **Time** \_\_\_\_\_

**WIN(S):** \_\_\_\_\_ **Town(s):** \_\_\_\_\_ **Bid Date:** \_\_\_\_\_

**Question(s):**\_\_\_\_\_

**Company Name:**\_\_\_\_\_ **Phone:( )**\_\_\_\_\_

**Email:** \_\_\_\_\_ **Fax:** (\_\_\_\_) \_\_\_\_\_

7

# NOTICE

## **BIDDER'S LIST FORM**

**All** Bidders must submit the Bidder's List Form with their bid.

The Bidder's List Form contains information required by USDOT.

The Bidder's List Form must be completed by each Prime Contractor.

A copy of the new Bidder's List Form and instructions for completing it are attached.

The DBE Directory can be found on the MaineDOT Website at: <https://www.maine.gov/mdot/civilrights/dbe/>

Questions about the Directory or this form should be sent to the Civil Rights Office at [mary.bryant@maine.gov](mailto:mary.bryant@maine.gov) or by calling 207-624-3056.

## INSTRUCTIONS FOR PREPARING THE MAINEDOT BIDDER'S LIST FORM

The Contractor shall extend equal opportunity to MaineDOT certified DBE firms (as listed in MaineDOT's DBE Directory of Certified Businesses) in the selection and utilization of subcontractors and suppliers.

Each prime contractor submitting a bid on a federally funded project must complete each section of the Bidder's List Form in its entirety for itself and each subcontractor on that project.

### SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

#### Section A:

1. Insert Prime Contractor Name
2. Insert WIN for the Federal Project bidding on
3. Insert Bid Date
4. Insert Project Location
5. Insert Email address of Contact Person

#### Section B:

- A. Enter each Contractor's and Sub-Contractor's name and address (including zip code) – Prime Contractor's name should be listed in first box of this section; then each additional line would be proposed subcontractors – DBE and NonDBE
- B. Enter each Contractor's and Sub-Contractor's annual gross receipts bracket (see the legend on the form)
- C. Enter DBE status (DBE or non-DBE) for each contractor/sub-contractor
- D. Enter each Contractor's and Sub-Contractor's NAICS (North Amer. Industry Classification System) code (may be more than one) and Scope of Work
- E. For each Contractor and Sub-Contractor enter the Race and Gender of the firm's majority owner
- F. Enter the Age of each firm for every Contractor and Sub-Contractor
- G. Enter the Proposed amount of payment (Bid amount) for each Contractor/Sub-Contractor.

# Maine Department of Transportation

## BIDDER'S LIST FORM

### Section A. Bidder/Prime Contractor Information.

This section must be completed by the Bidder/Prime Contractor.

|                           |  |                         |  |              |  |
|---------------------------|--|-------------------------|--|--------------|--|
| 1. Prime Contractor Name: |  | 2. Federal Project WIN: |  | 3. Bid Date: |  |
| 4. Project Location:      |  | 5. Email Address:       |  |              |  |

### Section B. Commitment Details - Prime Contractor and all Proposed Subcontractor Information is Required in This Section

| A. Firm's Name & Address,<br>Including Zip Code<br>Prime must be listed first | B. Annual Gross<br>Receipt Bracket<br>Select 1 to 7* | C. Status<br>DBE or<br>Non-DBE | D. NAICS Code(s)<br>and Scope of Work | E. Race & Gender<br>of each Firm's<br>Majority Owner | F. Age of<br>Each<br>Firm | G. Proposed<br>Amount |
|-------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------|---------------------------------------|------------------------------------------------------|---------------------------|-----------------------|
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |
|                                                                               |                                                      |                                |                                       |                                                      |                           |                       |

\*1) Less Than \$1M, 2) \$1 - \$3M, 3) \$3 - \$6M, 4) \$6 - \$10M, 5) \$10 - \$20M, 6) \$20 - \$50M, 7) Greater Than \$50M - More than 5 Subs use a new form

MaineDOT Use Only:

Form Received:    /    /    Verified by:   

FHWA

FTA

FAA

For a complete list of certified DBE firms please visit: <http://www.maine.gov/dot/doing-business/civil-rights/dbe>

Note: This information is required pursuant to 49 CFR §26.11 and is used to track data in all federally funded MaineDOT contracts.

**DBE GOAL NOTICE**  
**Maine Department of Transportation**  
**Disadvantaged Business Enterprise Program**

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation (MaineDOT) has established a Disadvantaged Business Enterprise Program (DBE) for disadvantaged business participation in the federal-aid highway and bridge construction programs; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

Beginning September 1, 2024, MaineDOT has established an annual DBE participation goal of **1.43%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration through August 31, 2027. MaineDOT must meet this goal each federal fiscal year. If the goal is not met, MaineDOT must provide a justification for not meeting the goal and provide a plan to ensure the goal is met, which may include contract goals on certain projects that contractors will be required to meet.

MaineDOT asks all contractors, consultants and subcontractors to seek certified DBE firms for projects and to work to meet the determined 1.43% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

<http://www.maine.gov/mdot/disadvantaged-business-enterprises/pdf/directory.pdf>

Interested parties may view MaineDOT's DBE goal setting methodology, also posted on this website. If you have questions regarding this goal or the DBE program you may contact Sherry Tompkins at the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3066 or by e-mail at: [sherry.tompkins@maine.gov](mailto:sherry.tompkins@maine.gov)

**Maine Department of Transportation Civil Rights Office**

**Directory of Certified Disadvantaged Business Enterprises**

**Listing can be found at:**

<https://www.maine.gov/mdot/civilrights/dbe/>

**For additional information and guidance contact:**

**Civil Rights Office at (207) 624-3056**

***It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listing.***

### **Vendor Registration**

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

<http://www.maine.gov/purchases/venbid/index.shtml>

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION  
NOTICE TO CONTRACTORS**

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "**Light Capital Paving Preservation** in the town of **Greenville** & the townships of **Big Moose, Cove Point, Misery Gore, Moosehead Junction, Rockwood Strip T1 R1 NBKP, Sapling, & Taunton & Raynham Academy Grant**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on **March 18, 2026** and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a **Highway Construction, Paving**, or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening.** Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: WIN 029424.00 LCPP

Location: Piscataquis & Somerset Counties, project is located:

Map #1 is in Big Moose Township, Cove Point Township, Greenville & Moosehead Junction Township on Route 6/15 beginning 0.14 of a mile north of Mountain View Pond Road and extending south 6.45 miles to Lily Bay Road. Includes existing paved shoulders.

Map #2 is in Big Moose Township, Misery Gore Township, Rockwood Strip T1 R1 NBKP, Sapling Township & Taunton & Raynham Academy Grant on Route 6/15 beginning 0.06 of a mile west of Hardscrabble Road and extending south 7.09 miles to the Big Moose Township line. Includes existing paved shoulders. Bridge Milling - Bridge #3113, Bridge #3101, & Bridge #3256.

Outline of Work: Light Capital Paving Preservation and other incidental work.

Total length is 13.54 miles

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to **Tim Pelotte** at (207) 624-3431, use electronic RFI form or email questions to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov), project name and identification number should be in the subject line. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Bid Documents, specifications and bid forms can be viewed and obtained digitally at no cost at <http://www.maine.gov/mdot/contractors/>. They may be purchased from the Department between the hours of 7:00 a.m. to 3:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 24 Child Street, Augusta, Maine

04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 7:00 a.m. to 3:30 p.m. Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

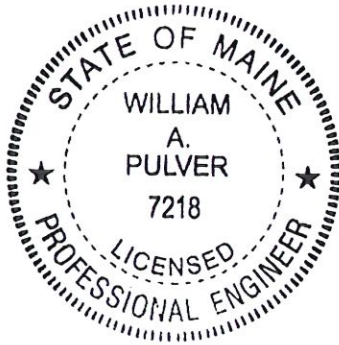
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of 5% of the bid amount, payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition", price \$10 [\$15 by mail], and Standard Details, March 2020 Edition, price \$20 [\$25 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Standard Detail updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

The right is hereby reserved to the Maine DOT to reject any or all bids.

Augusta, Maine  
February 25, 2026



WILLIAM A. PULVER P. E.  
CHIEF ENGINEER

# NOTICE

All bids for Federal Projects **shall** be accompanied by the DBE Proposed Utilization form. If you are submitting an electronic bid, the DBE Utilization Form may be faxed to 207-624-3431. Failure to submit the form with the bid will be considered a curable defect.

**SPECIAL PROVISION 102.7.3**  
**ACKNOWLEDGMENT OF BID AMENDMENTS**

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.maine.gov/mdot/contractors/> . It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

| Amendment Number | Date |
|------------------|------|
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |
|                  |      |

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

CONTRACTOR

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of authorized representative

\_\_\_\_\_  
(Name and Title Printed)

2/18/2026

## Maine Department of Transportation

## Proposal Schedule of Items

Page 1 of 1

Proposal ID: 029424.00

Project(s): 029424.00

SECTION: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

| Proposal<br>Line<br>Number | Item ID<br>Description                                                | Approximate<br>Quantity and<br>Units | Unit Price |       | Bid Amount |       |
|----------------------------|-----------------------------------------------------------------------|--------------------------------------|------------|-------|------------|-------|
|                            |                                                                       |                                      | Dollars    | Cents | Dollars    | Cents |
| 0010                       | 202.202<br>REMOVING PAVEMENT SURFACE                                  | 4,366.000<br>SY                      | _____      | _____ | _____      | _____ |
| 0020                       | 202.20201<br>REMOVING PAVEMENT SURFACE<br>(HOURLY)                    | 30.000<br>HR                         | _____      | _____ | _____      | _____ |
| 0030                       | 202.203<br>PAVEMENT BUTT JOINTS                                       | 600.000<br>SY                        | _____      | _____ | _____      | _____ |
| 0040                       | 403.209<br>HOT MIX ASPHALT 9.5 MM<br>(SIDEWALKS, DRIVES, INCIDENTALS) | 100.000<br>T                         | _____      | _____ | _____      | _____ |
| 0050                       | 403.2102<br>9.5 MM ASPHALT RICH BASE<br>MIXTURE                       | 300.000<br>T                         | _____      | _____ | _____      | _____ |
| 0060                       | 461.13<br>LIGHT CAPITAL PAVING                                        | 16,180.000<br>T                      | _____      | _____ | _____      | _____ |
| 0070                       | 631.175<br>CONTRACTOR TRUCKING                                        | 16,180.000<br>T                      | _____      | _____ | _____      | _____ |
| 0080                       | 631.212<br>SMALL PAVEMENT GRINDER<br>(INCLUDING OPERATOR)             | 20.000<br>HR                         | _____      | _____ | _____      | _____ |
| 0090                       | 652.352<br>LIGHT CAPITAL PAVING SIGNAGE                               | 27.000<br>WD                         | _____      | _____ | _____      | _____ |
| Section: 1                 |                                                                       |                                      | Total:     |       | _____      | _____ |
|                            |                                                                       |                                      | Total Bid: |       | _____      | _____ |

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

\_\_\_\_\_ a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 029424.00 for Light Capital Paving Preservation in the town of Greenville & the townships of Big Moose, Cove Point, Misery Gore, Moosehead Junction, Rockwood Strip T1 R1 NBKP, Sapling, & Taunton & Raynham Academy Grant, Counties of Piscataquis & Somerset, Maine.** The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work; performing construction quality control including inspection, testing and documentation; providing all required documentation at the conclusion of the project; warranting its work; and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract. Payment shall be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **July 24, 2026.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

\$\_\_\_\_\_ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**WIN 029424.00 - for Light Capital Paving Preservation - in the town of Greenville & the townships of Big Moose, Cove Point, Misery Gore, Moosehead Junction, Rockwood Strip T1 R1 NBKP, Sapling, & Taunton & Raynham Academy Grant, Counties of Piscataquis & Somerset, State of Maine**, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items."

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition*, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and

submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_

Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_

Witness

\_\_\_\_\_

(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_

Date

\_\_\_\_\_  
By: Dale F. Doughty, Commissioner

\_\_\_\_\_

Witness

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

\_\_\_\_\_ a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 029424.00 for Light Capital Paving Preservation in the town of Greenville & the townships of Big Moose, Cove Point, Misery Gore, Moosehead Junction, Rockwood Strip T1 R1 NBKP, Sapling, & Taunton & Raynham Academy Grant, Counties of Piscataquis & Somerset, Maine.** The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work; performing construction quality control including inspection, testing and documentation; providing all required documentation at the conclusion of the project; warranting its work; and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract. Payment shall be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **July 24, 2026.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

\$\_\_\_\_\_ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**WIN 029424.00 - for Light Capital Paving Preservation - in the town of Greenville & the townships of Big Moose, Cove Point, Misery Gore, Moosehead Junction, Rockwood Strip T1 R1 NBKP, Sapling, & Taunton & Raynham Academy Grant, Counties of Piscataquis & Somerset, State of Maine**, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items."

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition*, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and

submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_  
Witness

\_\_\_\_\_  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: Dale F. Doughty, Commissioner

\_\_\_\_\_  
Witness

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

**(Name of the firm bidding the job)**

a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at **(address of the firm bidding the job)**

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No.01 **12345.00**, for the **Hot Mix Asphalt Overlay** in the town/city of **South Nowhere**, County of **Washington**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **November 15, 2006**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)  
\$ (repeat bid here in numerical terms, such as \$102.10) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the *Standard Specifications March 2020 Edition* (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**PIN 012345.00 South Nowhere, Hot Mix Asphalt Overlay**,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items."

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition*, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Witness Sign Here)  
Witness

\_\_\_\_\_  
CONTRACTOR  
(Sign Here)  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_  
(Print Name Here)  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: Dale F. Doughty, Commissioner

\_\_\_\_\_  
(Witness)

BOND # \_\_\_\_\_

CONTRACT PERFORMANCE BOND  
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_  
\_\_\_\_\_ **in the State of** \_\_\_\_\_, as principal,  
and.....  
a corporation duly organized under the laws of the State of ..... and having a  
usual place of business .....  
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum  
of \_\_\_\_\_ **and 00/100 Dollars (\$** \_\_\_\_\_ **)**,  
to be paid said Treasurer of the State of Maine or his successors in office, for which  
payment well and truly to be made, Principal and Surety bind themselves, their heirs,  
executors and administrators, successors and assigns, jointly and severally by these  
presents.

The condition of this obligation is such that if the Principal designated as Contractor in  
the Contract to construct Project Number \_\_\_\_\_ in the Municipality of  
\_\_\_\_\_ promptly and faithfully performs the Contract, then this  
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State  
of Maine.

Signed and sealed this ..... day of ....., 20.... .

WITNESSES:

Signature.....  
Print Name Legibly .....

Signature .....  
Print Name Legibly .....

SURETY ADDRESS:

.....  
.....  
.....

TELEPHONE.....

SIGNATURES:

CONTRACTOR:

.....  
Print Name Legibly .....

SURETY:

.....  
Print Name Legibly .....

NAME OF LOCAL AGENCY:

ADDRESS .....  
.....  
.....

BOND # \_\_\_\_\_

CONTRACT PAYMENT BOND  
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_  
\_\_\_\_\_ **in the State of** \_\_\_\_\_, as principal,  
and.....  
a corporation duly organized under the laws of the State of ..... and having a  
usual place of business in .....  
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use  
and benefit of claimants as herein below defined, in the sum of  
\_\_\_\_\_ **and 00/100 Dollars (\$** \_\_\_\_\_ **)**  
for the payment whereof Principal and Surety bind themselves, their heirs, executors and  
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in  
the Contract to construct Project Number \_\_\_\_\_ in the Municipality of  
\_\_\_\_\_ promptly satisfies all claims and demands incurred for all  
labor and material, used or required by him in connection with the work contemplated by  
said Contract, and fully reimburses the obligee for all outlay and expense which the  
obligee may incur in making good any default of said Principal, then this obligation shall  
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a  
Subcontractor of the Principal for labor, material or both, used or reasonably required for  
use in the performance of the contract.

Signed and sealed this ..... day of ....., 20 ... .

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS .....

.....

.....

TELEPHONE .....

.....

"General Decision Number: ME20260041 01/02/2026

Superseded General Decision Number: ME20250041

State: Maine

Construction Type: Highway

County: Piscataquis County in Maine.

#### HIGHWAY CONSTRUCTION PROJECTS

|                     |                  |
|---------------------|------------------|
| Modification Number | Publication Date |
| 0                   | 01/02/2026       |

ENGI0004-005 04/01/2025

|                             | Rates | Fringes |
|-----------------------------|-------|---------|
| POWER EQUIPMENT OPERATOR:   |       |         |
| Grader/Blade, Milling       |       |         |
| Machine, Paver (Asphalt,    |       |         |
| Aggregate, and Concrete),   |       |         |
| Roller Asphalt.....\$ 30.17 |       | 13.80   |
| -----                       |       |         |
| SUME2014-036 06/23/2017     |       |         |

|                                           | Rates | Fringes |
|-------------------------------------------|-------|---------|
| CARPENTER, Includes Form Work....\$ 18.34 |       | 2.84    |
| HIGHWAY/PARKING LOT STRIPING:             |       |         |
| Laborer.....\$ 15.81                      |       | 3.24    |
| IRONWORKER, REINFORCING.....\$ 16.27      |       | 0.00    |
| LABORER: Asphalt, Includes                |       |         |
| Raker, Shoveler, Spreader and             |       |         |
| Distributor.....\$ 14.32                  |       | 3.17    |
| LABORER: Common or General.....\$ 13.46   |       | 1.38    |
| LABORER: Wheelman.....\$ 15.40            |       | 3.01    |

|                                   |       |      |
|-----------------------------------|-------|------|
| OPERATOR:                         |       |      |
| Backhoe/Excavator/Trackhoe.....\$ | 15.18 | 3.07 |
| OPERATOR: Bobcat/Skid             |       |      |
| Steer/Skid Loader.....\$          | 20.36 | 5.06 |
| OPERATOR: Broom/Sweeper.....\$    |       |      |
|                                   | 16.75 | 6.47 |
| OPERATOR: Bulldozer.....\$        |       |      |
|                                   | 16.58 | 2.89 |
| OPERATOR: Loader.....\$           |       |      |
|                                   | 17.18 | 4.72 |
| OPERATOR: Mechanic.....\$         |       |      |
|                                   | 22.30 | 8.71 |
| OPERATOR: Screed.....\$           |       |      |
|                                   | 18.82 | 4.75 |
| OPERATOR: Roller (Earth).....\$   |       |      |
|                                   | 15.81 | 1.72 |
| TRAFFIC CONTROL: Flagger.....\$   |       |      |
|                                   | 9.00  | 0.00 |
| TRAFFIC CONTROL:                  |       |      |
| Laborer-Cones/                    |       |      |
| Barricades/Barrels -              |       |      |
| Setter/Mover/Sweeper.....\$       | 17.48 | 5.37 |
| TRUCK DRIVER: Dump Truck.....\$   |       |      |
|                                   | 14.35 | 6.33 |
| TRUCK DRIVER: TackTruck.....\$    |       |      |
|                                   | 18.82 | 8.29 |

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at

[www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

## Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

## Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

## Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based.

The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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#### WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210.

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END OF GENERAL DECISION

"General Decision Number: ME20260042 01/02/2026

Superseded General Decision Number: ME20250042

State: Maine

Construction Type: Highway

County: Somerset County in Maine.

#### HIGHWAY CONSTRUCTION PROJECTS

|                     |                  |
|---------------------|------------------|
| Modification Number | Publication Date |
| 0                   | 01/02/2026       |

ENGI0004-022 04/01/2025

|                           | Rates    | Fringes |
|---------------------------|----------|---------|
| POWER EQUIPMENT OPERATOR: |          |         |
| Grader/Blade, Milling     |          |         |
| Machine.....              | \$ 30.17 | 13.80   |
| -----                     |          |         |
| SUME2014-037 06/23/2017   |          |         |

|                                   | Rates    | Fringes |
|-----------------------------------|----------|---------|
| CARPENTER, Includes Form Work.... | \$ 18.34 | 2.84    |
| HIGHWAY/PARKING LOT STRIPING:     |          |         |
| Laborer.....                      | \$ 14.80 | 1.27    |
| IRONWORKER, REINFORCING.....      | \$ 16.27 | 0.00    |
| LABORER: Asphalt, Includes        |          |         |
| Raker, Shoveler, Spreader and     |          |         |
| Distributor.....                  | \$ 15.40 | 2.69    |
| LABORER: Common or General.....   | \$ 14.42 | 2.68    |
| LABORER: Landscape.....           | \$ 18.69 | 2.70    |
| LABORER: Wheelman.....            | \$ 15.64 | 4.29    |

|                                                                       |       |      |
|-----------------------------------------------------------------------|-------|------|
| OPERATOR:                                                             |       |      |
| Backhoe/Excavator/Trackhoe.....\$                                     | 18.80 | 4.16 |
| OPERATOR: Bobcat/Skid                                                 |       |      |
| Steer/Skid Loader.....\$                                              | 21.66 | 4.91 |
| OPERATOR: Broom/Sweeper.....\$                                        | 19.09 | 5.20 |
| OPERATOR: Bulldozer.....\$                                            | 17.30 | 3.50 |
| OPERATOR: Loader.....\$                                               | 18.59 | 5.53 |
| OPERATOR: Mechanic.....\$                                             | 22.07 | 8.73 |
| OPERATOR: Paver (Asphalt,<br>Aggregate, and Concrete).....\$          | 20.92 | 6.19 |
| OPERATOR: Screed.....\$                                               | 19.02 | 4.82 |
| OPERATOR: Roller (Earth).....\$                                       | 16.43 | 3.40 |
| OPERATOR: Roller Asphalt.....\$                                       | 21.56 | 5.42 |
| TRAFFIC CONTROL: Flagger.....\$                                       | 9.38  | 0.00 |
| TRAFFIC CONTROL:                                                      |       |      |
| Laborer-Cones/<br>Barricades/Barrels -<br>Setter/Mover/Sweeper.....\$ | 17.47 | 4.80 |
| TRUCK DRIVER: Dump Truck.....\$                                       | 15.07 | 5.15 |
| TRUCK DRIVER: TackTruck.....\$                                        | 20.18 | 7.75 |

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

<https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at

[www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

## Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

## Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

## Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based.

The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

#### -----

#### WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

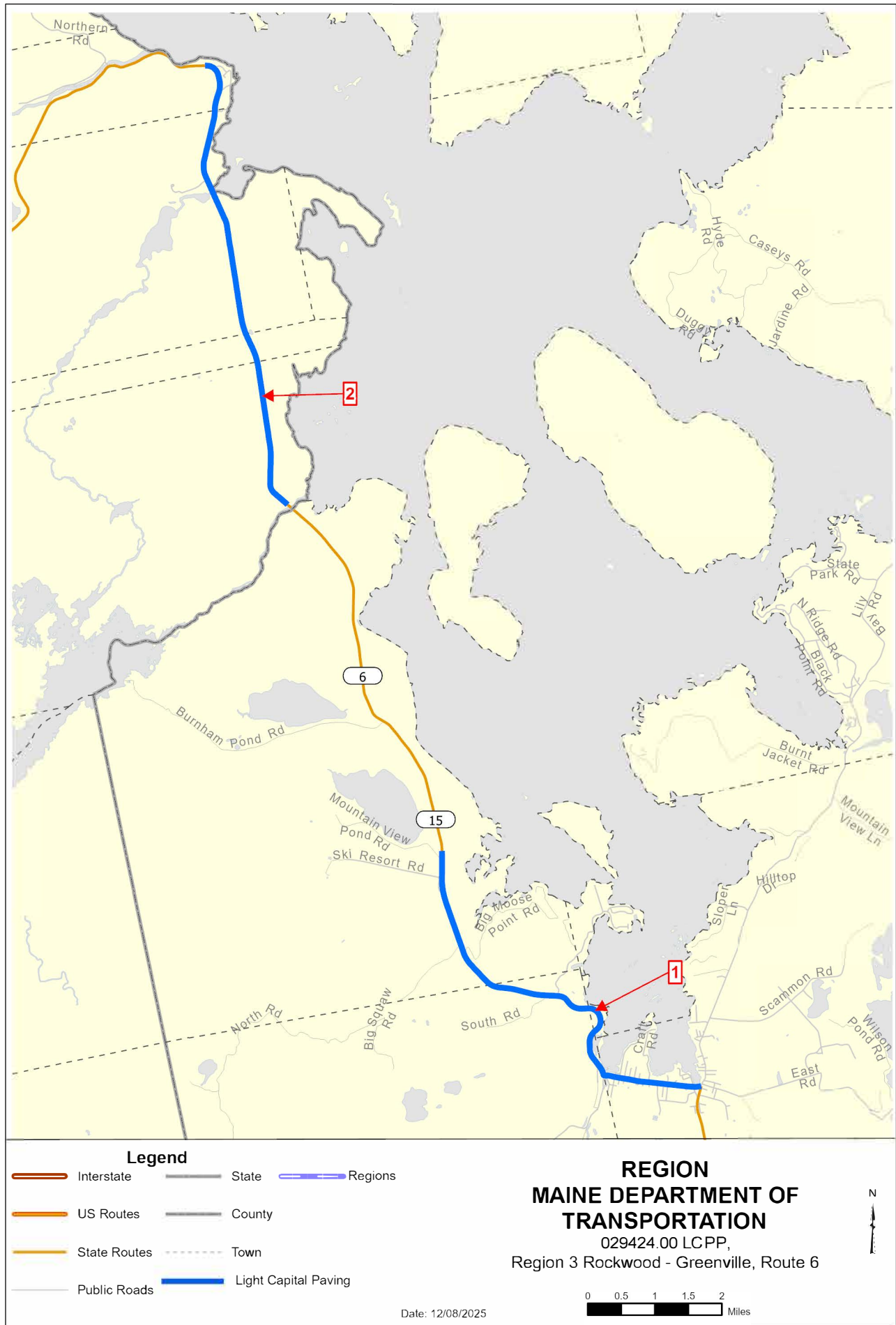
Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210.

=====

END OF GENERAL DECISION

LIGHT CAPITAL PRESERVATION PAVING

| WIN         | 029424.00                                                                                               | Rockwood - Greenville, Route 6 |                                                                                                                                                                                     | REGION | 3-Western |          |
|-------------|---------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|----------|
| MAP LABEL   | TOWNS                                                                                                   | ROUTE                          | PROJECT DESCRIPTION                                                                                                                                                                 | MILES  | TONS      | MIX TYPE |
| 1           | Big Moose Twp, Cove Point Twp, Greenville, Moosehead Junction Twp                                       | ST RTE 6                       | Beginning 0.14 of a mile north of Mountain View Pond Road and extending south 6.45 miles to Lily Bay Road. Includes Existing Paved Shoulders (4,733).                               | 6.45   | 7,958     | LCPP     |
| 2           | Big Moose Twp, Misery Gore Twp, Rockwood Strip T1 R1 NBKP, Sapling Twp, Taunton & Raynham Academy Grant | ST RTE 6                       | Beginning 0.06 of a mile west of Hardscrabble Road and extending south 7.09 miles. Includes Existing Paved Shoulders (4,677 Tons). Bridge Milling - Bridge #3113, #3101, and #3256. | 7.09   | 8,222     | LCPP     |
| AREA TOTALS |                                                                                                         |                                |                                                                                                                                                                                     | 13.54  | 16,180    |          |



**CONSTRUCTION NOTES****202.20201 REMOVING PAVING SURFACE (Hourly)****Segment ID #1**

Beginning at the Intersection of Moosehead Lake Road/Lily Bay Road and Route 6, to Bridge #3752 - both sides of the road the contractor will mill 0" at the edge of travel way and ¾" at the face of curb on the shoulders.

**202.202 REMOVING PAVEMENT SURFACE****Segment ID #2**

Bridge #3113 – Milling bridge deck and approaches – Mill depth on bridge deck will be 1.5" full width, approaches depth will be determined in the field with a string line, approximately 350' total length.

Bridge #3101 - Milling bridge deck and approaches – Mill depth on bridge deck will be 1.5" full width, approaches depth will be determined in the field with a string line, approximately 540' total length.

Bridge #3256- Milling bridge deck and approaches – Mill depth on bridge deck will be 1" full width, approaches depth will be determined in the field with a string line, approximately 200' total length.

**202.203 PAVEMENT BUTT JOINTS**

Butt Joints will not be allowed to be cut more than 2 weeks prior to paving on any segments.

**403.2102 - 9.5mm Asphalt Rich Base HMA****Segment ID #2**

To be used on the approaches and decks for the following two bridges. Bridge #3113 approximately 350' total length and Bridge #3101 approximately 540' total length

**SPECIAL PROVISION**  
**SECTION 104**  
**(WAGE RATES)**

When two or more wage rate schedules appear in the bid Book, the highest rate shall prevail for each classification.

SPECIAL PROVISION  
SECTION 104  
GENERAL RIGHTS AND RESPONSIBILITIES  
(Electronic Payroll Submission)  
(Payment Tracking)

104.3.8.1 Electronic Payroll Submission The prime contractor and all subcontractors and lower-tier subcontractors will submit their certified payrolls electronically on this contract utilizing the Elation System web based reporting. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at <http://www.maine.gov/mdot/contractors/> under the first “Notice”.

104.3.8.2 Payment Tracking The prime contractor and all subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System

**SPECIAL PROVISIONS  
SECTION 104  
UTILITIES**

**UTILITY COORDINATION**

The Contractor has primary responsibility for coordinating their work with Utilities **AFTER** contract award. The Contractor shall communicate directly with the Utilities regarding any utility work necessary to maintain the Contractor's schedule and prevent project construction delays. The Contractor shall notify the LCP Coordinator of any issues.

**THE CONTRACTOR SHALL PLAN AND CONDUCT WORK ACCORDINGLY.**

**MEETING**

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **IS** required.

**GENERAL INFORMATION**

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. The following list identifies all known Utilities and/or Railroads having facilities presently located within the limits of this project or intending to install facilities either before or during project construction.

Utilities have been notified and will be furnished with project specifications.

The Contractor shall give all Utilities **10** working days' notice prior to beginning **ANY** work on this project. In addition to the 10 working days' notice, the Contractor shall adhere to any specific notification periods stipulated in the utility/railroad summaries below.

All work shall be performed in accordance with Section 104.4.6 Utility Coordination of the MaineDOT Standard Specifications.

**OVERVIEW**

| Utility / Railroad                    | Aerial | Subsurface | RR | Map Segment(s) |
|---------------------------------------|--------|------------|----|----------------|
| Central Maine & Quebec Railway (CMQR) |        |            | X  | 1 & 2          |
| Central Maine Power Co.               | X      |            |    | 1 & 2          |
| Consolidated Communications Inc.      | X      | X          |    | 1 & 2          |
| Maine Water Company                   |        | X          |    | 1              |
| Moosehead Sanitary District           |        | X          |    | 1              |
| Premium Choice broadband              | X      |            |    | 1 & 2          |

| Utility / Railroad                    | Contact                         | Phone                            |
|---------------------------------------|---------------------------------|----------------------------------|
| Central Maine & Quebec Railway (CMQR) | Charles Kretchman               | (612) 247-0706                   |
| Central Maine Power Co.               | Derick Hemingway                | (207) 215-6136                   |
| Consolidated Communications Inc.      | Brian Smith<br>Travis Roberts   | (207) 712-8604<br>(207) 944-2361 |
| Maine Water Company                   | David Poulin<br>Tony Bellavance | (207) 691-5152<br>(207) 314-0418 |
| Moosehead Sanitary District           | Dan Daigle                      | (207) 280-0055                   |
| Premium Choice broadband              | David Sickles                   | (207) 659-2117                   |

#### MaineDOT Contacts:

- LCPP Project Manager: Tim Pelotte (207) 592-1239
- LCPP Coordinator: Chris LeBlanc (207) 592-6792

Temporary utility adjustments are **NOT** anticipated. If any unexpected utility relocations become necessary, they shall be scheduled in accordance with Section 104 of the Standard Specifications and shall be performed by the appropriate Utility company in conjunction with the work by the Contractor. Should the Contractor choose to have any poles temporarily relocated, all work shall be done at the Contractor's request and expense, with no additional cost or schedule impacts to the Department.

All adjustments are to be made by the respective Utility/Railroad unless otherwise specified herein.

Fire hydrants, if present, shall not be disturbed until all necessary work has been accomplished in order to ensure proper fire protection.

***\*\* Specific information regarding line voltages can be requested from Central Maine Power Co. \*\****

Utility working days are Monday through Friday. Times are estimated on the basis of a single crew for each utility. Any times and dates mentioned are **estimates only** and are dependent upon favorable weather, working conditions, and freedom from emergencies.

#### **AERIAL**

Aerial utility adjustments are **NOT** anticipated as part of this project. Though unexpected, if utility relocations become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the Utilities in conjunction with the work by the Contractor.

Aerial Utilities require **5** working days' notice prior to any operations involving work around their lines.

#### **SUBSURFACE**

Subsurface Utility adjustments **ARE** anticipated at this time for the completion of this project and will be scheduled in compliance with Section 104 of the Standard Specifications. Adjustments to subsurface structures such as sewer manholes and/or water gate valves are planned. If adjustment of drainage structures is required, the Department will have them adjusted prior to paving operations.

**Towns:** Rockwood to Greenville

**Project:** 029424.00

**Date:** January 23, 2026

- **NOTE: The Contractor will be responsible to make any final grade adjustments to water gates in conjunction with paving operations, unless otherwise specified by the Utility. The cost of any final adjustments to water gates will be considered incidental to paving items.**

***Summary:***

| Utility / Railroad               | Summary of Work                            | Estimate of Workdays Required |
|----------------------------------|--------------------------------------------|-------------------------------|
| Consolidated Communications Inc. | Adjusting <b>2</b> Communications Manholes | 5                             |
| Maine Water Company              | Adjusting <b>26</b> Water Gate Valves      | 5                             |
| Moosehead Sanitary District      | Adjusting <b>24</b> Sewer Manholes         | 5                             |
|                                  |                                            | <b>Total: 15</b>              |

**Consolidated Communications (CCI)** - has underground facilities located within the project limits along Segment 1, Route 6 (Pritham Ave.) in Greenville. CCI reports **2** communications manholes affected by this project, MH#1 & MH#11. The Department intends to mill around these structures in parking stalls and in the shoulders, from fog-line to curbline, as well as to place mainline shim. CCI will adjust any manholes accordingly once milling and shimming operations are complete. CCI will require **10** working days' notice prior to commencement of operations, and **5** working days to complete their work.

**Maine Water Company** - has a drinking water system located within the project limits along Segment 1, Route 6 (Pritham Ave.) in Greenville. This system is reported to have **26** gate valve boxes affected by this project. The Department intends to mill in parking stalls and in the shoulders, from fog-line to curbline, as well as to place mainline shim. Maine Water Co. will loosen & lower valve boxes, repairing/replacing as necessary, then adjust to milled and/or shimmed surfaces once those operations are complete, with the Contractor raising valve boxes to final grade during surface paving operations. Due to competing projects, Maine Water Co. will require **20** working days' notice prior to the commencement of operations and **5** working days to complete their work.

**Moosehead Sanitary District** - has a sewer system located within the project limits along Segment 1, Route 6 (Pritham Ave.) in Greenville. This system is reported to have **24** sewer manholes affected by this project. The Department intends to mill around these structures in parking stalls and in the shoulders, from fog-line to curbline, as well as to place mainline shim. The District will adjust any manholes accordingly once milling and shimming operations are complete. Due to competing projects, the District will require **20** working days' notice prior to the commencement of operations and **5** working days to complete these adjustments.

**RAILROAD**

**Central Maine & Quebec Railway (CMQR)** - has rail crossings located on Route 6 in Big Moose Twp., Fed ID# **847790A** / MP **44.84**, and in Greenville, Fed ID# **847781B** / MP **33.21**.

***Scope of Work:***

Big Moose Twp. - Fed ID# **847790A** / MP **44.84**

- Rail crossing is below an overpass, MaineDOT bridge #**3256**, constructed with a concrete bridge deck. Bridge joints will be milled and paved to, with **NO** work being performed on, or to the bridge itself. Only incidental encroachment into the RR's reported **100'** right-of-way is expected.

**Towns:** Rockwood to Greenville

**Project:** 029424.00

**Date:** January 23, 2026

Greenville - Fed ID# **847781B** / MP **33.21**

- Rail crossing is above the road surface on a CMQR owned trestle. To maintain the existing 14'- 2" & 14'- 4" clearances, both milling and paving operations will take place below the trestle and within the RR's reported **100'** right-of-way.

It is the Contractor's responsibility to coordinate and schedule this work with the Railroad, including completing and submitting the attached Right-of Entry Agreement, along with the required Certificates of Insurance. The attached CPKC Minimum Safety Requirements shall be adhered to at **ALL** times.

The Contractor shall keep **ALL** personnel, equipment, and materials out of the Railroad's right-of-way, unless duly authorized by the Railroad and Rail Protection Services are present, if required. **NO** work shall take place within the Railroad's right-of-way without prior written authorization using the attached **Project Railroad Document Receipt & Sign-Off Form**.

### **MAINTAINING UTILITY LOCATION MARKINGS**

The Contractor will be responsible for maintaining buried utility location markings following the initial locating by the appropriate Utility or their designated representative.

### **UTILITY SIGNING**

Any Utility working within the construction limits of this project shall ensure that the traveling public is adequately protected at all times. All work areas shall be signed, lighted, and traffic flaggers employed as determined by field conditions. All traffic controls shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as issued by the Federal Highway Administration.

# Project Railroad Document Receipt & Sign-Off Form

ME# / WIN #: \_\_\_\_\_ Location / Milepost / Segment: \_\_\_\_\_

Railroad (Owner / Operator): \_\_\_\_\_

MaineDOT Resident (Name): \_\_\_\_\_ Phone: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

## Documents Received

I, the undersigned Resident in Charge, hereby acknowledge receipt of the following written *approved* railroad documents from the contractor in connection with the above-referenced project:

| # | Document                                                                              | Date Received      | Comments (if any) | Initials |
|---|---------------------------------------------------------------------------------------|--------------------|-------------------|----------|
| 1 | Railroad Approved Safety Plan / Rules / Procedures                                    | ____ / ____ / ____ | _____             | ____     |
| 2 | Railroad Approved Insurance Certificate(s) / Coverage Documents                       | ____ / ____ / ____ | _____             | ____     |
| 3 | Railroad Approved Flagging requirements (or documentation showing no flagging needed) | ____ / ____ / ____ | _____             | ____     |
| 4 | Contractor Superintendent Railroad Training document                                  | ____ / ____ / ____ | _____             | ____     |

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## Conditions Before Work Commences

**No work or equipment** may commence or be within the railroad right-of-way until **all** of the above *approved* documents have been received from the contractor and accepted by the MaineDOT Resident If required Railroad flagger must be onsite. Any contractor violating this will be subject to fines and loss of payment for all work done in violation.

---

## Signature

**MaineDOT Resident / Engineer/ Project Manager**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date all documents received/work may proceed: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

*\* Not all items may be required from all railroads*

Rev 3. 10/10/25

**Optional: Supplementary Acknowledgment (for Document Revisions, Page 2)**

If any of the above documents are revised or supplemented during the course of the work, the Resident shall sign below to confirm receipt of the updated *approved* version:

| Revision # | Document Revised | Date Received | Summary of Change | Signature / Date |
|------------|------------------|---------------|-------------------|------------------|
|------------|------------------|---------------|-------------------|------------------|



## CPKC Safety Requirements for Contractors United States

|                            |                           |                          |               |
|----------------------------|---------------------------|--------------------------|---------------|
| <b>Approval Authority:</b> | Safety Management Systems | <b>Effective Date:</b>   | Apr. 15, 2025 |
| <b>Version:</b>            | 5.0                       | <b>Next Review Date:</b> | Apr. 15, 2028 |

## Table of Contents

|                                                              |    |
|--------------------------------------------------------------|----|
| 1.0 Introduction .....                                       | 1  |
| 2.0 Application.....                                         | 1  |
| 3.0 Definitions and Interpretation .....                     | 1  |
| 4.0 Interpretation and Application.....                      | 3  |
| 5.0 Contractor Compliance and Responsibilities .....         | 3  |
| 6.0 Site Safety Plans .....                                  | 4  |
| 7.0 Safety Training .....                                    | 5  |
| 8.0 Safety Orientation .....                                 | 5  |
| 9.0 Job Safety Briefing.....                                 | 6  |
| 10.0 Applicable Legislation .....                            | 7  |
| 11.0 Security Access to CPKC Property.....                   | 8  |
| 12.0 Personal Conduct .....                                  | 9  |
| 13.0 Personal Protection.....                                | 10 |
| 14.0 Railroad Track Protection.....                          | 12 |
| 15.0 HAZCOM .....                                            | 16 |
| 16.0 Operation of Highway Vehicles.....                      | 16 |
| 17.0 Tools, Equipment and Machinery.....                     | 18 |
| 18.0 Emergency Response .....                                | 20 |
| 19.0 Confined Space .....                                    | 21 |
| 20.0 Reportable Accidents, Incidents, and Injuries .....     | 21 |
| 21.0 Reporting .....                                         | 22 |
| 22.0 Contractor & Contractor Personnel Acknowledgement ..... | 24 |
| 21.0 Attachment A – Emergency Information Sheet .....        | 25 |
| 22.0 Attachment B – Work Site Information Sheet .....        | 26 |

## 1.0 Introduction

At CPKC, safety is an integral part of the way we do business. We expect everyone working for CPKC to be unconditionally committed to safety. Safety must be given top priority and will take precedence over deadlines, production schedules, and all other considerations.

## 2.0 Application

- 2.1 These Safety Requirements are applicable to all who work on CPKC property (except as noted in 2.3 and 2.4 below) including contractors and other persons performing work or otherwise providing services to CPKC on its property in the United States.
- 2.2 These Safety Requirements cannot be waived or altered, in whole or in part, without a prior risk Assessment specific to the work being conducted, and written consent has been provided by the Manager-in-Charge.
- 2.3 Notwithstanding the foregoing, these Safety Requirements do not apply to other railroad companies who only operate trains on CPKC property under various trackage or interchange agreements.
- 2.4 Further notwithstanding the foregoing, these Safety Requirements may not apply to work or services provided in CPKC office premises.

## 3.0 Definitions and Interpretation

### 3.1 Definitions

- 3.1.1 In these Safety Requirements, the following capitalized terms shall have the ascribed meaning below:

**Applicable Legislation** - means all applicable legislation, regulations, by-laws, codes, rules, standards, policies, procedures, promulgated by any federal, state, and municipal governmental body, including those of its agencies, having authority over CPKC and, or a contractor in relation to the work in the matter of health and safety of the person, property and, or the environment.

**Canadian Pacific Kansas City or CPKC** - means Canadian Pacific Kansas City Limited, and its subsidiaries and affiliates, and includes each of their respective directors, officers, employees, agent, and representatives.

**CPKC Personnel** - means CPKC's employees, agents, and representatives.

**CPKC Property** - means any building, facility, yard, track, right of way or other property owned or controlled by CPKC.

**Contractor** - means the company or person, and their respective employees and authorized agents, representative and subcontractors who are providing goods or services to CPKC; or on behalf of a third party working on CPKC property.

**Contractor Personnel** - means the contractor's employees, and authorized agents, representative and subcontractors.

**Efficiency Test (eTest)** - means a planned procedure to evaluate compliance with rules, instructions, and procedures, with or without the employee's knowledge.

**Foul of Track** - means the placement of an individual or equipment within 4 feet (1.2 m) of the outside rail of a railway track that could be struck by a moving train or on-track work equipment (e.g., hi-rail equipment).

**Hazardous Materials-** means any substance, which is hazardous to persons or property and includes, without limiting the generality of the foregoing:

- i) radioactive, explosive, poisonous, or toxic substances.
- ii) any substance that if added to any water, would degrade, or alter the quality of the water to the extent that it is detrimental to its use by man or by any animal, or plant.
- iii) any solid, liquid, gas or odor or combination of any of them that, if emitted into the air, would create, or contribute to the creation of a condition of the air that endangers the health, safety, or welfare of persons, or the health of animal life, or causes damage to plant life or to property, or
- iv) substances declared to be hazardous, toxic, or dangerous under any law or regulation now or hereafter enacted by any governmental authority having jurisdiction.

**Manager-in-Charge-** means a CPKC manager as designated or otherwise identified by CPKC as being responsible for overseeing the work to be performed, such Manager-in-Charge may include, but is not limited to local CPKC Management, Superintendents, Chief Engineers, and Project Managers, etc.

**Mobile Equipment-** means any motorized and self-propelled equipment, excluding railroad equipment and highway vehicles, but including, for example, forklifts, tractors, cranes, ATVs, mules, motorized scissor lifts, telescopic boom lifts, and similar equipment that are not designed to operate or move on railroad tracks.

**Office Premises-** means any building, facility, or portion thereof, or other premises, whether owned or controlled by CPKC, which is used solely for clerical or administrative purposes, and which does not contain heavy equipment or machinery, as designated by CPKC from time to time.

**Qualified and Authorized-** means a status attained by a person who has successfully completed any required training and demonstrated proficiency in the duties of a particular position or function and who has been given the right to act.

**Railroad Equipment-** means trains, locomotives, railcars, on track equipment (track units), hi-rail vehicles and any other equipment designed to operate or move on railroad tracks.

**Site Safety Plan-** means a documented plan which set out how work is to be conducted in a safe manner, as required by applicable legislation, see 6.1).

**Third Party Project-** means any work being performed on CPKC property that CPKC is not managing (i.e., road authority, utility company, commuter agency, or other similar entity, are on CPKC property for their own purposes, and not a project sponsored or managed by CPKC.

**Work-** means the provision of products and services and related activities.

**Work Site-** means any CPKC property where CPKC personnel or contractor personnel are present, or permitted to be present, while engaged in any Work, including any railroad equipment, mobile equipment and highway vehicles operated by or used to convey a person engaged in such Work. This applies also to work immediately adjacent to CPKC property which can pose a risk to safe railway operations (i.e., blasting, excavation next to right-of-way (ROW), etc.).

## 4.0 Interpretation and Application

- 4.1 Where legislation is referred to in these Safety Requirements, it shall include all amendments and replacements thereto as promulgated from time to time.
- 4.2 Where standards, such as those of the American National Standards Institute (ANSI), are referred to in these Safety Requirements, they shall include all amendments and replacements thereof from time to time.
- 4.3 Where there is any ambiguity, inconsistencies, or omissions between or among any agreements with CPKC, expressed or implied; any applicable legislations; any applicable CPKC policies and practices; and any applicable industrial standards and practices, contractor and contractor personnel shall adhere to that which is most stringent and current.

## 5.0 Contractor Compliance and Responsibilities

### 5.1 General Compliance

- 5.1.1 The contractor shall be fully and solely responsible for ensuring the health and safety of contractor personnel and for ensuring that its work and other activities do not compromise the health and safety of CPKC personnel or any other party, the protection of the environment, the protection of CPKC's property and those of any other party, and do not interfere with the safety of CPKC's railroad operations.
- 5.1.2 The contractor shall comply with and shall ensure all of contractor personnel are trained and qualified to safely perform the Work and that they comply with all Applicable Legislation pertaining to the protection against fire, safety, health, and environmental hazards, and with any license, permits, authorizations issued by the respective authority and provide CPKC with written certification that contractor's safety program required by 49 CFR Part 243 has been approved by the Federal Railroad Administration (FRA) where applicable.
- 5.1.3 The contractor shall comply with and shall ensure all of contractor personnel comply with all terms and conditions of all agreements, expressed or implied, between contractor and CPKC, and all applicable CPKC policies and practices.
- 5.1.4 Subject to the requirements of CPKC's Access Control Procedures, the contractor shall provide CPKC eRailsafe training for each employee engaged in work on CPKC property.

Note - contractors entering into new agreements after Apr. 14, 2023, will be required to enroll or / subscribe to eRailsafe / ISNetworld as required by CPKC Access Control Policy / Procedure).

Where there is no agreement between CPKC and the contractor, the contractor is responsible for meeting the additional requirements outlines within CPKC's Access Control Procedures.

- 5.1.5 The contractor shall provide contractor personnel, at its own expense, all safety equipment required to protect against injuries during the performance of the work and shall ensure that contractor personnel are knowledgeable of and utilize safe practices in performing the work.
- 5.1.6 The contractor shall always have a copy of the documents listed below at the work site, and shall produce them as and when requested by CPKC:
  - a) CPKC Safety Requirements for Contractors - United States.
  - b) Licenses, certifications, permits, training records or other documents required by applicable legislation or these Safety Requirements.
  - c) Contractor's site safety plan.

- d) Contractor's Emergency Information Sheet (see Attachment A) / Worksite Information Sheet (see Attachment B).
- e) Any additional documents required by contract or by agreement with Manager-in-Charge.
- f) Employee identification (eRailsafe badge or equivalent, see 11.1.1).

## 5.2 Compliance Assurance

- 5.2.1 CPKC reserves the right to observe, inspect, test and audit contractor and contractor personnel for compliance with all requirements herein, and to demand and receive all relevant records, documentation, and materials evidencing compliance, at any time, and from time to time.
- 5.2.2 Failure of the contractor or contractor personnel to comply with any applicable provisions herein may be considered a material breach, and in addition to all other remedies available, CPKC may without prejudice:
  - a) take over control of that work or activity.
  - b) order the work to stop, and / or
  - c) order contractor personnel to leave CPKC Property.
- 5.2.3 Upon the earlier of the completion of the work, the expiration of the applicable agreement, or the request of a Manager-in-Charge, contractor and contractor personnel shall return all identification, badges, access cards, and decals, issued or provided by CPKC to the Manager-in-Charge.

## 6.0 Site Safety Plans

### 6.1 General Requirements

- 6.1.1 Prior to starting any work on CPKC Property, the contractor must have a written site safety plan that identifies:
  - a) All applicable legislation, rules, policies, and work practices in relation to the work being performed.
  - b) Specific hazards that are associated with the work being performed on CPKC property for CPKC, and work being performed not for CPKC:

#### **For example:**

- i) Construction, maintenance, or inspections of buildings.
  - ii) Working on or adjacent to railroad tracks.
  - iii) Maintenance or inspection of railroad tracks, crossings, or signal systems.
  - iv) Operating railroad equipment on CPKC tracks, or
  - v) When / where contractor personnel work directly with or in proximity (time or space) to CPKC personnel.
- c) Methods of verifying compliance.
- 6.1.2 The contractor will provide Manager-In-Charge with a copy of this site safety plan on reasonable request.
- 6.1.3 The contractor must be able to demonstrate an awareness of applicable legislation, rules, policies, and work practices in relation to the work being performed.

## 7.0 Safety Training

### 7.1 Training & Qualifications

- 7.1.1 At its sole cost and expense, contractor shall ensure that all contractor personnel be fully trained and qualified for the work they will be performing. Contractors and contractor personnel shall meet, or exceed, all applicable legislation requirements relating to training and qualification, including but not limited to the requirements of 49 CFR Part 243 – Training, Qualification, and Oversight for Safety-Related Railroad Employees and provide training documentation to ISNetworld for filing / record keeping as per CPKC Access Control Policy / Procedure.
- 7.1.2 Additionally, contractor personnel training and qualification shall meet or exceed all applicable industry standards.

### 7.2 Proof of Training & Qualification

- 7.2.1 Contractor personnel shall always have proof of such training and qualifications and shall produce them as and when requested by the Manager-in-Charge.
- 7.2.2 CPKC reserves the right to inspect qualification certificates, licenses, training records and / or work history records for any contractor personnel, and, or to be provided with copies thereof, on reasonable request. In addition, CPKC reserves the right to perform eTests on contractor employees, and request discipline for non-conformance.
- 7.2.3 As per 49 CFR 243.205 contractors are required to conduct periodic oversight tests and inspections of their safety-related railroad employees if a contractor:
- employs more than 15 safety-related railroad employees;
  - contractor relies on training it directly provides to its own employees as the basis for qualifying those employees to perform safety-related duties on a railroad; and
  - employs supervisory safety-related railroad employees capable of performing oversight.

CPKC, in alignment with 49 CFR § 243 regulations, requires that Contractors retain periodic oversight test and inspection records, which include:

- Date, time, place, and result of each test or inspection;
- Specify each person administering the tests and inspections, and each person tested;
- Indicate whether the employee complied with the monitored duties; and
- Indicate whether any interventions or corrective actions were undertaken to remediate non-compliances or unsatisfactory ratings.

Consistent with 49 CFR § 243 regulations, CPKC requires that records from the periodic oversight test and inspections are retained for a period of one calendar year following the end of the calendar year in which such tests and inspections were conducted. CPKC may request and audit the records for completion, quality, and compliance purposes. In case of an audit, CPKC shall provide a ten (10) business day notice to the contractor to provide the records.

Any changes to FRA regulations in the future will supersede requirements set forth in this letter, as required.

## 8.0 Safety Orientation

### 8.1 General Requirements

- 8.1.1 Prior to beginning work, all contractor personnel shall participate in a CPKC authorized safety orientation, including on-site orientation presented by the Manager-in-Charge or designate.
- 8.1.2 Any time the scope of work, location, condition or supervision changes, contractor personnel may be required to attend additional safety orientation sessions.
- 8.1.3 After successful completion of such safety orientation, contractors must be able to produce company identification or an eRailsafe photo identification badge authorizing access to CPKC property unescorted for the purposes of conducting work. Managers can enter the tracking code into Compliance Management (CM) (CP property) and Operational Testing System (OTS) (KC property). Third parties who hire subcontractors must ensure required compliance while on CPKC property. The eRailsafe identification card shall be worn or be always made visible or produced upon request and cannot be transferred under any circumstances.

## 9.0 Job Safety Briefing

- 9.1.1 Contractor personnel shall attend all job safety briefings as and when conducted. Contractor personnel shall be solely and fully responsible for understanding the content of the job safety briefing, shall:
  - a) understand the scope of work to be performed and an appreciation of the nature of the location, environment, and conditions where such work is to be performed.
  - b) be aware of specific or unusual hazardous condition, existing or potential and the control measures required to protect against, control, mitigate, or where possible, avoid said hazard, and
  - c) have an emergency response plan / evacuation procedures.
- 9.1.2 Where contractor personnel are working directly with or in proximity (time or space) to CPKC personnel, job safety briefings must include both CPKC personnel and contractor personnel, and any other affected third parties. The job safety briefing shall identify nature and extent of the interaction between the work being performed by contractor personnel, and those performed by CPKC personnel or other third parties. Contractor personnel shall inform CPKC personnel, and any other third parties of known or potential unsafe conditions and hazards that may be created by, resulting from, or inherent in their work and the corresponding preventative, mitigation, and / or control measures at all job briefings prior to commencing work, or as soon as contractor personnel becomes aware of such conditions.
- 9.1.3 In all situations, all contractor personnel are expected to:
  - a) continually identify hazards and assess risk of hazards and to communicate all hazards continually and clearly to the Manager-in-Charge and to all other parties that may be affected at job safety briefings, and at any other time as and when appropriate or necessary.
  - b) take actions that are within their assigned responsibility to eliminate or control hazards and risks, and
  - c) immediately notify their supervisor or the Manager-in-Charge of hazards that pose unacceptable risk that they are unable to eliminate or control.
- 9.1.4 Where contractor personnel are unable to eliminate or control a hazard, contractor personnel shall take interim measures to protect people, property, equipment, and the environment until the hazard can be accurately assessed and appropriate corrective actions taken.

## **10.0 Applicable Legislation**

### **10.1 General Requirements**

- 10.1.1 Contractor and contractor personnel shall be solely responsible for identifying and complying with all applicable legislation. Contractor and contractor personnel shall comply with the federal legislations set out below which list is intended solely for general guidance, and not as a comprehensive list of all applicable legislation.
- 10.1.2 Additionally, the Association of American Railroads (AAR) is an industry association which can provide support and guidance on matters related to railroad safety and the transportation of hazardous materials.

### **10.2 Transportation of Hazardous Materials**

- 10.2.1 When work involves the handling or transportation of hazardous materials (hazmat), that work must comply with Hazardous Materials Transportation Act and regulations administered by the Pipeline and Hazardous Materials Safety Administration (PHMSA).
- 10.2.2 Contractors shall be solely responsible for ensuring that all contractor personnel who handles, offers for transport and / or transports hazmat by any transportation mode are trained and hold a valid training certificate or is working under the direct supervision of someone who is trained and holds a valid training certificate. That training must be based on the work that the person is expected to perform and the hazmat that the person is expected to handle, offer for transport or transport.
- 10.2.3 All U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations are published in Chapter I of title 49 of the Code of Federal Regulations (49 CFR).

### **10.3 Railroad Work**

- 10.3.1 When work involves the construction, alteration, operation, inspection, and maintenance of any part work of the general railroad system of transportation, that work must comply with the Federal Railroad Safety Act and regulations administered by the Federal Railroad Administration (FRA).
- 10.3.2 Contractors shall be solely responsible for ensuring that all contractor personnel who perform railroad work are trained and qualified in accordance with those regulations and hold valid certificates when required.
- 10.3.3 All FRA regulations are published in Chapter II of title 49 of the Code of Federal Regulations (49 CFR).

### **10.4 Occupational Safety & Health**

- 10.4.1 Any work being performed that may create a risk to the health and safety of any person, including CPKC personnel and contractor personnel, when not covered by FRA regulations shall be governed by U.S. Department of Labor regulations administered by Occupational Safety and Health Administration (OSHA).
- 10.4.2 All OSHA regulations are published in Chapter XVII of title 29 of the Code of Federal Regulations (29 CFR).

### **10.5 Environmental Protection**

- 10.5.1 Where work is being performed that may impact the environment, that work must comply with all applicable federal state, and local government legislation, regulations, and standards.
- 10.5.2 Federal legislation is generally administered by the Environmental Protection Agency (EPA). A compilation of these laws and regulations can be accessed at <http://www.epa.gov/lawsregs/>

## 11.0 Security Access to CPKC Property

- 11.1.1 All contractor personnel must have a valid eRailsafe photo identification card (when / where required) or personal identification (as per the list below) always authorizing access and in their possession while on CPKC property, and present them for review to any Manager-in-Charge, other CPKC managers and employees, police officer, security guard, or regulatory officer upon request:
- Photo identification (e.g., driver's license); and
  - Proof of employment, document, or card; and
  - CPKC safety orientation certificate, or
  - Building access pass issued by CPKC, or third-party having control over CPKC premises, or
  - CPKC security photo ID card or badge, or
  - Other proof of safety orientation and access authorization issued by CPKC.
- 11.1.2 Where any work requires contractor personnel to ride in locomotive or other non-passenger railroad equipment, the contractor must also possess a CPKC Access Pass for riding non-passenger railroad equipment, signed by the responsible operating manager. Such a signed pass must be presented to the train crew or operator when boarding the equipment. Failure to possess such a pass will result in the equipment not moving, removal from the equipment, and / or the filing of trespasser charges.

## 11.2 Security Awareness

- 11.2.1 Contractor shall conduct employee background checks as is necessary to ensure that contractor personnel do not pose a security risk to CPKC, such security risk includes the risk of the commission of terrorist activities, sabotage, vandalism, theft, and violence. CPKC reserves the right, at all times, to require that contractors undertake certain security training and / or perform background checks on contractor personnel, prior to allowing such contractor personnel to enter onto CPKC property.
- 11.2.2 On request CPKC can make available a copy of CPKC's Railway Security Awareness Program for use by contractor personnel.

## 11.3 Firearms & Explosives

- 11.3.1 Firearms (loaded or empty) are not permitted on CPKC Property, except for police officers and other designated government officials when authorized to do so.
- 11.3.2 No explosives will be permitted on CPKC Property without written approval by the Manager-in-Charge.

## 11.4 Reporting

Contractor personnel must report any security concern, security incident, criminal activity (known or suspected), suspicious happenings and / or suspicious persons on CPKC Property to the Manager-in-Charge or to CPKC Police Services in accordance with Section 20.

## 12.0 Personal Conduct

### 12.1 Drug and Alcohol Prohibition

CPKC recognizes the problem of alcohol and substance abuse in today's society. This problem poses concerns to an employer who is subject to governmental regulations and seeks to promote the safety of the general public. CPKC has a concern for the safety, health and well-being of its employees as well as an obligation to comply with the United States Department of Transportation (DOT) and Federal Railroad Administration (FRA) regulations. CPKC will comply with all statutes and regulations administered by the FRA in implementing the required 49 CFR §219 Drug and Alcohol Program. CPKC also expects employees of other railroads, visitors or contractors to comply with this regulation while on CPKC property, consistent with federal regulations. If subject to this regulation, contractor shall be solely responsible for compliance with the 49 CFR Part 219. Contractor shall provide CPKC with proof of its compliance prior to performing services for CPKC and continued proof of compliance must be provided to CPKC immediately upon request. This proof of compliance will include, but will not be limited to, a copy of the 49 CFR §219 Drug and Alcohol Program Plan and FRA Approval Letter and Continued Certification of Compliance and Statistical Reporting. Periodic audits to ensure compliance with these regulations may be performed and cooperation and compliance is expected upon request.

If subject to other DOT modalities and regulations, such as the Federal Motor Carriers Safety Administration (FMCSA), compliance of that modality's drug and alcohol program guidelines will be required and periodic audits to ensure compliance with these regulations may be performed and cooperation and compliance is expected upon request.

12.1.1 Entry onto CPKC Property when in possession of, or under the influence of alcohol, intoxicants, narcotics, or controlled substances is strictly prohibited. Controlled substances include all Schedule 1 drugs (such as marijuana and "medical marijuana") and synthetic / designer drugs and / or any intoxicants or products labeled "not intended for human consumption".

12.1.2 The sale, trade, and / or offer for sale alcohol or controlled substances are prohibited.

12.1.3 Additionally, contractor personnel shall be free of any condition which may in any way adversely affect alertness, concentration, responsiveness, or the ability react calmly and responsibly to safety hazards.

12.1.4 CPKC reserves the right to request drug and / or alcohol tests for contractor personnel as and where required or permitted by law.

### 12.2 Inappropriate Behavior

12.2.1 CPKC is committed to maintaining a work environment that supports the dignity of all individuals. No person working at CPKC may be subjected to any form of discrimination or harassment, including sexual harassment.

12.2.2 Acts or threats of violence are always unacceptable on CPKC Property. Uttering of threats or committing acts of violence will result in the removal of the responsible contractor personnel from CPKC property, termination of the contract, and / or criminal charges.

12.2.3 Horseplay, practical jokes, fighting or any other activity that may create a safety hazard is not permitted.

### 12.3 Electronic Entertainment and Communication Devices

12.3.1 The use of personal entertainment devices, including portable audio and video devices such as compact DVD, CD, video game players, iPads / tablets, SMART watches, and MP3 players, is prohibited:

- a) while working on CPKC property.

- b) while transporting CPKC personnel, whether on and off CPKC property, and
- c) while operating any CPKC highway vehicle, railroad equipment or mobile equipment, whether on and off CPKC property.

12.3.2 The use of electronic communication devices, including cell phones, walkie-talkies, PDAs, iPads, Tablets, GPS navigation units, portable computers, and similar devices, is prohibited:

- a) while operating any highway vehicle unless it is stopped and parked in a safe location.
- b) while transporting CPKC Personnel, whether on and off CPKC property.
- c) while operating or assisting in the operation of any railroad equipment or mobile equipment.
- d) while operating power tools, equipment, or machinery.
- e) when Foul of Track for any reason.
- f) wherever use is prohibited by signage or by a CPKC manager, or
- g) whenever use of such a device creates an unsafe condition.

12.3.3 Notwithstanding the foregoing, company cell phones, radios, walkie-talkies, GPS units, iPads, tablets, and other communication devices may be used solely for the conduct of business when authorized by the CPKC Manager-in-Charge and where not prohibited by state or municipal legislation. Any electronic communication device may be used when it is necessary to communicate an emergency condition.

## **12.4 Smoking**

12.4.1 Smoking, including the use of e-cigarettes is prohibited on all CPKC Property, and in or on all highway vehicles, Railroad Equipment, and Mobile Equipment, except for CPKC designated outdoor smoking areas.

## **13.0 Personal Protection**

### **13.1 Work Clothing**

13.1.1 The Contractor must ensure that contractor personnel wear clothing that meets applicable legislation and is suitable to perform the work safely. This always includes at minimum ankle length pants and waist length shirts with a minimum quarter-length sleeves. Clothing must not interfere with vision, hearing or use of hands and feet.

### **13.2 Personal Protective Equipment (PPE)**

13.2.1 The contractor shall ensure that contractor personnel wear personal protective equipment required by applicable legislation, regulations, codes and industry standards as necessary to protect against personal injuries while on railroad property. All personal protective equipment shall meet applicable legislation and American National Standards Institute (ANSI) standards and shall be in good condition and be properly fitted.

13.2.2 The following mandatory personal protective equipment ("PPE") shall be supplied by the contractor at its own expense, and shall be always worn by contractor personnel while on CPKC property:

- Safety hard hat, meeting ANSI Z89.1 standards, except in office buildings or in enclosed vehicles or equipment.
- Safety footwear with protective toe caps and puncture resistant soles, meeting ASTM F2413 standards.
- Safety glasses with permanently attached side shields meeting ANSI Z87.1

- standards in office buildings or enclosed highway vehicles.
- Note- transition lenses are not permitted.
- High visibility fluorescent outerwear with retro reflective striping meeting ANSI / ISEA 107 Class 2 standards not covered by other clothing or equipment, except where necessary for safety reasons such as where fall protection or pole climbing equipment is being used.
- Any other PPE as required by applicable legislation or referenced standard, or as otherwise required to protect contractor personnel from injuries.

| Type of Protection      | Additional Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hard Hats               | Have hi-visibility characteristics which are not obscured by markings or decals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Safety Eyewear          | <p>Tinted safety eyewear must meet military tinting standards for red signal recognition if operating railway equipment (safety eyewear meeting this requirement is available from Wurth / North / ORR Safety; ask for CPKC approved tinted safety eyewear).</p> <p>Polarized lenses are discouraged and should be worn with caution when required to view LCD / LED screens. Transition lenses are discouraged and should be worn with caution when working in changing light conditions.</p> <p>Personal sunglasses are discouraged and must not be worn when operating railway equipment.</p> <p>Wear mesh face shields over top safety glasses when using any striking tool while performing on track maintenance work (e.g., spiking, snapping on/off anchors, etc.). If working alongside CPKC employees, you will be required to comply with this practice.</p> |
| Safety Footwear         | <p>Have defined heels.</p> <p>Laced fully to the top and tied securely for ankle support.</p> <p>When snow and ice conditions are present wear anti-slip winter footwear.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| High Visibility Apparel | Lime-green is recommended when working on, or near tracks, or when performing work in proximity to CPKC personnel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

13.2.3 Contractor and contractor personnel shall be solely and fully responsible for assessing the risks related to the work and determining whether additional PPE may be required such as:

- Nomex or Proban fire-retardant protective gear when performing certain Transportation of Dangerous Goods (TDG) work and / or handling certain Hazardous Materials or performing specialized work.
- Hearing protection when working in any area where noise exposure levels:
  - are consistently equal to or greater 85 dBA.
  - exceed 115 dBA at any time.
  - any other work areas where posted, or so notified by CPKC management.
- Respiratory protection where contractor personnel may be exposed to occupational dusts / particulates, fumes, mists, gases and vapors, in which case, in which case contractors must have a written Respiratory Protection Program that meets or exceeds applicable legislation.
- Additional eye and face protection meeting ANSI standard Z87.1 (i.e. face shields, impact / splash goggles, welding / cutting goggles and welding helmets).
- Fall protection systems and equipment meeting appropriate ANSI Z359 standards as required by applicable legislation and as appropriate for the related fall hazards.
- Fall protection when working on an unguarded surface over water, where the water is deeper than 4 feet (1.2 m), or where there is a hazard of drowning due to terrain, winter conditions, water velocity or current; contractors must use a fall protection system or a personal floatation device (PFD) meeting approved standards.

## 14.0 Railroad Track Protection

### 14.1 Contractor's Responsibilities for the Protection of Railroad Traffic and Property

- 14.1.1 Where the work site is in close proximity to, or is located on, above, or below railroad tracks, special attention, care and precautions shall be taken to ensure the safety of all contractor personnel, CPKC personnel, all other third parties and to protect CPKC's property and railroad operations.
- 14.1.2 Contractor shall ensure that contractor personnel are made aware of all unique and inherent hazards in working near, on, above or below railroad tracks and shall ensure that all contractor personnel are fully trained and equipped to work safely.
- 14.1.3 Contractors who perform inspection, maintenance or repair to railroad tracks or track structures must be trained in accordance with FRA On Track Safety Rules (FRA 49 CFR Part 214, Subpart C - Roadway Worker Protection Regulations).
- 14.1.4 Contractors will not be allowed to foul a track unless:
  - a) They have been properly advised of the On Track Safety awareness procedures.
  - b) A railroad employee who is qualified to provide protection is present at the work site, or
  - c) The contractor has personnel present who are specifically trained, qualified, and authorized to provide that protection.
- 14.1.5 All work shall be organized or executed in such a manner as to ensure no interference with the regularity and safety of railroad operations. No step or sequence of any work that might directly or indirectly affect the safe movement of railroad traffic shall be started without the approval of the Manager-in-Charge.
- 14.1.6 No temporary structure, materials, or equipment shall be permitted closer than 12 feet (3.7 m) to the nearest rail of any track without prior approval in writing of the Manager-in-Charge.  
  
Contractor personnel shall always remain alert to the movement of trains, rolling stock and other railroad equipment.
- 14.1.7 Contractor Personnel shall be especially alert in yards and terminal areas as
  - a) Railroad equipment that appears to be stationary may be moving.
  - b) Rate of movement of railroad equipment may be faster than it appears.
  - c) Railroad equipment change tracks often; and movements may be occurring simultaneously on adjacent tracks.
- 14.1.8 The Contractor shall always conduct its operations in a wholly responsible manner to avoid damage to the CPKC's tracks or property.

### 14.2 Clearance Requirements (50 feet / 15.2 m)

- 14.2.1 All work shall be performed as far away from railroad tracks as possible.
- 14.2.2 Unless authorized by CPKC, contractor personnel, equipment, and vehicles are not permitted to be within 50 feet (15.2 m) of the closest track centerline.
- 14.2.3 In the event work must be carried out within 50 feet (15.2 m) of the closest track written authorization must be obtained from the Manager-in-Charge, and contractor personnel must always remain at the maximum practicable distance from all railroad tracks.

- 14.2.4 When crossing tracks, contractor personnel shall ensure a minimum of 50 feet (15.2 m) separation between standing railroad equipment, stay at least 15 feet (4.6 m) away from the end of the nearest equipment, and look both ways before crossing tracks, and if clear, walk at a right angle to the tracks.
- 14.2.5 No work activities or processes are allowed within 50 feet (15.2 m) of the track while trains are passing through the work site unless specifically authorized.

### **14.3 Flagging Protection**

- 14.3.1 When the work requires contractor personnel to be within 50 feet (15.2 m) of any railroad tracks, contractor or contractor personnel shall notify and obtain the written approval of the Manager-in-Charge in advance of the intended start date, and when approved, shall only perform work strictly in accordance with all terms and conditions of that approval.
- 14.3.2 Unless otherwise indicated by the Manager-in-Charge, proper protection against the movement of trains, rolling stock and other railroad equipment shall be deemed always required whenever work or contractor personnel must be within 50 feet (15.2 m) of the closet track. Protection may be provided only by a qualified CPKC employee through use of a flag person.
- 14.3.3 Where CPKC determines that flagging is required, then work must be strictly conducted under the direction of a CPKC flag person, or such other person designated by the Manager-in-Charge.
- 14.3.4 Contractor personnel shall ensure that there is always clear communication between contractor personnel and any CPKC flag person. Contractor personnel shall ensure that they are aware of:
  - (a) flagging distance limits.
  - (b) time limits, and
  - (c) any adjacent tracks where movement of railroad equipment may still occur.
- 14.3.5 Contractor Personnel shall not assume that a train movement is being stopped or cleared unless clear communication is received directly from the CPKC flag person.
- 14.3.6 A job briefing between the CPKC flag person, and all contractor personnel must occur before beginning any work on or foul of track.
- 14.3.7 Blue signal protection is used to indicate that CPKC or contractor personnel are working on, under or between railroad equipment and movement of trains or other railroad equipment is prohibited. Blue signals must not be tampered with or obstructed. Blue signals can only be removed by the person or group of persons who originally applied it. Application, use, and removal of blue signals, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge.
- 14.3.8 Red flag protection is used to indicate that CPKC or contractor personnel are working on or foul of track, or the track is out of service and movement of trains or other railroad equipment is prohibited. Red flags must not be tampered with or obstructed. Application, use, and removal of red flags, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge.

### **14.4 Working on or near Tracks**

- 14.4.1 When authorized to perform work foul of track or otherwise be near railroad tracks, contractor personnel shall ensure all contractor personnel, equipment, and vehicles are kept as far away from railroad tracks as practicable, and shall at all times:
  - (a) be alert to train movements and shall expect the movement of trains, engines, cars, or

other mobile railroad equipment at any time, on any track, and in any direction, even if they appear to be stationary or in storage.

- (b) not rely on others to protect them from train movement.
- (c) stay at least 15 feet (4.6 m) away from the ends of railroad equipment when crossing the track.
- (d) ensure a minimum of 50 feet (15.2 m) separation prior to crossing between railroad equipment.
- (e) look both ways before crossing tracks, and if clear, walk at a right angle to them.
- (f) never climb on, under or between railroad equipment.
- (g) be aware of the location of structures or obstructions where track clearances are close.
- (h) not stand on the track in front of an approaching engine, car, or other equipment.
- (i) stand at least 20 feet (6.1 m) from the track(s) when there is a passing movement of trains, engines, cars, or other mobile railroad equipment, to prevent injury from flying debris or loose rigging and shall observe the train as it passes and be prepared to take evasive action in the event of an emergency.
- (j) not stand on or between adjacent tracks in multiple track territory when a train is passing.
- (k) not walk, stand or sit on the rails, between rails or on the end of ties, unless necessary. As the rail surface can be extremely slippery, personnel must step over the rails when crossing tracks. Personnel shall also be aware railroad ties can also be slippery and that railroad ballast can shift while walking on top of it. Situational awareness and use of proper footwear is important.
- (l) not remain in a vehicle that is within 50 feet (15.2 m) of a passing train unless specifically authorized, or where this is not possible.
- (m) keep away from track switches as remotely operated switch points can move unexpectedly with enough force to crush ballast rock. Personnel shall stay away from any other railroad devices they are unsure of. Personnel shall not disturb or foul the ballast at any time.
- (n) Third party work that has a potential to impact rail traffic must consider machine swing radius, vertical grade differences, overhead work, etc. to ensure it will not impact a passing train; work and equipment must maintain 50 feet (15.2 m) of a passing train.
- (o) When exiting on track machinery as trains are passing; exit on the opposite side.
  - i) use 3-point contact when getting on / off any vehicle, equipment, or track unit.
  - ii) face the vehicle or equipment / track unit when getting on / off.
  - iii) place handheld items onto equipment / track unit or seek help prior to getting on / off.
  - iv) get on / off on the operators' side when possible.

## **14.5 Equipment on or near tracks**

- 14.5.1 Contractor personnel shall not be Foul of Track with any piece of equipment without a CPKC flag person or other authorized track protection.
- 14.5.2 Contractor personnel shall not move equipment across the tracks except at established road crossings, or unless under the protection and authorization of a CPKC flag person and only if the work site has been properly prepared for such a move. Tracked equipment will require a CPKC flag person any time railroad tracks are crossed.
- 14.5.3 Contractor personnel shall not move equipment across railroad bridges or through tunnels, except as expressly authorized and only under such conditions as stipulated by the Manager-in-Charge.

- 14.5.4 When there is passing rail traffic, contractor personnel shall move equipment away from the tracks at least 50 feet (15.2 m), or where not possible, park the equipment as far away from the tracks as possible, exit to the side away from the track where the movement is taking place, and walk to a safe distance.
- 14.5.5 When there is passing rail traffic, buckets, shovels, and loads on cranes must be lowered to the ground to rest, and cranes without a load must have their load line tightened or retracted to prevent movement.

## **14.6 Railroad Signs, Signals, Flags, and other Communication Infrastructure**

- 14.6.1 Signs, signals and flags shall not be obstructed, removed, relocated, disabled, or altered in any way without proper authorization and qualification.
- 14.6.2 Only qualified contractor personnel who are authorized by CPKC are permitted to operate switches, derails, electric track mechanisms, signal and communication systems or other track control appliances.
- 14.6.3 Railroad pole lines carry electric power and should be treated as any other power lines.
- 14.6.4 The contractor shall keep all contractor personnel informed of current weather conditions.  
  
Personnel shall stay alert for possible high-water conditions, or flash floods. During severe weather conditions:
  - a) Personnel shall be prepared to take cover in the event of a tornado.
  - b) Personnel shall not work while lightning is occurring.
  - c) If storm conditions arise unexpectedly, contractor personnel shall ensure that equipment is in the clear of the tracks and secured before seeking cover. Contractor personnel shall stay away from railroad tracks when visibility is poor, such as during fog or blizzard conditions.

Any Contractor personnel discovering a hazardous or potentially unsafe condition, which may affect the safe passage of railroad traffic, must advise CPKC immediately by calling:

- CPKC U.S. North (north of Kansas City) 1-800-716-9132
- CPKC U.S. South (Kansas City and south of) 1-877-527-9464

## **14.7 Excavation**

- 14.7.1 Before starting excavation operations, the contractor shall ascertain that there are no underground wires, fiber optic cables, pipelines or other utilities which could be damaged or, if present, that such installations are properly protected. Fiber optic cables are present on most segments of the right-of-way. Prior to commencing any excavation, the contractor shall contact the proper authority CPKC and / or public utility to obtain the necessary permit and to locate and protect such cables or other underground utilities.
- 14.7.2 Excavations shall not be left unattended unless they are properly protected; and the Manager-in-Charge shall be notified.
- 14.7.3 Contractors must obtain and maintain utility locates in accordance with applicable law.

## **15.0 HAZCOM**

### **15.1 General Requirements**

- 15.1.1 If at any time contractor's work involves the use, handling, storage, or disposal of hazardous materials ("Handling of Hazardous Materials"), Contractor Personnel must inform the Manager-in-Charge.
- 15.1.2 Contractors shall ensure that all contractor personnel are fully trained in the handling of hazardous materials and that contractor and contractor personnel are in full compliance with all applicable legislation, and as directed by the Manager-in-Charge.
- 15.1.3 Contractor personnel shall have appropriate processes, systems and controls in place to prevent or otherwise mitigate potential environmental, health and safety risks associated with the handling of hazardous materials.

### **15.2 Access to Safety Data Sheets (SDS)**

- 15.2.1 Prior to beginning any work that may expose CPKC personnel to hazardous materials, contractor or contractor personnel shall:
  - a) provide a copy of the respective SDS to the Manager-in-Charge, and
  - b) keep a copy of the SDS at the work site and ensure that it is always readily available.

### **15.3 Hazardous Material Incident or Spill**

- 15.3.1 In the event of a hazardous material incident or spill, the contractor must:
  - (a) ensure that no contractor or CPKC personnel have or will be exposed
  - (b) take all reasonable actions to contain the spill
  - (c) respond in accordance with its emergency response plan, and
  - (d) notify CPKC immediately in accordance with Section 18 below.

## **16.0 Operation of Highway Vehicles**

### **16.1 Highway Vehicles**

- 16.1.1 The following requirements apply to all highway vehicles, when operated on CPKC property; or used to transport CPKC personnel.

### **16.2 Regulations and Inspection**

- 16.2.1 Before using a highway vehicle, contractor personnel shall:
  - (a) complete a pre-trip inspection.
  - (b) maintain an inspection log.
  - (c) ensure periodic inspections are completed at official testing locations as required.
  - (d) ensure the vehicle is always maintained and in safe operating conditions, and
  - (e) ensure the vehicle is in compliance with applicable motor vehicle regulations and license requirements.
- 16.2.2 Vehicle maintenance, inspection records and logs must be made available to the Manager-in-Charge on request.

### 16.3 Vehicle Operator Requirements

- 16.3.1 Operation of highway vehicles is restricted to those contractor personnel who are licensed, qualified and authorized to do so. Such contractor personnel shall be always responsible for the safety of all passengers. For greater certainty, such contractor personnel shall:
- (a) hold a valid license for the class of vehicle being operated, in accordance with applicable local, state, and federal requirements.
  - (b) strictly comply with all posted traffic signs, signals, and all shall obey all applicable legislation,
  - (c) maintain the required driver log, and make the log available to the Manager-in-Charge on request, and
  - (d) comply with the requirements on the use of electronic devices as set out in Section 12 above.

### 16.4 Driving on CPKC Property

- 16.4.1 In addition to the requirements set out above, while on CPKC Property, contractor personnel shall:
- (a) travel only on designated roadways unless otherwise instructed.
  - (b) keep daytime running lights on (if so equipped).
  - (c) not exceed 15 mph (24.1 Km/h) unless otherwise posted.
  - (d) come to a full stop at all blind corners, rail, and roadway crossings.
  - (e) yield the right of way to all mobile equipment and other non-highway equipment or service vehicles.
  - (f) not operate vehicles (or any internal combustion equipment) inside buildings or enclosed structures unless adequate ventilation is provided.
  - (g) not park foul of track unless on-track protection is provided.
  - (h) not leave vehicles running unnecessarily.
  - (i) park only in pre-determined or designated areas.
  - (j) always use the parking brake (or wheel chocks) when leaving an unoccupied vehicle running.
  - (k) prior to operation of a vehicle the driver must conduct a walk around of the vehicle to identify any obstacles, clearance restrictions, or adjacent vehicles that may interfere with executing a safe movement.
  - (l) where safe and practicable, pull vehicles through or back into marked parking spaces to avoid reverse collisions when exiting.
  - (m) If a passenger is present, he exit the vehicle prior to a reverse movement to provide guidance and direction to the driver during the reverse movement and applies to commercial vehicles and vehicles with restricted rear views.
- 16.4.2 All contractor personnel who will be operating a highway vehicle or mobile equipment in any CPKC intermodal facilities must complete a driver safety orientation program prior to first entry, and from time to time thereafter as directed by the Manager-in-Charge.

**16.5 Seat Belts**

- 16.5.1 Seat belts must always be worn while operating or riding in any equipped vehicle unless contractor personnel is actively engaged in inspections requiring said contractor personnel to be free of such restraint, and then only when the vehicle is operating at less than 15 mph (24.1 Km/h).

**16.6 Loads**

- 16.6.1 Contractor personnel shall ensure vehicles are loaded according to weight and dimensional requirements as authorized by state regulations and permits, and properly load and secure tools, material, equipment and freight to avoid shifting, falling, leaking or otherwise escaping from vehicles during operation.

**16.7 Riding in CPKC Vehicles**

- 16.7.1 Contractor personnel are prohibited from operating or riding in any CPKC vehicles unless authorized to do so, or in case of emergency.

**17.0 Tools, Equipment and Machinery****17.1 General Safety Requirements Respecting All Tools, Equipment and Machinery**

- 17.1.1 Contractor personnel shall ensure that all tools, equipment, and machinery used be:
- (a) in compliance with all applicable legislation.
  - (b) in good working order, properly serviced and maintained.
  - (c) safe for their proposed use and used only for purposes specified by the manufacturer.
  - (d) operated and maintained only by persons properly trained and qualified for that duty.
  - (e) seat belts (if present on equipment) must be worn while operating or riding any such equipped mobile equipment.
  - (f) if mobile, equipped with appropriate safety devices (e.g., lights, horns, back-up alarms, safety beacons), and
  - (g) be prevented from moving, through use of the hand brake, wheel blocking, wheel chocking and / or a derail, where applicable.
- 17.1.2 The contractor shall provide adequate lighting when performing work between sunset and sunrise.
- 17.1.3 Use of CPKC tools, equipment and machinery by contractor personnel is prohibited unless specifically authorized by local CPKC management.

**17.2 Hazardous Energy Control- Lockout**

- 17.2.1 Contractor personnel shall employ lockout / tagout procedures as required to eliminate the accidental or unexpected start-up, energizing, or release of stored (residual) energy during maintenance, repair and/or servicing activities.
- 17.2.2 All tools, equipment and machinery must be made safe and isolated from all energy sources rendering the machine, equipment, or process inoperative prior to performing maintenance, repair or servicing related tasks.
- 17.2.3 No contractor personnel can remove any CPKC applied lock or tag, including bad-order tag.
- 17.2.4 Notwithstanding the foregoing, if contractor's work may create an energy hazard to any CPKC.

Personnel, then all affected parties must follow the requirements set forth in CPKC's Lockout – Hazardous Energy Control Policy and Code of Practice.

- 17.2.5 If CPKC personnel and contractors are jointly performing maintenance, repair or servicing activities on the same machine, equipment or using the same energy source, then a multi-lock hasp must be applied with individual locks and tags affixed (as per CPKC's Lockout – Hazardous Energy Control Policy and Code of Practice).

### **17.3 Electrical Safety Requirements**

- 17.3.1 In addition to the hazardous energy control lockout requirements above, all electrical work must comply with applicable legislation, National Electrical Code (NEC), and National Fire Protection Association (NFPA) requirements.

- 17.3.2 Contractor personnel working on electrical systems must:

- (a) if in proximity to CPKC Personnel, inform them of:
  - (i) existing or potential electrical hazards,
  - (ii) any specific additional personal protective equipment that may be required,
  - (iii) applicable safe work practices,
  - (iv) applicable emergency and evacuation procedures, and
  - (v) apply lock out procedures as per section above on Hazardous Energy Control- Lockout.
- (b) have practices, procedures and training that comply with:
  - (i) Applicable sections of the NEC and NFPA electrical safety standards.
  - (ii) Any other applicable legislation.
- (c) not operate or allow cranes or other mobile equipment to approach closer to any live electrical power line than is permitted by OSHA regulations (29 CFR 1910.333).

### **17.4 Lifting Devices**

- 17.4.1 All lifting devices, including but not limited to jacks, cranes, cables, slings, chains, and hooks shall:

- (a) meet applicable legislation governing design, inspection, maintenance, and operation.
- (b) be safety certified and labeled or tagged with load capacity limits where required.
- (c) have sufficient capacity for the planned lift.
- (d) have sufficient footing or support area to properly distribute the load during a lift.

### **17.5 Welding and Torch Cutting**

- 17.5.1 When welding or torch cutting, contractor personnel shall:

- (a) be properly trained and qualified.
- (b) ensure that all closed containers have been properly purged.
- (c) direct flame or sparks away from other workers, equipment and flammable material.
- (d) have a fire extinguisher readily available.
- (e) keep compressed gas and oxygen cylinders stored in a secure, vertical position, with regulators removed and caps applied, labeled properly, and located in vented cabinets or other designated locations.

## **17.6 Explosive Actuated Tools**

- 17.6.1 Only contractor personnel who are qualified and licensed in accordance with applicable legislation, and authorized by CPKC, may use explosives or explosive actuated tools.

## **17.7 Unattended Equipment or Machinery**

- 17.7.1 Tools, equipment and machinery shall not be left unattended at any time and shall not be stored on CPKC property, unless expressly permitted pursuant to a written agreement with CPKC or by the Manager-in-Charge in writing, and where so permitted, contractor shall ensure that:
- (a) storage shall be restricted to the designated area, or as otherwise specified by CPKC.
  - (b) all such tools, equipment and machinery shall be secured in a safe position well clear of all tracks to prevent accidental contact with trains and moving equipment and to not restrict train crew sightlines.
  - (c) as much as possible, tools, equipment and machinery shall be stored in locations out of public view.
  - (d) Machines must be secured in accordance with on-track machinery rules.

## **18.0 Emergency Response**

### **18.1 Emergency Response Plan**

- 18.1.1 The contractor must maintain a current emergency response plan and make it available to CPKC on request. Emergency response plans must include at a minimum:
- (a) contractor reporting procedures in the event of an incident or spill.
  - (b) emergency response contacts and phone numbers, including phone numbers for CPKC incident reporting and local CPKC managers (See Attachment A), and
  - (c) containment measures to be taken in the event of an incident or spill.

### **18.2 Initial Response**

- 18.2.1 Initial response to any emergency condition must follow the following sequence:
- (a) Protect the safety and security of all individuals and communities.
  - (b) Provide environmental protection and mitigation.
  - (c) Conduct incident investigation and evidence preservation.
  - (d) Restore railroad operations.

### **18.3 First Aid**

- 18.3.1 Contractor personnel must have sufficient First Aid qualified personnel and the required first aid kit and any other required first aid equipment at the work site, suitable for the crew size, nature of work being performed and location, all of which shall, at a minimum, comply with OSHA regulations (29 CFR 1910.266).

### **18.4 Fire Protection**

- 18.4.1 The contractor must have appropriate fire extinguishers suitable (i.e., type, size and quantity) for nature of the work being done, in compliance with applicable legislation, and be always readily available on:

- (a) the work site, and
- (b) all contractor equipment, machinery, and highway vehicles.

18.4.2 Contractor personnel shall ensure that all necessary precautions are taken to prevent fires, including the following:

- (a) storing flammable material (e.g., paper, rubbish, sawdust, oily or greasy rags, etc.) in proper containers,
- (b) storing and transporting fuel, gasoline, or other flammable liquids in approved containers. Use of unapproved containers is prohibited,
- (c) proper disposal of flammable material daily,
- (d) preventing static electricity when dispensing or transferring flammable liquids by using proper grounding and bonding techniques,
- (e) avoid using cutting or welding torches during the last one-half hour of shifts, if possible.
- (f) taking special precautions with fusees, including:
  - (i) store and transport in approved containers.
  - (ii) do not allow fusees to come in contact with any combustible material, including railroad ties or wooden timbers, and
  - (iii) fully extinguish fusees before leaving the location where used.
- (g) promptly advise CPKC management of any fire on CPKC property, and
- (h) fully extinguish or provide protection for any fire prior to leaving the work site.

18.4.3 Contractors working on the CPKC right-of-way where a high risk of fire exists (e.g., during rail grinding, rail welding) must have:

- (a) appropriate fire prevention and suppression plans (including emergency numbers for CPKC, local firefighters and fire control districts), and
- (b) additional firefighting equipment and trained contractor Personnel on site, as required by applicable legislation or the Manager-in-Charge.

## **19.0 Confined Space**

### **19.1 Confined Space**

- 19.1.1 Qualified and authorized contractor personnel must follow all required confined space entry procedures in accordance with applicable legislation and standards prior to entering into a confined space.
- 19.1.2 Rescue procedures and equipment must readily available when required to enter a confined space.

## **20.0 Reportable Accidents, Incidents, and Injuries**

### **20.1 Reportable Injuries**

- 20.1.1 Reportable injuries include any personal injury to:
  - (a) Contractor personnel.
  - (b) any CPKC personnel, or
  - (c) to any third party on CPK property.

## 20.2 Reportable Accidents

20.2.1 Reportable accidents include any occurrence that results in:

- (a) damage to railroad tracks, right of way, buildings or other CPKC property,
- (b) damage to railroad equipment,
- (c) damage to CPKC highway vehicles,
- (d) release of hazardous material,
- (e) spill or loss of transported commodities, and
- (f) any threat to the environment.

## 20.3 Reportable Incidents

20.3.1 Reportable incidents include:

- (a) unintended movement of railroad equipment.
- (b) failure to provide track protection for workers when required.
- (c) movement of railroad equipment beyond authorized limits.
- (d) operation of railroad equipment by an unqualified person.
- (e) unauthorized handling of a track switch.
- (f) damage, vandalism or tampering with any railroad signals, structures or railroad safety device.
- (g) seepage, leakage, spills of, or other contamination from, hazardous materials.
- (h) actual, threaten or suspected security related incidents.
- (i) slides, washouts, or other on-track obstructions, or
- (j) any occurrence that may disrupt the movement of trains or affect safe rail operations.

## 21.0 Reporting

### 21.1 Emergency Reporting

21.1.1 In the case of an emergency, contractor personnel must call:

- (a) 911, where this emergency response system exists, or
- (b) the local police, fire or emergency department in all cases, and
- (c) CPKC Police Services Communication Center- 1-800-716-9132.

### 21.2 Accident, Incident, Injury Reporting

21.2.1 When an accident, incident or injury occurs on CPKC Property, the contractor must:

- (a) immediately report it to the
  - (i) CPKC U.S. North (north of Kansas City) 1-800-716-9132 or CPKC U.S. South (Kansas City and south of) 1-877-527-9464
  - (ii) CPKC Manager-in-Charge
- (b) follow all instructions given to protect the scene.

21.2.2 CPKC is obligated to report contractor personnel injuries occurring on CPKC property to the Federal Railroad Administration (FRA). Any state or required regulatory reporting remains the contractor's responsibility.

### 21.3 Information to Report

21.3.1 Information required with the initial report includes:

- (a) type of incident.
- (b) date and time of occurrence.
- (c) location (mileage, subdivision, building, yard, or other physical description).
- (d) identity of person(s) involved or injured (company & name).
- (e) description of any hazardous materials involved.
- (f) type & unit number of any railroad equipment or vehicle involved.
- (g) description of occurrence, damage and/or injury, and cause if known.
- (h) description of any emergency response.
- (i) name and contact information of person making the report, and
- (j) any such other information that CPKC may require.

### 21.4 Environmental Incidents and Spills

21.4.1 In the event of an environmental incident or spill that could have a negative impact on the environment, the contractor must immediately:

- (a) Report the incident to the Operations Center, the Manager-in-Charge, and the designated CPKC Contact as per the governing agreement relating to the work.
- (b) take all reasonable actions to contain the spill.
- (c) respond in accordance with its emergency response plan, and
- (d) provide CPKC with the following information:
  - (i) description of location and surrounding area, including any sensitive environmental areas nearby (e.g., rivers, parks, sewers).
  - (ii) type and quantity of substance released.
  - (iii) cause of spill or deposit, if known, and
  - (iv) details of any immediate action taken, or action proposed to be taken to contain spill and recover substance.

### 21.5 Additional Contractor Requirements

21.5.1 Contractor and Contractor Personnel must:

- (a) ensure an appropriate emergency response is initiated.
- (b) protect any evidence until released by the CPKC Manager-in-Charge.
- (c) cooperate fully with any CPKC investigation.
- (d) cooperate fully with any investigating government agency, and
- (e) notify CPKC if information is requested by any investigating government agency.

## 22.0 Contractor & Contractor Personnel Acknowledgement

### Acknowledgement

- 20.1.1 Contractor and Contractor Personnel who Work on CPKC Property shall be deemed to have read and understood the content of these CPKC Safety Requirements for Contractors - United States, as amended from time to time, and to agree to be bound by them.
- 20.1.2 These CPKC Safety Requirements for Contractors - United States are subject to change without prior notice.



***Home Safe is a commitment to be vigilant about personal safety and the safety of co-workers.***

**21.0 Attachment A – Emergency Information Sheet**

| <b>Emergency Contact Information:</b>                                                                           |                |                  |
|-----------------------------------------------------------------------------------------------------------------|----------------|------------------|
| <b>Emergency Contacts:</b>                                                                                      | <b>Phone:</b>  | <b>Location:</b> |
| CPKC U.S. North<br>(North of Kansas City):                                                                      | 1-800-716-9231 |                  |
| CPKC Public Safety Communication<br>Centre (PSCC)                                                               |                |                  |
| CPKC U.S. South<br>(Kansas City and south of)                                                                   | 1-877-527-9464 |                  |
| CPKC U.S. North Railroad Dispatcher<br>Radio Channel:                                                           |                |                  |
| CPKC U.S. South Railroad Dispatcher<br>Radio Channel:                                                           |                |                  |
| Manager-in-Charge (MIC):                                                                                        |                |                  |
| Local Emergency Services (EMS):                                                                                 |                |                  |
| Local Police Services:                                                                                          |                |                  |
| Local Fire Services:                                                                                            |                |                  |
| Hospital:                                                                                                       |                |                  |
| Physician:                                                                                                      |                |                  |
| Aircraft service, (if applicable):                                                                              |                |                  |
| Watercraft service, (if applicable):                                                                            |                |                  |
| Other Emergency Services:                                                                                       |                |                  |
| <b>Emergency Evacuation Route:</b><br>(Describe nearest evacuation assembly location or provide sketch on back) |                |                  |

**22.0 Attachment B – Work Site Information Sheet**

| <b>Work Site Information:</b>                                    | <b>Details:</b> |
|------------------------------------------------------------------|-----------------|
| Worksite Location Name:                                          |                 |
| Worksite Location Address:                                       |                 |
| Railroad Subdivision Name and Mileage:                           |                 |
| Nearest Town:                                                    |                 |
| Manager-in-Charge:<br>(Name / Phone Number)                      |                 |
| Contractor Supervisor:<br>(Name / Phone Number)                  |                 |
| Worksite Phone Number:                                           |                 |
| Certified First Aid Attendant(s):<br>(Name(s) / Phone Number(s)) |                 |
| Location of First Aid Kit(s):                                    |                 |
| Location of AED (if onsite):                                     |                 |
| Location of Fire Extinguishing Equipment:                        |                 |
| Location of Safety Data Sheets (SDSs):                           |                 |

| Utility Information:                                                       |        |           |
|----------------------------------------------------------------------------|--------|-----------|
| Utilities Contact:                                                         | Phone: | Location: |
| Natural Gas:                                                               |        |           |
| Water / Sewer:                                                             |        |           |
| Electrical (Overhead):                                                     |        |           |
| Electrical (Underground):                                                  |        |           |
| Fiber Optic Line:                                                          |        |           |
| Phone Lines:                                                               |        |           |
| Cable Lines:                                                               |        |           |
| Confined Space Entry, (if applicable)                                      |        |           |
| Equipment requirements for confined space entry / rescue, (if applicable): |        |           |
| Fall Protection Plan Location, (if applicable):                            |        |           |
| Other:                                                                     |        |           |
|                                                                            |        |           |
|                                                                            |        |           |
|                                                                            |        |           |
|                                                                            |        |           |
|                                                                            |        |           |
|                                                                            |        |           |
|                                                                            |        |           |

**Notes:**

[illegible]

## RIGHT OF ENTRY LICENSE AGREEMENT

THIS LICENSE AGREEMENT (this “**Agreement**”) is made by and between **CENTRAL MAINE & QUÉBEC RAILWAY US** doing business as Canadian Pacific Kansas City and **Add Your Company Name**.

### 1. PARTIES

**CENTRAL MAINE & QUÉBEC RAILWAY US**, a Delaware corporation doing business as Canadian Pacific Kansas City with general offices at:

| Address                                                                                             | Contact Info                       |
|-----------------------------------------------------------------------------------------------------|------------------------------------|
| Canadian Pacific Kansas City Plaza<br>120 South 6th St. – Suite 700<br>Minneapolis, Minnesota 55402 | Name: Charles Kretchman            |
|                                                                                                     | Phone: (612) 247-0706              |
|                                                                                                     | Fax:                               |
|                                                                                                     | Email: charles.kretchman@cpkcr.com |
|                                                                                                     |                                    |

hereinafter called “**CPKC**,”

and **Add Your Company Name**, a whose address is:

| Address                 | Contact Info    |
|-------------------------|-----------------|
| <b>Add Your Address</b> | Name: Your Name |
|                         | Phone:          |
|                         | Fax:            |
|                         | Mobile:         |
|                         | Email:          |

hereinafter called “**Licensee**.”

### 2. PROPERTY; SCHEDULE; GRANT OF LICENSE

#### 2.1 Property

CPKC hereby grants Licensee a license to enter in and upon certain properties owned or controlled by CPKC in **Big Moose TWP, Maine near railroad mile post 44.84+/-** on the **Moosehead Subdivision**, and **Greenville, Maine near railroad mile post 33.21+/-** on the **Moosehead Subdivision**, as shown upon the map labeled **Exhibit A** that is attached hereto and made a part hereof (the “**Property**”).

#### 2.2 Work Schedule

for the sole for the purpose of performing, generally, the following activities: **Light Capital Paving Preservation, including the milling of bridge joints & butt joints, with some possible profile milling, and shim, followed by a 3/4” HMA overlay project** (the “**Work**”), as detailed in Licensee’s plans, specifications and special provisions. The Work is subject to approval by CPKC’s authorized representative.

#### 2.3 Grant of License

This license is granted subject to all the terms and conditions set forth below and applies to all Work and activities upon the Property that may be performed by Licensee through its employees, agents, and contractors. For the purposes of this Agreement, the actions and omissions of such employees, agents, and contractors shall be deemed the actions and omissions of Licensee.

#### 2.4 Agreement to be Available at Work Site

Licensee shall keep a copy of this Agreement at the Work site and shall make it available upon demand by any employee or agent of CPKC.

### 3. TERM, EFFECTIVE DATE, EXPIRATION & TERMINATION

#### 3.1 Term

The term of this Agreement shall

*Commence* at 12:01 am on **Add Your Start Date** (the “Commencement Date”); and

*Expire* at 11:59 pm on **Add Your End Date** (the “Expiration Date”)

the “Term.” Upon agreement between CPKC and Licensee, the Term may be lengthened or shortened without affecting any other provisions of this Agreement.

#### 3.2 Effective Date

This Agreement shall be effective upon the date that it has been signed by both parties.

#### 3.3 Expiration

This Agreement will expire at the Expiration Date, or when the Work is completed, whichever occurs first. Notwithstanding any other provision of this Agreement, the preceding sentence shall not terminate or limit any claim by CPKC against Licensee arising prior to the Expiration Date. If the Work includes monitoring wells, and if such wells remain on the Property after the Expiration Date, this Agreement shall remain in effect for those wells until the earlier of the following:

- (i) the date they are properly closed (*i.e.*, sealed and abandoned in accordance with applicable legal requirements) by Licensee or
- (ii) the date CPKC assumes ownership of such wells pursuant to section 10.8.

#### 3.4 TERMINATION; EXCLUSION

Notwithstanding anything to the contrary contained herein, this Agreement is terminable by CPKC prior to the Expiration Date in the event Licensee breaches any of its obligations under this Agreement. If CPKC elects to terminate this Agreement, it shall give Licensee notice of termination, which notice shall specify the obligation or obligations breached by Licensee; and this Agreement shall terminate 30 days after such notice is given (provided, however, that this Agreement shall not terminate if the breach is cured within said 30 day period). The early termination of this Agreement shall not terminate or limit any claim by CPKC against Licensee arising prior to such termination. If Licensee is in breach of any of its obligations under this Agreement, any employee or agent of CPKC may order Licensee off the Property, in which case Licensee shall immediately leave the Property; moreover, Licensee shall leave the property immediately upon receipt of a notice given pursuant to this section 3.4; and in either case, Licensee shall not re-enter the Property until such time as the breach is cured.

### 4. PAYMENTS

#### 4.1 License Fee

In consideration of the permissions herein granted, Licensee shall with its execution hereof pay to CPKC the sum of **One Thousand Five Hundred Dollars (\$1,500.00)**.

#### 4.2 Utilities

Licensee shall assume and timely pay for any gas, electrical, telephone, computer, sewer, water, storm water, waste or trash removal or any other service or commodity connected with the Work, collectively “**Utility Service**.” If any Utility Service fee is in common with CPKC or

other parties, Licensee shall be liable for its proportionate share of any such Utility Service Fee and upon receipt of a bill therefor, promptly pay CPKC or such other party for its share. It shall be a default of the terms of this license if it can be shown that Licensee has not made such payments within 30 days if due to CPKC, or within 60 days if payable to any other party.

#### **4.3 Mechanics' And Materialmen's Liens**

If any mechanics' or materialmen's lien, or similar lien, is asserted against the Property, or any other property of CPKC, as a consequence of the Work, Licensee shall immediately satisfy, defend, or obtain the release of such lien, all at Licensee's expense, and Licensee shall indemnify and defend CPKC against any Claims arising out of or connected with such lien.

#### **4.4 Additional Charges**

Licensee shall within 30 days of receipt of a bill therefor, pay to CPKC costs for flagging, track changes or damage, or other such charges as may be provided by this Agreement or that CPKC may reasonably impose in connection with Licensee's Work.

#### **4.5 Due Dates; Penalties; Other Charges**

##### **4.3.1 Due Dates**

Any item, submission or payment required to be made shall be deemed timely made if received by the other party on or before the specified due date, or prior to expiration of the applicable period for compliance, submission or payment.

##### **4.3.2 Late Fees**

In addition to any amounts payable by Licensee to CPKC, Licensee shall pay CPKC a late fee for any payment not timely made by Licensee. The late fee shall be at the rate for overdue accounts set by CPKC's Accounting Department that is in effect at the time that any such payment is due. Said late fee shall initially be an amount equal to 1% of the invoice amount per month.

##### **4.3.3 Fines and Service Fees**

In addition to any other amounts payable by Licensee to CPKC, Licensee shall pay CPKC for any bank fines or service incurred by it in connection with the handling, non-payment, return or currency conversion incurred by CPKC in connection with processing of any payment made by Licensee to CPKC.

#### **4.6 Work At No Cost To CPKC**

The Work completed by Licensee shall be performed at no cost to CPKC.

### **5. CONTACT, NOTICES, ETC.**

#### **5.1 Contact Persons; Communications**

Communications pursuant to this Agreement shall be directed to the contact persons designated in Section 1 or their designees. Either party may change its contact person, or the address(es), telephone number, or fax number for the contact person, by notice to the other party.

#### **5.2 Notices**

Except as otherwise provided in this Agreement, all notices pursuant to this Agreement shall be in writing and shall be effective upon delivery to the address or fax number of the contact person for the party to whom notice is being given. If notice is given by fax, the notice shall not be deemed effective until received in legible form.

#### **5.3 Notification Prior To Beginning Work**

Licensee must notify CPKC's contact person by telephone at least three working days prior to beginning any separate phase of the Work, and again promptly after such phase of the Work has been completed.

## 6. PERMITTED & PROHIBITED USES; RIGHTS OF CPKC

### 6.1 Permitted Uses

#### 6.1.1 *The Work*

The use of Property by Licensee shall be limited to the completion of the Work set forth in Section 2.2., or such other activities as may be approved by CPKC in writing.

#### 6.1.2 *Government Authorities*

Licensee may permit governmental authorities other than Licensee with jurisdiction over the Work to enter the Property for the purpose of inspecting or monitoring the Work. Whenever possible, Licensee shall advise CPKC (by telephone or other means calculated to bring the matter to CPKC's immediate attention) prior to permitting such governmental authorities to enter the Property for such purposes. The actions and omissions of such governmental authorities while on the Property for such inspections and monitoring shall be deemed the actions and omissions of Licensee. Licensee is not authorized to permit governmental authorities other than Licensee to enter the Property for any other purpose.

### 6.2 Prohibited Uses and Activities

Licensee shall not use, occupy or permit the Property to be used for any purpose, activity or improvement except as provided in this Agreement or as may be approved of in writing by CPKC. Specifically, Licensee shall not:

#### 6.2.1 *Advertising*

permit any advertisements or signs upon the Property;

#### 6.2.2 *Use of Hazardous Substances*

without prior written disclosure to and approval by CPKC, Use or authorize the Use of any Hazardous Substance on the Property, including installation of any above or underground storage tanks; subject thereto, Licensee shall arrange at its own cost for the lawful transportation and off-site disposal of any and all Hazardous Substances that it shall Use or generate;

#### 6.2.3 *Use of Premises for waste treatment or as storage or disposal facility*

cause or allow the Property or any of CPKC's adjacent property to become a hazardous waste treatment, storage or disposal facility within the meaning of, or to otherwise bring any such property within the ambit of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. or any similar state statute or local ordinance; or

#### 6.2.4 *Subleasing is prohibited*

sublease the Property or the permissions or rights herein granted in any manner or form.

### 6.3 Reservations and Rights of CPKC

#### 6.3.1 *Railroad Activities Take Priority over Work*

All Work by Licensee shall always and all times be subordinate to the needs of CPKC in connection with the operation and movement of railroad trains and equipment, and the repair of railroad track, structures, communications and appurtenances thereto.

#### 6.3.2 *Reservation of prior and future uses not inconsistent with Licensee's activities*

The rights herein granted to Licensee are subject to the rights granted in all other licenses, permits and easements for tracks, roads, walkways, poles, wires, pipelines, sewers, billboards and other improvements that exist or may be placed upon, across, above or underneath the Property by CPKC, or its employees, agents, licensees, grantees,

representatives or invitees. Further, CPKC reserves unto itself the right to place (or to give others the right to place) additional tracks, roads, walkways, poles, wires, pipelines, sewers and billboards upon, across, above or underneath the Property in any manner that does not unreasonably interfere with Licensee's Work.

### **6.3.3 Monitoring**

CPKC may elect to be present during the conduct of the Work and to monitor same.

## **7. COVENANTS, CONDUCT & RESPONSIBILITIES**

### **7.1 Definitions**

- 7.1.1 "Claim" or "Claims"** means any and all liabilities, suits, claims, counterclaims, causes of action, demands, penalties, debts, obligations, promises, acts, fines, judgments, damages, consequential damages, losses, costs, and expenses of every kind (including without limitation any attorney's fees, consultants' fees, response costs, remedial action costs, cleanup costs and expenses which may be related to any Claims);
- 7.1.2 "Environmental Law" or "Environmental Laws"** means the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq., the Clean Water Act, 33 U.S.C. '§1321 et seq., the Clean Air Act, 42 U.S.C. § 7401 et seq., the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq., all as amended from time to time, and any other federal, state, local or other governmental statute, regulation, rule, law, ordinance, order or decree dealing with the protection of human health, safety, natural resources or the environment now existing or hereafter enacted;
- 7.1.3 "Hazardous Substance" or "Hazardous Substances"** means any pollutant, contaminant, hazardous substance or waste, solid waste, petroleum product, distillate, or fraction, radioactive material, chemical known to cause cancer or reproductive toxicity, polychlorinated biphenyl or any other chemical, substance or material listed or identified in or regulated by any Environmental Law;
- 7.1.4 "Release" or "Released"** means any actual or threatened spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing or spreading of any Hazardous Substance into the environment, as "environment" is defined in CERCLA;
- 7.1.5 "Response" or "Respond"** means action taken in compliance with Environmental Laws to correct, remove, remediate, cleanup, prevent, mitigate, monitor, evaluate, investigate, assess or abate the Release of a Hazardous Substance;
- 7.1.6 "Use"** means to manage, generate, manufacture, process, treat, store, use, re-use, refine, recycle, reclaim, blend or burn for energy recovery, incinerate, accumulate speculatively, transport, transfer, dispose of, or abandon.

### **7.2 Investigation; Compliance with Laws; Safety Requirements**

#### **7.2.1 Tenants and Licensees in possession of Property**

Before entering the Property, Licensee shall secure the consent of all persons or entities who are using or occupying any portion of the Property. CPKC will cooperate with Licensee to obtain consent from any such person or entity who unreasonably withholds consent.

### **7.2.2 Underground Utilities and Structures**

- a. Licensee shall be responsible for determining the location of all underground utilities (electric lines, telephone lines, gas lines, steam lines, sewer lines, water lines, fiber optic cables, pipes, wires, and the like) and underground structures.
- b. Licensee shall call **CPKCCBYD “Canadian Pacific Kansas City Call before You Dig”** at 1-866-291-0741 for Signal, Fiber Optics, and Power for CPKC Facilities on Canadian Pacific Kansas City Right of Way and the **STATE “ONE CALL”** a minimum of 5 business prior to commencing any excavation or boring on the Property.
- c. CPKC will cooperate with Licensee to identify the location of underground utilities and structures known to CPKC, but such cooperation shall not relieve Licensee from its primary responsibility to determine the locations of such utilities and structures.

### **7.2.3 Permits And Licenses; Compliance With Laws**

Licensee shall secure, at no expense to CPKC, any permits or licenses required in connection with the Work and shall comply with all laws applicable to the Work and the Property, including (but not limited to) any laws, standards, regulations, and permit requirements relating to environmental pollution or contamination or to occupational health and safety. Licensee shall indemnify and defend CPKC against any and all Claims arising out of or connected with the violation of any law by Licensee while on or about the Property.

### **7.2.4 Compliance with CPKC Safety Requirements; Identification**

- a. While on the Property, Licensee shall comply with the safety requirements of CPKC, as such requirements may be amended from time to time during the duration of the Work, all at no expense to CPKC. CPKC's safety requirements are set forth “**Exhibit B**” titled “**MINIMUM SAFETY REQUIREMENTS FOR CONTRACTORS WORKING ON RAILWAY PROPERTY**” and in CPKC's current safety handbook. One free copy of the current safety handbook will be provided to Licensee by the CPKC contact person. Additional copies will be provided at Licensee's expense. Licensee shall be responsible for ensuring that any person performing any of the Work for or on behalf of Licensee shall comply with the CPKC safety requirements that would apply to a CPKC employee performing similar work.
- b. Prior to any entry onto the Property, Licensee and every employee, agent or subcontractor who carries out any part of the Work on the Property shall successfully complete the safety training available through the e-railsafe program at [www.e-railsafe.com](http://www.e-railsafe.com) in respect to requirements for Canadian Pacific Kansas City operations.  
<if applicable>
- c. Licensee and every employee, agent or subcontractor who carries out any part of the Work on the Property shall at all times wear and visibly display the identification badge issued to them following successful completion of the e-railsafe safety training together with whatever additional identification materials that CPKC may reasonably require.

## **7.3 Work In Close Proximity To Railroad Operations; Drainage**

### **7.3.1 Interference with Railroad Operations**

Licensee shall keep CPKC fully apprised of its proposed activities on the Property so as to prevent any interference with the operations of CPKC's trains or equipment (or trains or equipment of others) operating on or near the Property.

**7.3.2 Clearance**

No work shall be done or any equipment or other obstruction placed over or within 50 feet laterally of the centerline of any track without advance notification to CPKC prior to performing such work or placing such equipment or obstruction.

**7.3.3 Flagging**

Licensee must make arrangements with CPKC for such flagging or watchman service as CPKC deems necessary for the protection of railroad traffic. All such flagging and watchman service shall be provided by CPKC at Licensee's expense. The fact that CPKC provides such service shall not relieve Licensee from any liability under this Agreement. CPKC's labor and material additives are subject to change without notice to Licensee, and CPKC shall be reimbursed based upon its labor and material additives actually in effect as of the date of such service.

**7.3.4 Certain Work Close To Track Not Permitted; Lateral Support**

- a. Unless otherwise agreed to in writing by CPKC, excavations, borings, wells, pits, test holes, probe sites, and the like shall not be located closer than 50 feet from the centerline of the nearest railroad track on or adjacent to the Property nor shall it take or allow any action upon the Property that would materially impair the lateral or sub adjacent support of adjacent lands or railroad tracks.;
- b. Unless otherwise agreed to in writing by CPKC, drilling and excavating equipment and related equipment shall not be located closer than 50 feet from the nearest rail of any such track;
- c. In the event that CPKC permits excavations, borings, wells, pits, test holes, probe sites, or the like in close proximity to tracks, embankments or other features providing lateral or sub adjacent support to land or tracks, then notwithstanding anything to the contrary in this license, Licensee shall be responsible for designing and constructing at no cost to CPKC any measure that is required to prevent the collapse, erosion or impairment to said land or tracks.

**7.3.5 Storm Water**

Licensee shall not, without the advance written approval of CPKC, make any changes to the Property that would either increase the historic flow rate of storm water from the Property or create an impediment to the historic flow of storm water to the Property. Unless otherwise agreed in writing, as between CPKC and Licensee it is understood and agreed that Licensee shall, at Licensee's cost and expense, be responsible for the construction, maintenance, repair and replacement upon the real property or other land not belonging to CPKC such storm sewer lines, manholes, mains, rip rap, boulders, wing walls, ditches and related to improvements required for Licensee's compliance with this section.

**7.3.6. Fencing <If applicable>**

Licensee shall, at no cost to CPKC, construct and maintain during the term hereof a fence acceptable to CPKC in the location(s) designated on Exhibit A. Following completion of the Work, the Licensee shall remove the fencing, remove any post footings or concrete, and fill and tamp any post holes with clean fill material.

## 7.4 Conduct

### 7.4.1 ***Property clean, safe and free from nuisances***

Licensee shall not permit the existence of any nuisance upon the Property and shall at all times keep the Property in a proper, clean, safe and sanitary condition, and free from accumulations of waste materials, debris or refuse.

### 7.4.2 ***Release of Hazardous Substances***

Licensee shall not cause or allow the Release or threat of Release of any Hazardous Substance on, to, or from the Property.

### 7.4.3 ***Response Actions***

Licensee shall promptly take all necessary action in Response to any Release or Use of a Hazardous Substance at the Property caused by, or attributable to, any act or omission of Licensee (or Licensee's employees, agents, representatives or invitees) that could:

- a. give rise to any Claim under any Environmental Law,
- b. cause a public health or workplace hazard, or
- c. create a nuisance.

## 7.5 Required Notices/Disclosures

### 7.5.1 ***Transportation and Disposal Contracts***

Licensee shall, upon written request by CPKC, provide CPKC with copies of transportation and disposal contracts and manifests for Hazardous Waste, any permits issued under any Environmental Laws, and any other documents demonstrating that Licensee has complied with all Environmental Laws relating to the Property

### 7.5.2 ***Releases or Suspected Releases***

Licensee shall promptly notify CPKC of any actual or suspected Release of any Hazardous Substance on, to, or from the Property, regardless of the cause of the Release.

### 7.5.3 ***Notices, summons citations, etc.***

Licensee shall promptly provide CPKC with copies of all summons, citations, directives, information inquiries or requests, notices of potential responsibility, notices of violation or deficiency, orders or decrees, claims, causes of action, complaints, investigations, judgments, letters, notices of environmental liens or Response actions in progress, and other communications, written or oral, actual or threatened, from the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or other federal, state or local agency or authority, or any other entity or individual, concerning:

- a. any Release of a Hazardous Substance on, to or from the Property,
- b. the imposition of any lien on the Property, or
- c. any alleged violation of or responsibility under any Environmental Law relating to the Property.

### 7.5.4 ***Other Reports***

Licensee shall, at CPKC's option, provide CPKC, at no cost to CPKC, a copy of any other report, summary or written test results, collectively "**Report**," pertaining to the Work. If any such Report is to be filed or made available to any governmental agency, other than Licensee, acting in a regulatory capacity, other than Licensee, then Licensee shall also give CPKC a reasonable time (not less than 5 working days) to review and comment on a draft of such Report and when preparing any such final Report pertaining to the Work, Licensee or its contractor shall give due consideration to CPKC's comments with respect to the draft of that Report. Licensee will promptly provide CPKC with a copy of any final Report.

#### **7.6 CPKC's right to Participate in Response Actions**

Following receipt of any notice, order, claim, investigation, information request, letter, summons, citation, directive, or other communication identified in section 7.5.3 in connection with any action taken pursuant to section 7.4.3, Licensee shall notify CPKC of any and all investigations, telephone conferences, settlement discussions, remediation plans and all other interactions, direct or indirect, with governmental or regulatory officials, and Licensee shall take all action necessary to ensure that any indemnification, release, waiver, covenant not to sue, or hold harmless agreement benefiting Licensee and arising out of such activities, whether from a governmental or regulatory entity or from a private entity, also benefits CPKC to at least the same extent as Licensee.

#### **7.7 Restoration of Property**

Upon completion of the Work or expiration or early termination of this Agreement, whichever occurs first, Licensee shall remove any debris resulting therefrom and shall restore the Property to the condition it was in prior to the commencement of the Work (or such other condition as is satisfactory to CPKC). All excavations are to be backfilled and tamped. All borings shall be backfilled with grout. Drill cuttings shall not be used as backfill. Licensee shall dispose of all drill cuttings, soil and sediment samples, purge water, dewatering effluent, and water samples and all excess excavation material in a manner acceptable to CPKC and in accordance with all applicable laws, all at no expense to CPKC.

### **8. LIABILITY**

#### **8.1 Damage to CPKC Tracks, Facilities, and Equipment**

If any tracks, facilities, or equipment owned, used, or maintained by CPKC are damaged in connection with the Work, CPKC shall repair (or arrange for the repair of) such damage and Licensee shall pay the full cost of such repair within 30 days after CPKC shall tender a bill therefor.

#### **8.2 Assumption of Risk**

Licensee is fully aware of the dangers of working on and about railroad property and railroad operations and knowingly and willingly assumes the risk of harm (e.g., injury to or death of persons and damage to or destruction of property) that may occur while on and about the Property. Without in any way limiting the scope of the preceding sentence, Licensee assumes the risk that monitoring wells, elevation bench marks, reference points, and other installations located on the Property may be disturbed, damaged, or destroyed by CPKC or third persons, and Licensee shall not make any claim against CPKC on account of same, even if such disturbance, damage, or destruction arises from the negligence of CPKC or its employees, agents, or invitees. Licensee assumes full responsibility for protecting its installations and personal property from theft and vandalism while such installations and personal property are on the Property.

#### **8.3 Indemnity**

To the maximum extent permitted by applicable law, Licensee shall indemnify and defend the Indemnified Parties (as defined below) against all claims, demands, actions, suits, judgments, losses, damages, penalties, fines, and sanctions (collectively, "Claims") arising out of or relating to any destruction of (or damage to) any property or natural resource, any injury to (or death of) any person, or any environmental pollution or contamination whatsoever, where such destruction, damage, injury, death, pollution, or contamination actually arises in whole or in part from the Work, any action or omission of Licensee while on or about the Property pursuant to this Agreement, or the exercise by Licensee of the license granted by this Agreement. As used in this Agreement, Indemnified Parties means the following businesses and their officers,

directors, employees, and agents: Soo Line Corporation, CENTRAL MAINE & QUÉBEC RAILWAY US, Delaware and Hudson Railroad Corporation, Dakota, Minnesota and Eastern Railroad Corporation, Soo Line Corporation, Wyoming, Dakota Railroad Properties, Inc., Central Maine & Quebec Railway, The Milwaukee Motor Transportation Company, Hiawatha Transfer Company, and Canadian and Pacific Railway Company, and their respective parent companies, subsidiaries, and affiliated companies, and any railway company or contractor operating trains or rail equipment upon railway tracks in close proximity to the Property, together with the parent companies, subsidiaries, and affiliated companies of all of the foregoing.

## 9. INSURANCE

Licensee shall, at its own expense, obtain and maintain during the Term and prior to entering the Property, in a form and with an insurance company satisfactory to CPKC, policies of:

- (a) **Commercial General Liability (C.G.L.)** insurance with a limit of not less than Ten Million Dollars (\$10,000,000) for any one loss or occurrence for personal injury, bodily injury, or damage to property including loss of use thereof. This policy shall by its wording or endorsement include without limitation the following: **NOTE – For large projects that are high risk, please confirm with Risk Management whether \$10M CGL is sufficient or if a higher limit and/or additional requirements are necessary.**
  - (i) CPKC and its associated or affiliated subsidiaries (and the Directors, Officers, employees, agents and trustees of all of the foregoing) as an additional insured with respect to obligations of the Licensee in this Agreement;
  - (ii) "cross liability" or "severability of interest" clause which shall have the effect of insuring each entity named in the policy as an insured in the same manner and to the same extent as if a separate policy had been issued to each;
  - (iii) blanket contractual liability, including the insurable liabilities assumed by the Licensee in this Agreement;
  - (iv) broad form products and completed operations;
  - (v) sudden and accidental pollution liability, if applicable;
  - (vi) shall not exclude property damage due to explosion, collapse, and underground hazards; and
  - (vii) shall not exclude operations on or in the vicinity of the railway right of way.
- (b) **Automobile Liability** insurance covering bodily injury and property damage in an amount not less than Two Million Dollars (\$2,000,000) per accident, covering the ownership, use and operation of any motor vehicles and trailers which are owned, non-owned, leased or controlled by the Licensee and used in regards to this Agreement.
- (c) **Workers Compensation** insurance which shall be in strict accordance with the requirements of the most current and applicable state Workers Compensation insurance laws, and Employers' Liability insurance including Occupational Disease insurance with limits of not less than One Million Dollars (\$1,000,000) each accident/each employee, and where appropriate coverage under said policies to be extended for liability under the FELA, USL&H Act, and the Jones Act. The Licensee shall, before any services are commenced under this License submit written evidence that it has obtained full Workers Compensation insurance coverage for persons whom it employs or may employ in carrying out the services under this License. CPKC and its associated or affiliated companies (and the Directors, Officers, employees, agents and trustees of all of the foregoing) shall be waived of any and all subrogation in the event of injury, death, losses, incidents, claims and potential claims.

- (d) **Contractor's Pollution Liability** insurance, including naming CPKC and its associated or affiliated subsidiaries (and the Directors, Officers, employees, agents and trustees of all the foregoing) as an additional insured, with a limit of not less than Two Million Dollars (\$2,000,000) for any one loss or pollution event. Coverage shall include, but not be limited to, claims for bodily injury, death, damage to property including the loss of use thereof, clean-up costs and associated legal defense expenses arising from pollution conditions caused by, and/or exacerbated by, services performed by the Licensee on behalf of CPKC. The policy shall be endorsed to contain a blanket contractual liability endorsement. If this policy is written on a "claims-made" basis it shall remain in effect for no less than twenty-four (24) months after the expiry or termination of this Agreement. **IF APPLICABLE – DEPENDS ON SCOPE OF WORK BEING PERFORMED – CONFIRM WITH RISK MANAGEMENT**

(collectively, the “**Insurance Coverage**”).

Licensee agrees that the insurance requirements set out herein shall not limit or restrict its liabilities pursuant to this Agreement.

The Insurance Coverage required to be maintained pursuant to this Agreement shall be primary and not excess of any other insurance that may be available. Unless otherwise provided above, all insurance coverage shall take place in the form of an occurrence basis policy and not a claims made policy.

Licensee shall waive any and all subrogation in the event of injury, death, losses, incidents, claims and potential claims where permissible under the insurance policies required under this Insurance Section.

Licensee shall provide CPKC with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims, and potential claims concerning this Agreement as soon as practicable after the damage, loss, incident, or claim has been discovered. Licensee is responsible for any deductible and excluded loss under any insurance policy. The deductible in any insurance policy shall not exceed such maximum amount that a reasonably prudent business person would consider reasonable.

The Insurance Coverage shall be endorsed to provide CPKC with not less than thirty (30) days' written notice in advance of cancellation.

Before Licensee enters the Property, CPKC must receive and approve certificates of insurance evidencing the Insurance Coverage outlined in this Section. Licensee may be required to annually provide a copy of updated certificate(s) of insurance evidencing the renewal of the above Insurance Coverage. Such certificate(s) of insurance shall be sent via email to matthew\_miller@CPKCr.ca. Upon request, Licensee shall provide CPKC with certified copies of the insurance policies.

CPKC shall have no obligation to examine such certificate(s) or to advise Licensee if its Insurance Coverage is not in compliance with this Agreement. Acceptance of any certificate(s) which are not compliant with the requirements set out herein shall in no way whatsoever imply that CPKC has waived its insurance requirements.

CPKC reserves the right to require Licensee to obtain additional insurance where, in CPKC's reasonable opinion, the circumstances so warrant. If the Licensee fails to maintain the Insurance Coverage required in this Agreement, CPKC may, at its option, terminate this Agreement without notice.

## **10. ENTIRE AGREEMENT**

### **10.1 Survival of Indemnity Provisions**

The indemnification provisions of this Agreement shall survive its expiration or termination.

### **10.2 Mere License**

The permission encompassed by this Agreement is a mere license to use the Property for the specified purpose and does not create any estate or interest in the Property.

**10.3 No Warranty of Title**

CPKC does not warrant that it has good title to the Property.

**10.4 Assignment; Binding Effect**

This Agreement may not be assigned by Licensee without the advance written consent of CPKC. Subject to the preceding sentence, this Agreement shall be binding upon, and inure to the benefit of, the parties' respective successors and assigns.

**10.5 Governing Law**

This Agreement shall be construed in accordance with the laws of the state of Minnesota.

**10.6 Entire Agreement**

This Agreement is the full, complete, and entire Agreement of the parties with respect to the subject hereof, and any and all prior writings, representations, and negotiations with respect to those subjects are superseded by this Agreement.

**10.7 Headings**

The headings used in this Agreement are provided solely as a convenient means of reference. They are not intended to, and do not, limit or expand the purpose or effect of the paragraphs to which they are appended. The headings shall not be used to construe or interpret this Agreement.

**10.8 Singular and Plural**

As used in this Agreement, the singular form of a word includes the plural form of that word, and vice versa, and this Agreement shall be deemed to include such changes to the accompanying verbiage as may be necessary to conform to the change from singular to plural, or vice versa.

**10.9 Duplicate Copies and Counterparts**

This Agreement may be executed in counterparts, which together shall constitute one and the same document. The parties may execute more than one copy of this Agreement, each of which shall constitute an original.

**11. SIGNATURES.**

**THE PARTIES HERETO** have executed this Agreement as evidence of their agreement to the terms herein.

**Your Company Name**

**CENTRAL MAINE & QUÉBEC RAILWAY US**  
*doing business as* Canadian Pacific Kansas City

By \_\_\_\_\_

Its **Your Name**

Date

By \_\_\_\_\_

Its Charles Kretchman  
Supervisor Public Works - U.S.

Date

**EXHIBIT A**  
Map of the Property

**Map of Crossing #847790A / Route 16, Big Moose TWP, Maine - Coordinates 45.588544, -69.726015**



**Map of Crossing #847781B / Route 16, Greenville, Maine - Coordinates 45.461181, -69.620588**



**EXHIBIT B**

Minimum Safety Rules for Work on Railroad Property

**See separate attachment titled:**

**'CPKC Safety Requirements for Contractors, United States, April 15, 2025**

**SPECIAL PROVISION**  
**SECTION 105**  
**GENERAL SCOPE OF WORK**  
**(LIMITATIONS OF OPERATIONS)**

1. The Contractor will be allowed to commence work 15 minutes after sunrise and must be completely off the road 15 minutes before sunset. Sunrise and sunset will be determined according to <http://www.sunrisesunset.com/usa/Maine.asp>. Failure to adhere to this requirement will result in a Traffic Control Penalty, non-payment of any material placed outside of the allowable times, and the Contractor will be required to implement the Night Work section of their Traffic Control Plan.
2. Paved driveways may need additional work including extending the wing and raking the edge joint. This area will be compacted by roller or vibratory plate compactor. This work will be considered incidental to item #461.13.
3. The Contractor is limited to one paving crew per day unless authorized by the Department.
4. If not identified in the Schedule of Work, the Contractor shall request absences at least 72 hours in advance. The Department will review and approve based on existing roadway condition, paving deadlines, adherence to schedule, traffic restrictions, etc. Segments must have both lanes matched up at an agreed stopping point before entering suspension.

SPECIAL PROVISION  
SECTION 105  
GENERAL SCOPE OF WORK  
(Build America, Buy America)

105.11 Other Federal Requirements this section is replaced with the following:

105.11 Build America, Buy America Requirements

Unless expressly otherwise provided in the Bid Documents, the following provisions are hereby incorporated into the Contract.

This project is subject to the Buy America (23 CFR 635.410) and Build America, Buy America Act (BABA) included in the Infrastructure Investment and Jobs Act (IIJA), Public Law No. 117-58. Further guidance can be found at the FHWA Buy America Construction Program Guide linked here:

<https://www.fhwa.dot.gov/construction/cqit/buyam.cfm>

The Contractor shall certify compliance with Buy America and BABA in the following categories. An article, material or supply should only be classified into one of the following categories and is classified based on its state when it arrives at the project site.

1. **Iron and Steel:** All iron and steel permanently incorporated into the project must be produced in the United States. The only exception to this requirement is the production of pig iron and the processing, pelletizing, and reduction of iron ore, which may occur in another country. This means all manufacturing processes, from the initial melting stage through the application of coatings, must occur in the United States. Any process that modifies the chemical content, the physical size and shape, or the final finish is considered a manufacturing process, including rolling, extruding, machining, bending, grinding, drilling, and coating. “Coating” includes epoxy coating, galvanizing, painting, or any other coating that protects or enhances the value of the material.

Existing De Minimis Use Exemption for Iron and Steel: The requirements of the law and regulations do not prevent a minimal use of foreign steel and iron materials if the total cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total construction contract price or \$2,500.00, whichever is greater.

2. **Manufactured Products:** Articles, materials, or supplies that have been processed into a specific form and shape, or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. If a domestic product is taken out of the United States for any process, it becomes a foreign source material.

All Manufactured Products used in the project must be manufactured in the United States (“final assembly requirement”). “Component” means an article, material, or supply, whether manufactured or unmanufactured, incorporated directly into a manufactured product or, where applicable, an iron or steel product. If a manufactured product is

predominantly iron, steel, or a combination of both it must meet the above requirements for iron and steel products. Predominantly iron or steel or a combination of both means the total cost of the iron and steel content exceeds 50 percent of the total cost of all its components.

Precast concrete products classified as Manufactured Products must additionally have predominantly iron or steel components meet the above requirements for iron and steel. Cabinets or other enclosures of intelligent transportation systems (ITS) and other electronic hardware systems classified as Manufactured Products must also comply with the above requirements for iron and steel if the cabinet or enclosure is predominantly iron or steel.

3. **Construction Materials:** Items, articles, materials, or supplies that consist of only one of the items listed below:
  - i. Non-ferrous metals.
  - ii. Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables).
  - iii. Glass (including optic glass);
  - iv. Fiber optic cable.
  - v. Optical fiber.
  - vi. Lumber.
  - vii. Engineered wood; and
  - viii. Drywall.

Minor additions of articles, materials, supplies, or binding agents to a Construction Material do not change the categorization of the Construction Material.

All Construction Materials permanently incorporated into the project must be produced in the United States. For the Construction Material to be considered “produced in the United States,” it must meet the following standards:

- i. Non-ferrous metals. All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
- ii. Plastic and polymer-based products. All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- iii. Glass. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- iv. Fiber optic cable (including drop cable). All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding, and jacketing, occurred in the United

States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic, and polymer-based products, or any others.

- v. Optical fiber. All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- vi. Lumber. All manufacturing processes, from the initial debarking through treatment and planning, occurred in the United States.
- vii. Drywall. All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- viii. Engineered wood. All manufacturing processes, from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

Construction Materials brought on site and combined with other materials are not considered Manufactured Products. Items that consist of two or more of the listed Construction Materials that have been combined off-site through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process should be treated as Manufactured Products rather than as Construction Materials.

#### **Specifically Excluded Materials**

Section 70917(c) of the Build America Buy America Act specifically excludes certain materials from being classified as either construction materials or manufactured products. These exclusions include cement and cementitious materials, aggregates (such as stone, sand, or gravel), and aggregate binding agents or additives.

Additionally, when these materials are combined as an unsettled mixture without a final form upon arriving at the work site, such as wet concrete or hot mix asphalt, the mixture is not considered a manufactured product. However, if these same materials are combined off-site to create a finished product, such as precast concrete, that finished product is considered a manufactured product.

#### **Public Interest Waiver of BABA Requirements for De Minimis Costs**

The US Department of Transportation issued a public interest Waiver of Buy America Requirements for De Minimis Costs. The Waiver for De Minimis Costs exempts Manufactured Products and Construction Materials produced outside the United States for which the total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project.

The obligation to track costs throughout the life of the contract is the Contractor's responsibility. The term "total applicable costs" is defined as the total actual final material cost of the compliant and non-compliant iron and steel, Manufactured Products, and Construction Materials.

#### **Certification**

For iron and steel materials and for Manufactured Products produced predominantly of iron or steel or a combination of both\*, the Contractor shall submit a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of the Buy America provisions of 23 CFR § 635.410, as amended. Such certification shall also include (1) a statement that the iron or steel product or component was produced entirely within the United States, or (2) a statement that the iron or steel product or component was produced within the United States, except for minimal quantities of foreign steel and iron valued at \$ (actual value). A “Buy America” Certification is required from each manufacturer, fabricator, supplier, subcontractor that engages in “manufacturing” as defined above.

*\*Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50% of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products, castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of the iron or steel components.*

In addition, upon completion of the project, the Contractor shall certify in writing as to the overall compliance with BABA and provide the total project delivered cost of all foreign Manufactured Products and Construction Materials. The Contractor shall also submit individual certifications from all subcontractors and suppliers that furnish applicable Construction Materials and Manufactured Products valued at \$10,000 or more. Such individual certifications shall be submitted upon delivery of the Construction Material or Manufactured Products to the site.

**Example certification:**

I hereby certify that this project is in compliance with the Build America, Buy America Act (Public Law 117- 58) requirements for this project. All Iron and Steel, Manufactured Products produced predominantly of steel or iron, Manufactured Products and Construction Materials that are permanently incorporated into the work for this project were produced in the United States of America, with the only exceptions as noted below.

As required, we will maintain all records and documents pertinent to the Build America, Buy America Act requirements, at the address given above, for not less than 3 years from the date of Final Acceptance. These files will be available for inspection and verification by the Maine Department of Transportation and/or the Federal Highway Administration.

We further certify that the total value of foreign steel and iron for this project is \$ \_\_\_\_\_, said value being less than 0.1% of the total construction contract price or \$2,500.00, whichever is greater.

December 12, 2025

We further certify that the total material cost of foreign Manufactured Products and Construction Materials for this project is \$\_\_\_\_\_, said value being no more than the lesser of \$1,000,000 or 5% of total applicable costs. The term “total applicable costs” is defined as the total actual final material cost of the compliant and non-compliant iron and steel, Manufactured Products, and Construction Materials.

Signed ( *Contractor* )  
(*President* ) ( *Contractor Firm* )

MaineDOT DBE Project Attainment Target (PAT)  
for this Project is 0%

The MaineDOT seeks to meet the specified annual Disadvantaged Business Enterprise (DBE) usage goal set out by 49 CFR 26.45 through the efforts of contractors seeking to employ qualified DBE subcontractors. We seek to meet this goal by race neutral means and do not, at this time, use contract specific requirements for each project. We do however, understand the capacity of Maine's DBE community and the unique characteristics a project may have that would differ from the broad annual goal.

Taking this into consideration, the MaineDOT will review each project and develop an anticipated attainment or Project Attainment Target (PAT) based on several factors that are project specific. Those factors include:

- ☐ Scope of Work
- ☐ DBE availability according to Specification Item
- ☐ Geographic location
- ☐ DBE capacity

This PAT is developed to assist contractors to better understand the DBE participation that the MaineDOT can reasonably expect for a specific project. The PAT is NOT a mandate but an assessment of the DBE opportunities that this project could meet or exceed. MaineDOT anticipates that each contractor will make the best effort to reach or exceed the PAT for this project.

SPECIAL PROVISION  
SECTION 106 - HOT MIX ASPHALT PAVEMENT

The following subsections of the most current version of Specification 100 – General Conditions have been revised and amended by the following:

106.7.3 Early Termination of Lots

In the event a Lot in progress is terminated prematurely before the Department is able to take the number of acceptance samples required by the test method specified in the Contract, the following will apply as applicable unless otherwise detailed in the specifications for the item:

1. For items under statistical acceptance where payfactors are generated
  - a. If three or more samples have been taken, then payfactors will be generated using the available samples results for the lot.
  - b. If the termination was requested by the Contractor and approved by the Department prior to three samples being taken, then each property's payfactor will be set to 0.80.
  - c. If the termination was initiated by the Department prior to three samples being taken, then each property's payfactor will be set to 1.00 for each property.
2. For items not under statistical acceptance
  - a. If initiated by the contractor and no random sample has been reached the entire lot shall be subject to a penalty of 20% of the item's price.
  - b. If initiated by the contractor and only the most recent sample tonnage has not been reached only the tonnage for that subplot will be subject to a penalty of 20% of the items price.

An HMA mix design aim change request from the Contractor with open Lots in progress will constitute a contractor initiated lot termination. For methods A & C, the minimum samples required to generate a pay factor prior to termination will be three. If a minimum of three samples have not been obtained, then each property's payfactor will be set to 0.80. For methods B & D the minimum number of samples (sublots) required prior to an aim change will be the total tonnage of the lot, or a minimum of three, whichever is less. If the minimum number of samples have not been obtained then the pay adjustment for each of the subplot's properties will be set to 0.80.

SPECIAL PROVISION  
SECTION 107  
PROSECUTION AND PROGRESS  
(Contract Time – Light Capital Paving)

The Contractor may begin work anytime on or after, **June 15, 2026**, in accordance with Standard Specification 104.4.2 and upon approval of all required submittals. The contract completion date will be **July 24, 2026**. Work added to or deleted from the Contract will increase or decrease at a rate of 1 day per 750 tons. A revised Schedule of Work shall be submitted and approved for these changes.

Paving will be allowed on Saturday if the Contractor chooses to provide all Traffic Control at no additional cost and a minimum 48-hour notice is given. Traffic control for all work after the completion date will be supplied by the contractor at no additional cost to the Department.

At least 21 calendar days prior to the desired begin construction date, the Contractor shall submit an **electronic copy of their signed request to begin work and the begin construction date**. This signed request shall be sent read receipt through **email** with their **Schedule of Work**, in accordance with Standard Specification 107.4.2, to **[Timothy.Pelotte@Maine.gov](mailto:Timothy.Pelotte@Maine.gov)**, **[Mackenzie.A.Kerbergen@maine.gov](mailto:Mackenzie.A.Kerbergen@maine.gov)** and **[Chris.I.leblanc@maine.gov](mailto:Chris.I.leblanc@maine.gov)**. The approved Schedule of Work will detail the anticipated working days and show a completion within the allowable working times. The Contractor shall notify all utility contacts listed in the 104 Special Provision and provide the utility contacts the submitted Schedule of Work within 2 calendar days of the Schedule of Work submittal. Upon receipt of the Schedule of Work, a pre-construction meeting will be scheduled.

SPECIAL PROVISION  
SECTION 107  
SCHEDULING OF WORK

Replace Section 107.4.2 with the following:

"107.4.2 Schedule of Work Required Within 21 Days of Contract Execution and before beginning any on-site activities, the Contractor shall provide the Department with its Schedule of Work. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

At a minimum, the Schedule of Work shall include a bar chart which shows the major Work activities, milestones, durations, submittals and approvals, and a timeline. Milestones to be included in the schedule include: (A) start of Work, (B) beginning and ending of planned Work suspensions, (C) Completion of Physical Work, and (D) Completion. If the Contractor Plans to Complete the Work before the specified Completion date, the Schedule shall so indicate.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule. The Contractor will make the requested changes to the schedule and issue the finalized version to the Department."

**SPECIAL PROVISIONS**  
**SECTION 108 PAYMENT**  
**(Diesel fuel Adjustment)**

108.4.2 Price Adjustment for Diesel Fuel: A price adjustment for diesel fuel will be made for all 461 items.

Price adjustments will be based on the variance in costs for diesel fuel. They will be determined as follows:

The quantity of hot mix asphalt, in tons, for each pay item will be multiplied by 2.75 times the difference in price in excess of 5 percent between the base price and the period price of diesel fuel. Adjustments will be made upward or downward, as prices increase or decrease.

Hot Mix Asphalt: The quantity of hot mix asphalt will be determined from the quantity shown on the progress estimate for each pay period.

Base Price: The base price of diesel fuel to be used is the price per gallon current with the **bid opening date**. This price is determined by using the weekly retail diesel price for the New England area, as listed on the Energy Information Administration's webpage.

Period Price: The period price of diesel fuel will be determined by the Department by using the weekly retail diesel price for the New England area, as listed on the Energy Information Administration's webpage current with the pay period ending date of the progress estimate.

## **SPECIAL PROVISION**

### **SECTION 109**

#### **CHANGES**

The Maine Department of Transportation reserves the right to increase or decrease the volume of work set forth in the Contract; including adding or removing segments. The Contractor shall not make any claim against the Department of Transportation should the work be increased or decreased by 50%. Also, the State reserves the right to increase or decrease the quantity per mile as shown in the description and computation sheets. The actual quantities placed in the field may range from 430 tons per mile to 1000 tons (+/-) per mile as field conditions warrant.

After actual roadwork has started, the Department or authorized representative will notify the Contractor 48 hours in advance of any changes, additions, or deletions that have occurred in the immediate areas to be paved.

By signing the Contract, the Contractor agrees to the following compensation for additional segments:

Bid Unit price per ton for Item #461.13 – Light Capital Paving.

Trucking at an agreed negotiated rate. If agreement cannot be made, trucking will be paid at the Bid Unit price per ton for Item #631.175 – Contractor Trucking

Mobilization at the rate of \$1,000 per added segment.

Time at the rate of one Working Day per 750 tons added, rounded up; determined on a per added segment basis. Timing of the additional work will be negotiated.

The Contractor may elect to propose utilizing a different plant for the added segment if the new mix and haul total results in a savings to the Department.

SPECIAL PROVISIONS  
SECTION 202  
REMOVING STRUCTURES AND OBSTRUCTIONS  
**(Removing Pavement Surface - Light Capital Paving)**

The March 2020 Revision of the Standard Specifications, Section 202-Removing Structures and Obstructions, subsection 202.061-Removing Pavement Surface, has been removed and replaced in its entirety by the following:

202.061 Removing Pavement Surface The equipment for removing the bituminous surface shall be a power operated milling machine or grinder capable of removing bituminous concrete pavement to the required depth, transverse cross slope, and profile grade using an automated grade and slope control system. The controls shall automatically increase or decrease the pavement removal depth as required, and readily maintain desired cross slope, to compensate for surface irregularities in the existing pavement course. The equipment shall be capable of accurately establishing profile grades by referencing from a fixed reference such as a 30 foot minimum contact ski (floating beam), 24 foot non-contact ski (floating beam) with 3 or more sensors; or 3 non-contact sensors directly affixed at the fore, mid, and aft points of the milling machine. Systems designed to incorporate a contact sensor located at the mid-point of the milling machine in lieu of the non-contact sensor will be permitted. Grade control sensors shall all be located on the same side. A single sensor, contact or otherwise, shall not be permitted unless otherwise approved by the Department.

The rotary drum shall be a minimum of 7 feet in width and utilize carbide tip tools at a minimum triple wrap configuration. The difference in height from the top of any ridge to the bottom of the groove adjacent to that ridge shall not exceed  $\frac{1}{4}$  inch. The forward speed of the milling machine shall be adjusted to produce a milled surface meeting the groove spacing, groove depth, and surface tolerance requirements of this specification. The tools on the revolving cutting drum must be continually maintained and shall be replaced as warranted to provide a uniform pavement texture. The Department may evaluate the texture of the milled surface for information purposes by performing the Sand Patch test according to ASTM E 965.

The Contractor shall locate and remove all objects in the pavement through the work area that would be detrimental to the milling or grinding machine. Any structures or obstructions left within the travel lane or shoulders shall have tapers installed according to Standard Detail 202(01). The finished milled surface will be inspected before being accepted, and any deviations in the profile exceeding  $\frac{1}{2}$  inch under a 16 foot string line or straightedge placed parallel to the centerline will be corrected. Any deviations in the cross-slope that exceed  $\frac{3}{8}$  inch under a 10 foot string line or straightedge placed transversely to centerline will be corrected. All corrections will be made with approved methods and materials. Any areas that require corrective measures will be subject to the same acceptance tolerances. Excess material that becomes bonded to the milled surface will be removed to the Resident's satisfaction before the area is accepted.

On roadways with adjoining lanes carrying traffic, the Contractor shall remove the pavement surface in each lane per the conditions in Table 1, unless otherwise noted by the Department in Special Provision, Section 105 – Limitations of Operations.

TABLE 1: MILLING CONDITIONS FOR ADJOINING LANES

| Depth<br>(At<br>Centerline)          | Milling Conditions                                                                                                                                                                                                                                                                               |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vertical Longitudinal Joint</b>   |                                                                                                                                                                                                                                                                                                  |
| ¾" and less                          | The Contractor may remove the pavement on a single travel lane width for each production day.                                                                                                                                                                                                    |
| 1" to 1 ¼"                           | The Contractor may remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before weekend or holiday suspension.                                                                                              |
| 1 ¼" to 2"                           | The Contractor may remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before the end of the following calendar day.                                                                                      |
| Greater than 2"                      | The Contractor shall remove the pavement over the full width of the traveled way section being paved that day.                                                                                                                                                                                   |
| <b>12:1 Tapered Centerline Joint</b> |                                                                                                                                                                                                                                                                                                  |
| 1 ½" to 2"                           | The Contractor may remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint length of 0.5 miles will be permitted over the weekend. |
| Greater than 2"                      | The Contractor shall remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before the end of the following calendar day.                                                                                    |

The Contractor will be required to remove the pavement over the full width of the mainline traveled way, regardless of highway type, cut depth, or longitudinal joint type prior to Memorial Day, July 4<sup>th</sup>, Labor Day, suspensions exceeding three days, or other dates as specified by Special Provision, Section 105 – Limitations of Operations.

On roadways with immediately adjacent shoulders, the Contractor shall remove the pavement surface in each lane per the conditions in Table 2, unless otherwise noted by the Department in Special Provision, Section 105 – Limitations of Operations.

TABLE 2: MILLING CONDITIONS FOR THE EDGE OF TRAVELED WAY

| Depth (At Edge of<br>Traveled Way) | Conditions                                                                                                                                                                                                 |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2" and less                        | The Contractor may leave a vertical edge joint exposed for up to <b>21 days</b> after milling is performed. The Contractor shall treat vertical edge joints exposed beyond 21 days per the criteria below. |
| Greater than 2"                    | The Contractor shall treat vertical edge joints exposed per the criteria below.                                                                                                                            |

When required by Table 2, the Contractor shall treat vertical edge joints through one of the options below:

1. The vertical edge shall be tapered to a zero edge by means of milling a 12:1 transition from the edge of traveled way onto the shoulder before opening the lane to traffic. Tapers shall be removed to form a vertical edge prior to the placement of the new pavement course. No additional payment will be made for tapers, or taper removal.
2. An additional 2 feet of pavement shall be removed from the shoulder to eliminate the vertical edge at the edge of travelway before opening the lane to traffic. Unless otherwise authorized by the Department, no additional payment will be made for the additional milling.
3. A pavement layer shall be placed to reduce the vertical edge to 1 inch or less before opening the lane to traffic.

As a minimum, the use of temporary painted line, or RPMs placed along the edge of traveled way at 200 foot intervals is required for all elevation differentials. When pavement milling is extended into the shoulder (including milled tapers), appropriate channelization devices shall be placed 2 feet outside the edge of the vertical face at intervals not exceeding 600 feet, and RPMs shall be placed on the remaining pavement surface along the vertical edge at 200 foot intervals. Uneven pavement signs shall be placed at a maximum spacing of ½ mile when any pavement milling operations leaves an exposed uneven pavement surface.

When shoulders are not milled, weepers shall be ground across the full width sections adjacent shoulders or remaining pavement surface matching the milled travel way or shoulder milled depth to minimize water ponding in any lanes carrying traffic. Weepers shall typically be 18 - 24" inches in width, installed along each lane, at a frequency of approximately one per half mile at locations as directed by the Resident or in areas that will provide drainage for the milled areas. Installation of weepers will not be paid for directly but will be considered incidental to the contracts pavement removal item. The replacement of mix in the weeper locations shall be performed concurrently within the pavement placement operation closure using the appropriate LCP item produced for the Contract or a MaineDOT approved 9.5mm HMA. There will be no separate payment for repaving the weeper locations as they are considered incidental to the square yard price of the contracts pavement removal item.

#### Basis of Payment

Square Yard: Payment will be made at the contract unit price for the number of square yards removed.

Hourly: Payment will be made at the contract unit price for the number of hours of operation removing pavement surface as directed by the Resident. The equipment used for pavement removal shall be operated at the minimum speed of 50 fpm, unless the Resident directs otherwise for milled surface quality reasons, trucking or traffic control limitations impact pavement removal operations, or site conditions make operations at the prescribed rate unreasonable.

The square yard or hourly rental contract price will be full compensation for mobilizing to the site, de-mobilizing from the site, labor, supervision, cleaning of the milled surface, and all other incidentals required to complete the work. **Traffic control and the hauling and disposing of the bituminous pavement removed shall be the responsibility of the Department.**

| <u>Pay Item</u>                              | <u>Pay Unit</u> |
|----------------------------------------------|-----------------|
| 202.202 Removing Pavement Surface            | S.Y.            |
| 202.20201 Removing Pavement Surface (Hourly) | Hour            |

## SECTION 401 - HOT MIX ASPHALT PAVEMENT

**401.01 Description** The Contractor shall furnish a uniformly blended, homogeneous mixture placed as one or more courses of Hot Mix Asphalt Pavement (HMA) using a single approved design for each item on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the MaineDOT Policies and Procedures for HMA Sampling and Testing.

**401.02 Materials** Materials shall meet the requirements specified in Section 700 - Materials:

|                             |        |
|-----------------------------|--------|
| Asphalt Cement              | 702.01 |
| Aggregates for HMA Pavement | 703.07 |
| RAP for HMA Pavement        | 703.08 |
| HMA Mixture Composition     | 703.09 |

**401.03 Composition of Mixtures** The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), approved antistrip, warm mix additive, and/or mineral filler if required. HMA shall be designed and tested according to AASHTO R 35 and the volumetric criteria in Table 1. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF). Unless otherwise noted in Special Provision 403 - Hot Mix Asphalt Pavement, the design, verification, Quality Control, and Acceptance tests for this mix will be performed at 65 gyrations.

TABLE 1: VOLUMETRIC DESIGN CRITERIA

| Design<br>ESAL's<br>(Millions) | Required Density<br>(Percent of G <sub>mm</sub> ) |                     |                  | Voids in the Mineral Aggregate<br>(VMA) (Minimum Percent) |      |      |      |      | Voids Filled<br>with Binder<br>(VFB)<br>(Minimum %) | Fines/Eff<br>·<br>Binder<br>Ratio |      |        |         |  |  |  |  |  |  |
|--------------------------------|---------------------------------------------------|---------------------|------------------|-----------------------------------------------------------|------|------|------|------|-----------------------------------------------------|-----------------------------------|------|--------|---------|--|--|--|--|--|--|
|                                |                                                   |                     |                  | Nominal Maximum Aggregate Size<br>(mm)                    |      |      |      |      |                                                     |                                   |      |        |         |  |  |  |  |  |  |
|                                | N <sub>initial</sub>                              | N <sub>design</sub> | N <sub>max</sub> | 25.0                                                      | 19.0 | 12.5 | 9.5  | 4.75 |                                                     |                                   |      |        |         |  |  |  |  |  |  |
|                                | < 3.0                                             | ≤90.5               | 96.0             | ≤98.0                                                     | 13.0 | 14.0 | 15.0 | 16.0 |                                                     |                                   | 16.0 | 65-80* | 0.6-1.2 |  |  |  |  |  |  |
| 3 to <10                       | ≤89.0                                             |                     |                  |                                                           |      |      |      |      |                                                     |                                   |      |        |         |  |  |  |  |  |  |
| > 10                           |                                                   |                     |                  |                                                           |      |      |      |      |                                                     |                                   |      |        |         |  |  |  |  |  |  |

\*For 9.5 mm nominal maximum aggregate size mixtures, the maximum VFB is 82. For 4.75 mm nominal maximum aggregate size mixtures, the maximum VFB is 84.

The Contractor shall submit a JMF to the Department for each mixture to be supplied. The JMF will be approved by the Department in accordance with the MaineDOT HMA Policies and Procedures for HMA Sampling and Testing Manual. At the time of JMF submittal, the Contractor shall identify and make available the stockpiles of all proposed aggregates at the plant site. There must be a minimum of 150 ton for coarse aggregate stockpiles and 75 ton for fine aggregate stockpiles before

the JMF may be submitted. The Contractor shall provide aggregate samples to the Department unless otherwise required. The Contractor shall also make available to the Department the PGAB proposed for use in the mix in sufficient quantity to test the properties of the asphalt and to produce samples for testing of the mixture. The first day's production shall be monitored, and the approval may be withdrawn if the mixture exhibits undesirable characteristics such as checking, shoving or displacement. The Contractor shall be allowed to submit aim changes for a JMF as outlined in the MaineDOT HMA Policies and Procedures for HMA Sampling and Testing Manual: Mix Design Approval Section.

The Contractor shall submit a new JMF for approval each time a change in material source or materials properties is proposed. The same approval process shall be followed. The cold feed percentage of any aggregate may be adjusted up to 10 percentage points from the amount listed on the JMF, however no aggregate listed on the JMF shall be eliminated. The cold feed percentage for RAP may be reduced up to 10 percentage points from the amount listed on the JMF and shall not exceed the percentage of RAP approved in the JMF or for the specific application under any circumstances.

401.031 Warm Mix Technology The Contractor may place Hot Mix Asphalt Pavement produced with an accepted WMA technology if approved by the Department. Methods or technologies shall generally be at the Contractors option, but will be limited to proven, Agency and Industry accepted practice. Mixture production, placement and volumetric testing details, including temperatures, shall be included in the project specific QCP, and submitted to the Department for approval prior to any work.

401.04 Temperature Requirements The temperature of the mixture shall conform to the tolerances in Table 2 as measured at the truck at the mixing plant and at the paver unless otherwise authorized by the Department.

TABLE 2: ALLOWABLE TEMPERATURE RANGES

| PGAB Grade(s)       | Temperature Range (°F) |
|---------------------|------------------------|
| PG58-28 / PG64-28   | 275-325                |
| PG64E-28 / PG70E-28 | 285-335                |

401.05 Performance Graded Asphalt Binder The Contractor shall utilize either a PG58-28, PG64-28, PG64E-28, PG70E-28, or other grade as specified in the 403 Special Provision. The Contractor shall utilize a PG64-28 if no liquid grade is specified within the 403 Special Provision.

401.06 Weather and Seasonal Limitations The State is divided into two paving zones as follows:

- a. Zone 1 Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- b. Zone 2 Areas south of Zone 1 including the US Route 2 and Route 9 boundaries.

TABLE 3: SEASONAL AND TEMPERATURE LIMITATIONS

| Description                                                                                                       | Zone 1 Allowable Placement Dates                               | Zone 2 Allowable Placement Dates                               | Minimum Ambient Air Temperature     |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------|
| HMA Surface Course greater than or equal to 1” (Travelway)                                                        | May 1 to Saturday following October 1                          | April 15 to Saturday following October 15                      | 50°F                                |
| HMA Surface Course less than 1” (Travelway)                                                                       | May 15 to Saturday following September 15                      | May 15 to Saturday following October 1                         |                                     |
| HMA Surface Course less than 1” considered to be “Night Work” (Travelway)                                         | June 1 to the Saturday following September 1                   |                                                                |                                     |
| HMA Surface Course less than 1” (Shoulders)                                                                       | May 15 to the Saturday following October 15                    |                                                                |                                     |
| HMA for Surface Course on Bridge Decks                                                                            | May 1 to Saturday following October 1                          | April 15 to Saturday following October 15                      |                                     |
| HMA for Base or Shim Course on Bridge Decks                                                                       | April 15 to November 15                                        |                                                                |                                     |
| HMA for use other than Travelway Surface Course (Shoulders greater than or equal to 1”, Intermediate, Base, Shim) | April 15 to November 15                                        |                                                                | 40°F                                |
| HMA for curb, driveways, sidewalks, islands, or other incidentals                                                 | N/A                                                            |                                                                |                                     |
| With Use of Approved Warm Mix Technology as Compaction Aid (Surface Course Ambient Air Temperature Allowances)    |                                                                |                                                                |                                     |
| HMA Surface Course greater than or equal to 1” (Travelway)                                                        | May 1 to Saturday following October 1                          | April 15 to Saturday following October 15                      | Begin at 50°F and pave down to 45°F |
| HMA Surface Course less than 1” (Travelway)                                                                       | May 15 to Saturday following October 1                         | May 15 to Saturday following October 15                        |                                     |
| HMA Surface Course less than 1” considered to be “Night Work” (Travelway)                                         | June 1 to the Saturday following September 15                  |                                                                |                                     |
| HMA Surface Course less than 1” (Shoulders)                                                                       | May 15 to the Saturday following October 15                    |                                                                |                                     |
| With Use of Approved Warm Mix Technology as Compaction Aid (Seasonal Limitation Extensions)                       |                                                                |                                                                |                                     |
| HMA Surface Course greater than or equal to 1” (Travelway)                                                        | Saturday following October 1 to Saturday following October 15  | Saturday following October 15 to Saturday following October 29 | 50°F                                |
| HMA Surface Course less than 1” (Shoulders)                                                                       | Saturday following October 15 to Saturday following October 29 |                                                                |                                     |
| HMA for use other than Travelway Surface Course (Shoulders greater than or equal to 1”, Intermediate, Base, Shim) | April 15 to Saturday following November 15                     |                                                                | 35°F                                |

1. Shoulders paved with the travelway pass shall meet travelway ambient air temperatures

2. Refer to the 461 SP for UTBWC for seasonal and temperature requirements.

3. The minimum ambient air temperature for placement of HMA for curbs, driveways, sidewalks, islands, and other incidental work shall be 40°F, regardless of whether the mixture is produced using an approved WMA technology.

The ambient air temperature shall be determined by an approved thermometer placed in the shade at the paving location. Unless otherwise specified, the Contractor shall not place Hot Mix Asphalt Pavement on a wet or frozen surface regardless of the ambient air temperature. The Hot Mix Asphalt Pavement produced with an approved WMA technology shall meet the requirements of section 401.04 - Temperature Requirements, unless otherwise approved by the Department. For the purposes of this Section, the traveled way includes truck lanes, ramps, approach roads and auxiliary lanes.

#### 401.07 Hot Mix Asphalt Plant

401.071 General Requirements HMA plants shall conform to AASHTO M 156, Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures with exception of Section 4.2.1, 4.2.2, 4.3.4, 4.3.5, and 4.12.2.

All HMA plants will be inspected annually by the Department prior to producing HMA for Department projects. The Contractor shall provide the Department at least 72 hours' notice that the plant is ready for inspection. The Contractor shall equip the plant with ladders and platforms that are accessible and safe to obtain samples of PGAB, aggregate and mix from the relevant tanks, collector belts and haul units. Silo storage time of mixtures shall not exceed 36 hours.

401.072 Stockpiles The Contractor shall provide sufficient space for stockpiles and maintain a minimum of supply for 2 days production of all aggregate products used in MaineDOT approved mix designs currently under production. A minimum stockpile supply of 100 ton (70 yards) shall be maintained at all times. The Contractor shall construct stockpiles to prevent intermingling and to minimize segregation. All stockpiles used in MaineDOT mixes shall be identified with weatherproof signs at least 12" high and 24" wide, with reflective lettering at least 2" high.

401.073 Cold Feeds Cold Feed Bins will have bin dividers to keep aggregate products separated. Adequate means must be provided for obtaining samples of the combined flow of all Cold feed bins.

401.074 Dryer Dryer shall be capable of heating aggregate to required mixing temperature and shall be in good operation and condition. Dryer shall be subject to annual inspection prior to start-up. The Contractor shall dry and heat the aggregates for the HMA to the required temperature, adjusting flames to avoid damaging the aggregates. The Contractor shall provide the Department a minimum period of 72 hours to inspect the dryer and provide at least 24 hours' notice that the dryer is ready for inspection.

401.075 Asphalt Binder The plant shall include a heating system and insulation to maintain the asphalt binder at a uniform temperature for proper mixing and compaction. A thermometer shall be provided in the asphalt binder line. No direct flame may come in contact with tank. A sampling valve shall be provided in the circulation line downstream of any binder additive used unless otherwise approved by the Department. The Contractor shall drain down the asphalt as low as safely possible in any tank that will be switched to a new source or grade prior to adding the new PGAB.

401.076 Additives Additives (WMA, anti-strip, etc.) introduced into the binder at the HMA plant shall be introduced per the supplier's recommendations and shall be approved by the Department. The system for introducing additives shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all production rates and batch sizes. Additive introduction systems shall be controlled by a proportioning device to the amount required on the JMF plus or minus 0.1% of the target. Additive introduction systems shall be interlocked with the plant and the recordation (batch tickets or drum recordation) shall display the additive and the weight and percentage added. A means for sampling the PG binder with additive introduced will be provided. The sampling point shall be after the additive is mixed with the PGAB before entering the drum or mixer unit.

#### 401.077 Batch Plants

Hot Bins Hot bins shall provide uniform continuous operation and be in good working condition. The plant shall be able to provide samples of hot bins upon request. Overflow shall be provided for each hot bin. Hot bin gates shall close without leaking. Bin walls must prevent intermingling between bins. Each hot bin shall have low level indicators which will alert the operator when the bin is empty.

Mixer Unit Clearance between blades and liner shall be 1" maximum, unless the aggregate exceeds 1 ¼" then the clearance shall be 1 ½". The spray bar length shall be at least 75% of the mixer length. The mixer unit shall be a twin pug mill-type mixer capable of mixing continuously for at least 45 seconds after all materials have been introduced into the mixer. The blades in the mixer shall be capable of producing a homogenous mixture. If the mixer is not enclosed, it shall be equipped with an adjustable hood to prevent loss of dust by dispersion. The mixer unit shall be subject to annual inspection prior to removal of safety features and being readied for service. The Contractor shall provide the Department the opportunity to inspect the mixer unit prior to the annual inspection. The Contractor shall provide the Department a minimum period of 72 hours to inspect the mixer unit and provide at least 24 hours' notice that the mixer unit is ready for inspection.

Mineral Filler Mineral filler and fiber shall utilize separate bins and feed systems to store and proportion the required quantity into the mixture. The feed systems shall be accurate to no more than 10% of the required weight with a convenient and accurate means of calibration. Mineral filler and fiber shall be introduced in the weigh hopper and uniformly distributed prior to the injection of the asphalt binder.

Automation The HMA batch plant shall automatically batch, mix and discharges mixes. The batch plant shall accurately proportion the various materials in the proper order by weight. The entire batching and mixing cycle shall be continuous and shall not require any manual operations. The batch plant shall use auxiliary interlock circuits to trigger an audible alarm whenever an error exceeding the acceptable tolerance occurs. Along with the alarm, the printer shall print an asterisk on the delivery slip in the same row containing the out-of-tolerance weight. The automatic proportioning system shall be capable of consistently delivering material within the full range of batch sizes. When RAP is being used, the plant must be capable of automatically compensating for the moisture content of the RAP.

The HMA batch plant shall be operated within the following tolerances:

|                          |                              |
|--------------------------|------------------------------|
| Each aggregate component | +/- 1.5% cumulative, per bin |
| Mineral Filler           | +/- 0.5%                     |
| Bituminous Material      | +/- 0.1%                     |
| Zero return (aggregate)  | +/- 0.5%                     |
| Zero Return (AC)         | +/- 0.1%                     |
| Additives                | +/- 0.1%                     |

Recordation All plants shall be equipped with an approved digital recording device. The printer shall mark any weight on the ticket that exceeds tolerance. The delivery slip shall contain information required under Section 108.1.3 - Provisions Relating to Certain Measurements, Mass and paragraphs a, b, and c of Section 401.078.

#### 401.078 Drum Plants

Cold Feeds and Delivery System A scalper screen shall be used to remove oversize material. The accuracy of the belt scale shall be within +/- 1.0% of the actual weight being measured. The plant shall be capable of correcting for aggregate moisture. Mineral filler and fiber shall utilize separate bin(s) and feeder systems to store and proportion the required quantity into the mixture. The feed systems shall be accurate to no more than +/- 10% of the required weight with a convenient and accurate means of calibration. The plant shall be equipped with a single control to change all feed rates. Mineral filler and fiber shall be introduced such that dry mixing is accomplished no less than 18 inches prior to the injection of the asphalt binder. The Contractor shall ensure that the mineral filler does not become entrained in the exhaust stream of the dryer.

Binder System The flow of asphalt binder shall adjust automatically with dry aggregate weights. The Department will conduct an asphalt flow meter check annually and after each change of plant location. The flow meter check must be performed prior to producing mix for Department projects. The plant must be configured to provide a convenient means to check accuracy of the flow meter. The flow meter will be considered accurate if the measured weight is within 1% of actual weight.

Drum Mixer The plant shall be equipped with a diversion system where mix can be diverted at startup/shutdown and any time. The drum mixer shall be subject to annual inspection prior to removal of safety features and being readied for service. The Contractor shall provide the Department a minimum period of 72 hours to inspect the drum mixer while providing at least 72 hours' notice that the drum mixer is ready for inspection.

Recordation An approved automatic ticket printer system shall be used to print delivery slips. The requirements for delivery slips for payment of materials measured by weight, as given in the following Sections, shall be waived: 108.1.3 a., 108.1.3 b., 108.1.3 c., and 108.1.3 d. The automatic printed ticket will be considered as the Weight Certificate. The dry aggregate weights and binder flow shall be recorded as well as mineral filler and all binder additives. The recordation of materials shall be printed a minimum of every ten minutes while in production.

The requirements of Section 108.1.3 f. - Delivery Slips, shall be met by the delivery slip printed by the automatic system, which accompanies each truckload, except for the following changes:

- a. The quantity information required shall be individual weights of each batch or total net weight of each truckload.
- b. Signatures (legible initials acceptable) of Weighmaster (required only in the event of a malfunction as described in 401.074 c.).
- c. The MaineDOT designation for the JMF.

401.079 Scales and Weight Checks Scales shall meeting the requirements of Section 108 - Payment. The scales shall be inspected and sealed by the State Sealer (or approved alternative) as often as the Department deems necessary to verify their accuracy. Plant scales shall be checked prior to the start of the paving season, and each time a plant is moved to a new location. Subsequent checks will be made as determined by the Resident. The Contractor will have at least ten 50 pound masses for scale testing at batch plants. At Contractor's option, the Contractor can use one single test weight that has been checked on sealed scales. This weight shall be 1,000 lbs. or greater. At least twice during each 5 days of production either of the following checks will be performed:

- a. A loaded truck may be intercepted and weighed on a platform scale that has been sealed by the State Sealer of Weights and Measures within the past 12 months. The inspector will notify the producer to take corrective action on any discrepancy over 1.0%. The producer may continue to operate for 48 hours under the following conditions.
  1. If the discrepancy does not exceed 1.5%; payment will still be governed by the printed ticket.
  2. If the discrepancy exceeds 1.5%, the plant will be allowed to operate as long as payment is determined by truck platform scale net weight.

If, after 48 hours the discrepancy has not been addressed and reduced below 1.0%, then plant operations will cease. Plant operation may resume after the discrepancy has been brought within 1.0%.

- b. Where platform scales are not readily available, a check will be made to verify the accuracy and sensitivity of each scale within the normal weighing range and to assure that the interlocking devices and automatic printer system are functioning properly. If platform scales are not readily available, a weight with a known mass-verified and sealed annually by a licensed scale company, may be used by hanging weight from silo or surge hopper, at lower middle and upper third levels upon request to verify scale accuracy.
- c. In the event of a malfunction of the automatic printer system, production may be continued without the use of platform truck scales for a period not to exceed the next two working days, providing total weights of each batch are recorded on weight tickets and certified by a Licensed Public Weighmaster.

401.08 Hauling Equipment Units hauling HMA shall have tight, clean, and smooth metal bodies, which have been thinly coated with a small amount of approved release agent to prevent the mixture from adhering to the bodies. Release agents that dissolve or strip asphalts, including diesel fuel, will not be allowed.

All mix haul units shall have a cover of water repellent material capable of heat retention, which completely covers the mixture. The cover shall be securely fastened on the truck, unless unloading. Haul units shall have an opening on both sides near the midpoint of the body, at least 12 in above the bed, which will accommodate a thermometer stem.

401.09 Pavers The Contractor shall use pavers meeting the requirements of this section unless otherwise authorized by the Department. Pavers shall meet the requirements of Table 4: Paver Requirements.

TABLE 4: PAVER REQUIREMENTS

| Use                            | Paver Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Traveled Way & Auxiliary Lanes | Equipped with a 10 ft minimum main screed with activated extensions. The minimum tractor weight shall be 30,000 pounds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                | Equipped with automatic grade and slope controls that automatically adjust the screed and increase or decrease the layer thickness to compensate for irregularities in the preceding course. The controls shall maintain the proper transverse slope and be readily adjustable so that transitions and superelevated curves can be properly paved. The controls shall operate from a fixed or moving reference such as a grade wire or ski type device (floating beam) with a minimum length of 30 ft, a non-contact grade control with a minimum span of 24 ft, except that a 40 ft reference shall be used on interstate and divided highway projects. |
| All HMA Placement              | Self-contained, self-propelled units of sufficient class and size to place Hot Mix Asphalt Pavement in full lane widths specified in the contract on the main line, shoulder, or similar construction.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                | Equipped with a free-floating activated heated main screed with activated extensions. Pavers with extendible screeds shall have auger extensions and tunnel extenders as per the manufacturer's recommendations, a copy of which shall be available if requested.                                                                                                                                                                                                                                                                                                                                                                                        |
|                                | Equipped with a receiving hopper with sufficient capacity for a uniform spreading operation and a distribution system to place the mixture uniformly, without segregation in front of the screed.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                | Operated in such a manner as to produce a visually uniform surface texture and a thickness within the requirements of Section 401.11 - Surface Tolerances. The screed assembly shall produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture.                                                                                                                                                                                                                                                                                                                                                   |

The Contractor shall have the paver at the project site sufficiently before the start of paving operations to be inspected and approved by the Department. The Contractor shall repair or replace any paver found worn or defective, either before or during placement, to the satisfaction of the Department. Pavers that produce an unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA on MaineDOT projects. On a daily basis, the Contractor shall perform density testing across that mat as detailed in Section 401.191 Quality Control - Method A, B & C.

401.10 Rollers Rollers shall be static steel, pneumatic tire, oscillatory, or approved vibrator type. Rollers shall be in good mechanical condition, capable of starting and stopping smoothly, and be free from backlash when reversing direction. Rollers shall be equipped and operated in such a way as to prevent the picking up of hot mixed material by the roller drums or tires. Crushing of the aggregate or displacement of the HMA during rolling will not be permitted. Any HMA Pavement that becomes loose, broken, contaminated, shows an excess or deficiency of PGAB, or is in any other way defective shall be removed and replaced at no additional cost with fresh material which shall be immediately compacted to conform to the adjacent area.

The Contractor shall repair or replace any roller found to be worn or defective, either before or during placement, to the satisfaction of the Department. Rollers that produce grooved, unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA. The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option unless otherwise specified in the contract, provided specified density is attained and with the following requirements:

- a. On variable-depth courses, the first lift of pavement over gravel, reclaimed pavement, on irregular or milled surfaces, or on bridges, at least one roller shall be 16 ton pneumatic-tired. Pneumatic-tired rollers shall be equipped with skirting to minimize the pickup of HMA materials from the paved surface. When required by the Resident, the roller shall be ballasted to 20 ton.
- b. Compaction with a vibratory or steel wheel roller shall precede pneumatic-tired rolling, unless otherwise authorized by the Department.
- c. Vibratory rollers shall not be operated in the vibratory mode on bridge decks.
- d. Any method, which results in cracking or checking of the mat, will be discontinued and corrective action taken.
- e. The use of an oscillating steel roller shall be required to compact all mixtures placed on bridge decks.

The maximum operating speed for a steel wheel or pneumatic roller shall not exceed the manufacturer's recommendations, a copy of which shall be available if requested.

401.11 Surface Tolerances The Department will check the following surface tolerances:

- a. Longitudinally: The pavement surface profile shall be free of deviations in excess of  $\pm \frac{1}{4}$  inches from the required pavement surface profile grade. To verify the surface tolerance a straight plane shall be established using 16 foot straight edge or a taught string line placed parallel to the direction of travel and checked continuously across the width of the lane.
- b. Transversely: The pavement surface profile shall be free of deviations in excess of 0 inches below and  $\frac{1}{4}$  inches above the required cross-sectional profile grade. To verify the surface tolerance a straight plane shall be established using a 10 foot straight edge or taught string line placed perpendicular to the direction of travel and checked continuously along the length of the lane.

The Contractor shall correct defective areas by removing defective work and replacing it with new material as directed by the Department. The Contractor shall furnish a 10 foot straightedge for the Department's use.

401.12 Preparation of Existing Surface The Contractor shall thoroughly clean the surface upon which Hot Mix Asphalt Pavement is to be placed of all objectionable material. When the surface of the existing base or pavement is irregular, the Contractor shall bring it to uniform grade and cross section. All surfaces shall have a tack coat applied prior to placing any new HMA course.

When covering portland cement concrete surfaces (concrete slabs or concrete backfill), as a minimum, a triple application of tack coat shall be applied on the surface prior to pavement being placed over the concrete.

Tack coat shall conform to the requirements of Section 409 – Bituminous Tack Coat, Section 702 – Bituminous Material, and all applicable sections of the contract.

**401.13 Spreading and Finishing** In areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the Contractor shall spread, rake, and lute the HMA with hand tools to provide the required compacted thickness. Release agents that dissolve or strip asphalts, including diesel fuel, will not be allowed. On roadways with adjoining lanes carrying traffic, the Contractor shall place each course per the conditions in Table 5, unless otherwise noted by the Department in Section 403 - Hot Mix Asphalt Pavement.

TABLE 5: PLACEMENT CONDITIONS FOR ADJOINING LANES

| <b>Depth<br/>(at centerline)</b>          | <b>Placement Conditions</b>                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vertical Longitudinal Joint</b>        |                                                                                                                                                                                                                                                                                                                                                                                                     |
| $\frac{3}{4}$ " and less<br>(incl. shim)  | The Contractor may place the HMA course over the full single travel lane width for each production day.                                                                                                                                                                                                                                                                                             |
| 1" to 1 $\frac{1}{4}$ "                   | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint of the project's 1 days' average production will be permitted over the weekend.                                   |
| 1 $\frac{1}{2}$ " to 2"                   | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before the end of the following calendar day.                                                                                                                                                |
| Greater than 2"                           | The Contractor shall place each course over the full width of the traveled way section being paved that day.                                                                                                                                                                                                                                                                                        |
| <b>Notched-Wedge Longitudinal Joint</b>   |                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1 $\frac{1}{2}$ " to 2"                   | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint of the project's 1 days' average production will be permitted over the weekend.                                   |
| Greater than 2"                           | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before the end of the following calendar day.                                                                                                                                                |
| <b>Longitudinal Joints (&lt;45 mph) *</b> |                                                                                                                                                                                                                                                                                                                                                                                                     |
| Greater than 2"                           | With use of a Notch-Wedge device, the Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint of the project's 1 days' average production will be permitted over the weekend. |

\* Longitudinal joint allowances for segments under 45 mph will only be permitted if the segment length is continuous for one mile or greater or the total length of the project is one mile or less.

Constructed wedge joints that degrade or break off will not qualify for the open joint duration as described above. The impacted area shall be matched up within 48 hours of notification by the Department. Prior to matching, the Contractor shall trim off the impacted area and construct a vertical joint. Failure to comply will result in an automatic Traffic Control Violation as per section 652.8.

The Contractor shall place the specified course over the full width of the mainline traveled way being paved, regardless of use, depth, or longitudinal joint type prior to Memorial Day, July 4<sup>th</sup>, Labor Day, paving suspensions exceeding three days, or other dates as specified by special provision.

The Contractor shall install additional warning signage that clearly defines the centerline elevation differential hazard. Unless otherwise addressed in the contract, the Contractor shall install additional centerline delineation such as a double application of raised pavement markers at 100 foot intervals, or temporary painted line. For any exposed vertical edge between the shoulder and traveled way, at a minimum, the use of temporary painted line, or RPMs placed along the edge of traveled way at 200 foot intervals is required. The Traffic Control Plan shall be amended to include this option and the additional requirements. All signs and traffic control devices will conform to Section 719.01, and Section 652, and will be installed prior to the work, at a maximum spacing of 0.50 mile for the entire length of effected roadway section. If this option is utilized, all additional signing, labor, traffic control devices, or incidentals will not be paid for directly, will be considered incidental to the appropriate 652 items.

When covering a portland cement concrete surface (concrete slabs or concrete backfill) a minimum of 3 inches of HMA pavement will be required over the concrete.

401.14 Hot Mix Asphalt Placement on Bridge Decks Hot mix asphalt pavement placed on bridges shall also conform to Section 508.04 and the following requirements:

- a. The minimum production and placement temperature for the Hot Mix Asphalt placed over membrane shall conform to the manufacturer's recommendations.
- b. The bottom course shall be placed with an approved rubber mounted paver of such type and operated in such a manner that the membrane waterproofing will not be damaged in any way.
- c. The top course shall not be placed until the bottom course has cooled sufficiently to provide stability.
- d. The Contractor will not be required to cut sample cores from the compacted pavement on the bridge deck, unless otherwise directed by Special Provision.
- e. After the top course has been placed, the shoulder areas shall be sealed 3 ft wide with two applications of an emulsified bituminous sealer meeting the requirements of Section 612.03 - Sealing and Section 702.12 - Emulsified Bituminous Sealing Compound. The first application shall be pre-mixed with fine, sharp sand, similar to mortar sand, as needed to fill all voids in the mix in the area being sealed. The second application may be applied without sand. The sealer shall be carried to the curb at the gutter line in sufficient quantity to leave a bead or fillet of material at the face of the curb. The area to be sealed shall be clean, dry and the surface shall be at ambient temperature. The furnishing and applying of the required quantity of sealer for the bridge shoulder areas shall be incidental to placing the hot mix asphalt pavement.
- f. The area between the edge of the membrane and the vertical surface of bridge curbing and concrete bridge headers shall be completely sealed with hot-applied asphaltsealant material, meeting the requirements of Type 4 or mastic crack seal. Sealant shall be applied to form a complete seal between the membrane and the vertical surface and shall extend up the vertical surface to within ½ inch of the top of the HMA wearing surface. This work shall be considered incidental to the contract pavement items unless 508 membrane items are included in the contract.

401.15 Compaction Immediately after the Hot Mix Asphalt Pavement has been spread, struck off, and any surface irregularities adjusted, the Contractor shall thoroughly and uniformly compact the HMA by rolling.

The Contractor shall roll the surface when the mixture is in the proper condition and when the rolling does not cause undue displacement, cracking, or shoving. The Contractor shall prevent adhesion of the HMA to the rollers or vibrating compactors without the use of fuel oil or other petroleum-based release agents. Solvents designed to strip asphalt binders from aggregates will not be permitted as release agents on equipment, tools, or pavement surfaces.

The Contractor shall immediately correct any displacement occurring as a result of the reversing of the direction of a roller or from other causes to the satisfaction of the Department. Any operation other than placement of variable depth shim course that results in breakdown of the aggregate shall be discontinued. Any new pavement that shows obvious cracking, checking, or displacement shall be removed and replaced for the full lane width as directed by the Resident at no cost to the Department.

Along forms, curbs, headers, walls, and other places not accessible to the rollers, the Contractor shall thoroughly compact the HMA with mechanical vibrating compactors. The Contractor shall only use hand tamping in areas inaccessible to all other compaction equipment. On depressed areas, the Contractor may use a trench roller or cleated compression strips under a roller to transmit compression to the depressed area.

Any HMA that becomes unacceptable due to cooling, cracking, checking, segregation or deformation as a result of an interruption in mix delivery shall be removed and replaced with material that meets contract specifications at no cost to the Department.

For all items requiring pavement density testing, the Contractor shall cut 6-inch diameter cores at no additional cost to the Department by the end of the working day following paving. Cores shall be cut such that the nearest edge at least 9 inches from any joint. Pre-testing of the cores will not be allowed. If the Contractor and the Department mutually determine that a core is damaged, the Contractor shall cut new core(s) at the same offset and within 3 ft of the initial sample. The Contractor and the Department will mutually determine if underlying material is adhered to the core and if so will mark the core at the point where sawing is needed. The Department will place the cores in a secure container and the Contractor shall transport the cores to the designated MaineDOT lab. The cores will be saw cut by the Department to remove underlying layers. No recuts are allowed at a test location after the core has been tested.

On all sections of overlay with wearing courses designed to be 1 in or less in thickness, there shall be no pay adjustment for density otherwise noted in Section 403 - Hot Mix Asphalt Pavement. For overlays designed to be 1 in or less in thickness, density shall be obtained by the same rolling train and methods as used on mainline travelway surface courses with a pay adjustment for density, unless otherwise directed by the Department.

There shall be no pay adjustment for density on shoulders unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. Density for shoulders shall be obtained by the same rolling train and methods as used on mainline travelway, unless otherwise directed by the Department. Efforts to obtain optimum compaction will not be waived by the Department unless it is apparent during construction that local conditions make densification to this point detrimental to the finished pavement surface course.

**401.16 Joints** The Contractor shall construct wearing course transverse and longitudinal joints in such a manner that minimum tolerances shown in Section 401.11 - Surface Tolerances are met when measured with a straightedge. The paver screed shall maintain a uniform head of HMA during transverse and longitudinal joint construction. The HMA shall be free of segregation and meet temperature requirements outlined in Section 401.04. Transverse joints of the wearing course shall be straight and neatly trimmed. The Contractor may form a vertical face exposing the full depth of the course by inserting a header, by breaking the bond with the underlying course, or by cutting back with hand tools. The Contractor shall apply a coating of emulsified asphalt immediately before paving all joints to the vertical face and 3 in of the adjacent portion of any pavement being overlaid except those formed by pavers operating in echelon. The Contractor shall use an approved spray apparatus designed for covering a narrow surface. The Department may approve application by a brush for small surfaces, or in the event of a malfunction of the spray apparatus, but for a period of not more than one working day.

Where pavement under this contract joins an existing pavement, or when the Department directs, the Contractor shall cut the existing pavement along a smooth line, producing a neat, even, vertical joint. The Department will not permit broken or raveled edges. The cost of all work necessary for the preparation of joints is incidental to related contract pay items. Longitudinal joints shall be generally straight to the line of travel and constructed in a manner that best ensure joint integrity. Methods or activities that prove detrimental to the construction of straight, sound longitudinal joints will be discontinued.

The Contractor may utilize an approved notched wedge joint device on all HMA layers 1 ½ inches in depth or greater. A notched wedge joint shall be constructed as shown in Figure 1 using a device that is attached to the paver screed and is capable of independently adjusting the top and bottom vertical notches.

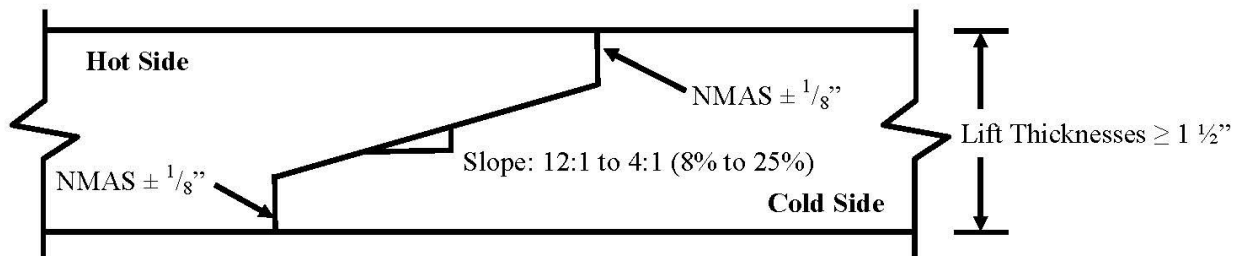


**FIGURE 1: Notched Wedge Joint**

**Notes**

1. An emulsified tack coat shall be applied to the vertical edges and the wedge surface so that the total rate is 0.05 G/SY plus the normal specified rate prior to placing the adjacent layer. The Contractor may elect to apply the emulsified tack coat in one or multiple passes.
2. Dimensions shown are compacted depths (after rolling is complete).

The Department reserves the right to have centerline cores cut by the Contractor's QC personnel for informational purposes to monitor the density along the joint. Informational cores at the centerline joint will be taken centered over the tapered part of the wedge joint.

Any notched wedge joint constructed areas that become cracked or broken shall be trimmed back to the limits affected prior to placing the adjoining lane. Any materials that become unbound or separated from the wedge or tapered joint section, or contaminated by materials determined by the Department as being detrimental to the construction of a sound construction joint, shall be removed by sweeping, compressed air and lance, or by hand tools as required. This work, if necessary, will not be paid for directly, but shall be considered incidental to the related contract items.

The Contractor shall apply a coating of emulsified asphalt on the vertical and tapered surface of the longitudinal centerline joint immediately before paving if the notched wedge joint device is used.

The total rate of application shall be 0.050 G/SY plus the normal specified tack coat rate. The Contractor shall use an approved spray apparatus designed for covering a narrow surface. The Department may approve application by a brush for small surfaces.

401.17 Hot Mix Asphalt Documentation The Contractor and the Department shall agree on the amount of Hot Mix Asphalt Pavement that has been placed each day. All delivery slips shall conform to the requirements of 401.078.

401.18 Prepave Meeting Prior to placing any mix, the Department and the Contractor shall hold a Pre-paving conference to discuss the paving schedule, source of mix, type and amount of equipment to be used, sequence of paving pattern, rate of mix supply, random sampling, project lots and sublots and traffic control. A copy of the density QC random numbers to be used on the project shall be provided to the Resident. The Departments' random numbers for Acceptance testing shall be generated and on file with the Resident and the Project Manager. All personnel of the Department and the Contractor who have significant information relevant to the paving items shall attend, including the responsible onsite paving supervisor for the Contractor. The Resident will prepare minutes of the conference and distribute them to all attendees. Any requests to revise the minutes must be made to the Resident within 7 Days of Receipt. These minutes will constitute the final record of the Pre-paving conference. On the first day of paving and whenever there is a change in the onsite paving foreman or paving inspector, the Department and the Contractor shall hold an informal onsite meeting to review the minutes of the Pre-paving conference, Project Specific QCP, Plans, Typical, Special Provisions and communication process. This meeting shall be held prior to placing any mix and, at minimum, shall occur yearly for multi-year contracts. The onsite paving supervisor, QCT, Superintendent, Resident and/or paving inspector shall attend.

401.19 Contractor Quality Control – Method A, B, C & D

The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

401.191 Quality Control The QCP shall meet the requirements of Section 106.6 – Acceptance and this Section. The QCP shall address any items that affect the quality of the Hot Mix Asphalt Pavement, and shall include the following personnel meeting these minimum requirements:

- a. QCP Administrator – The QCP Administrator must be a full-time employee of or a consultant engaged by the Contractor or paving subcontractor. The QCP Administrator shall have full authority to institute any and all actions necessary for the successful operation of the QCP. The QCP Administrator (or their designee in the QCP Administrator's absence) shall be available to communicate with the Department at all times.

- For items accepted under Methods A and B, the QCP Administrator shall be certified as a Quality Assurance Technologist (QAT) by NETTCP.
  - For items accepted under Methods C and D, the QCP Administrator shall be certified by NETTCP as a Quality Assurance Technologist (QAT), Plant Technician, or Paving Inspector.
- b. Process Control Technician(s) (PCT) shall utilize test results and other quality control practices to assure the quality of aggregates and other mix components and control proportioning to meet the JMF(s). The PCT shall inspect all equipment used in mixing to assure it is operating properly and that mixing conforms to the mix design(s) and other Contract requirements, and that delivery slips and plant recordation accurately reflects the mix being produced with all the required information. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one PCT is required. The Plan shall include the criteria to be utilized by the PCT to correct or reject unsatisfactory materials. The PCT shall be certified as a Plant Technician by the NETTCP.
- c. Quality Control Technician(s) (QCT) shall perform and utilize quality control tests at the job site to assure that delivered materials meet the requirements of the JMF(s). The QCT shall inspect all equipment utilized in transporting, laydown, and compacting to assure it is operating properly and that all laydown and compaction conform to the Contract requirements. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one QCT is required. The QCP shall include the criteria utilized by the QCT to correct or reject unsatisfactory materials. The QCT shall be certified as a Paving Inspector by the NETTCP.

The QCP shall detail the coordination of the activities of the Plan Administrator, the PCT and the QCT. The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The QCP shall address any items that affect the quality of the Hot Mix Asphalt Pavement including, but not limited to, the following:

a. General Requirements:

- Job Mix Formulas (JMFs)
- Name of QCP Administrator, and certification number
- Description of corrective action process
- Disposition of defective material
- A procedure to take immediate possession of acceptance samples once released by MaineDOT and deliver said samples to the designated acceptance laboratory.
- Type of release agent to be used on haul units, tools and rollers.
- A note stating that the use of petroleum-based fuel oils, such as diesel or kerosene, or asphalt stripping solvents will not be permitted.

b. Process Control Requirements: Each Hot Mix Asphalt plant shall have a Plant Specific Process Control Plan. At minimum the plan shall include:

- Name of Plant Specific Process Control Technician(s) and certification number(s)
- Hot mix asphalt plant details
- Stockpile Management
- Mixing & transportation
- Silo management and details
- A detailed description of RAP processing, stockpiling and introduction into the plant
- PG Binder management:
  - Tanks and storage (including polymer modified binders if applicable)
  - Binder temperature
  - Sample points
  - Method to ensure mixture contains the specified binder grade
  - Additive introduction details if introduced at the plant
- Testing and inspection plan for control of aggregates and RAP
- Mix Testing and inspection plan

c. Quality Control Requirements – Method A & B:

- Name of Quality Control Technicians(s) and certification number(s)
- Laydown operations
- Longitudinal joint construction including the tacking of all joints.
- Procedures for avoiding paving in inclement weather
- Compaction of shoulders
- Methods to ensure that segregation is minimized
- Procedures to determine the maximum rolling and paving speeds based on best engineering practices and past experience in achieving acceptable pavement smoothness.
- Sequence for paving around drainage structures, under guard rail, around curb, at bridges, intersections, drives and minor approaches to ensure proper compaction, finish, and drainage.

d. Quality Control Requirements – Method C and D:

- Name of QCP Administrator and certification number(s) as specified in Section 401.19.
- Name of Process Control Technicians(s) and certification number(s).
- Name of Quality Control Technicians(s) and certification number(s).
- Anticipated Compaction Temperature Zones for each roller zoned during placement.
- Mix TMD to be used for density gauge setting for method spec density work
- Procedures for avoiding paving in inclement weather.

The Contractor shall also supply a Laydown Operation Plan that addresses sequence of work, layout of work, longitudinal joint construction, compaction of shoulders, methods to minimize segregation, and procedures to achieve acceptable pavement smoothness.

For each production day, a summary of each day's results, including a daily paving report, summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and the number of roller passes, shall be recorded and signed by the QCT and presented to the Department's representative by 1 PM the following working day.

Unless otherwise noted in Section 403 – Hot Mix Asphalt Pavement, the Contractor shall submit a modified QC Plan every year detailing, how the mix is to be placed, what equipment is to be used, and what HMA plant is to be used for Items covered under the Plan. All mix designs (JMF) shall be approved and verified by MaineDOT prior to use.

The Contractor shall certify the mix and the test results for each item by a Certificate of Compliance.

The Contractor shall have a testing lab at the plant site, equipped with all testing equipment necessary to complete the tests in Table 6. The Contractor shall generate QC sampling random numbers for each approved mix design every year. A copy of the random numbers shall be emailed to the QC.mainedot@maine.gov email address and remain on-file (in print) and be available for inspection at the QC laboratory. The Contractor shall sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with the minimum frequencies per each approved mix design.

TABLE 6: MINIMUM QUALITY CONTROL FREQUENCIES

| Test or Action                    | Frequency                     | Test Method                  |
|-----------------------------------|-------------------------------|------------------------------|
| Temperature of mix                | 6 per day at street and plant | -                            |
| Temperature of mat                | 4 per day                     | -                            |
| %TMD (In-Place Density - Surface) | 1 per 125 ton                 | AASHTO T 355 or AASHTO T 343 |
| %TMD (In-Place Density - Base)    | 1 per 250 ton                 | AASHTO T 355 or AASHTO T 343 |
| Fines / Effective Binder          | 1 per 500 ton                 | AASHTO T 312*                |
| Gradation                         | 1 per 500 ton                 | AASHTO T 30                  |
| PGAB Content                      | 1 per 500 ton                 | AASHTO T 164 or AASHTO T 308 |
| Voids at $N_{design}$             | 1 per 500 ton                 | AASHTO T 312*                |
| VMA at $N_{design}$               | 1 per 500 ton                 | AASHTO T 312*                |
| Rice Specific Gravity             | 1 per 500 ton                 | AASHTO T 209                 |
| Percent Fractured Particles       | 1 per 5,000 ton               | AASHTO T 335                 |
| Flat and Elongated Particles      | 1 Per 5,000 ton               | ASTM D4791                   |
| Fine Aggregate Angularity         | 1 Per 5,000 ton               | AASHTO T 304                 |

The Contractor shall monitor plant production on each approved mix design using running average of three control charts as specified in Section 106 - Quality. Control limits shall be as noted in Table 7 below. The UCL and LCL, shall not exceed the allowable gradation control points for the particular type of mixture as outlined in Table 1 of Section 703.09.

TABLE 7: CONTROL LIMITS

| Property                                  | UCL and LCL          |
|-------------------------------------------|----------------------|
| Percent Passing 4.75 mm and larger sieves | Target +/- 4.0       |
| Percent Passing 2.36 mm sieve             | Target +/- 2.5       |
| Percent Passing 0.075 mm sieve            | Target +/- 1.0       |
| PGAB Content                              | Target +/- 0.25      |
| VMA at $N_{design}$                       | LCL = LSL + 0.2      |
| Voids at $N_{design}$                     | JMF Target +/- 1.2   |
| Theoretical Maximum Specific Gravity      | JMF Target +/- 0.020 |

The Contractor shall submit all QC test and inspection reports and updated control charts to the Resident and QC.mainedot@maine.gov by email. The reports and updated control charts shall be signed by the appropriate technician and be submitted to the Department by 1:00 P.M. on the next working day, except when otherwise noted in the QCP and approved by the Department.

The Contractor shall also retain splits of the previous 5 QC tests, with QC results enclosed for random selection and testing by the Department. Test results of splits that do not meet the Dispute Resolution

Variance Limits in Table 18 shall trigger an investigation by the MaineDOT Independent Assurance Unit and may result in that lab losing NETTCP certification and the ability to request a dispute [Section 401.50 - Process for Dispute Resolution].

The Contractor shall make density test results, including randomly sampled densities, available to the Department onsite. Summaries of each day's results, including a daily paving report summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and the number of roller passes, shall be recorded and signed by the QCT and provided to the QC.mainedot@maine.gov email address and Resident in writing by 1:00 p.m. the next working day. The Contractor shall fill all holes in the pavement resulting from cutting cores by the Contractor or the Department with a properly compacted, acceptable mixture no later than the following working day. Before filling, the Contractor shall carefully clean the holes and apply a coating of emulsified asphalt. The Contractor may only cut additional cores for verification of the densometer, at a rate not to exceed 3 per day or 2 per 1000 ton placed.

If the Contractor's control chart shows the process for a given mix design to be out of control (defined as a single point outside of the control limits on the running average of three chart) on any property listed in Table 7: Control Limits, the Contractor shall notify the Resident of all affected projects in writing of the corrective action by 1:00 PM the next working day. The written description shall detail what action is being taken by the Contractor to bring the property in question back within control limits. Subsequent quality control results are expected to demonstrate an improvement and regression towards the aim. The Department reserves the right to take action, to include cessation of production, in the case of repeated results outside the Table 7 control chart control limits.

On a daily basis, or whenever equipment type or sequence is modified, the Contractor shall perform density testing across the mat being placed, prior to being compacted by equipment at 12 in intervals. If the density values vary by more than 2.0% from the mean, the Contractor shall make adjustments to the screed until the inconsistencies are remedied. Failure to replace or repair defective placement equipment may result in a letter of suspension of work and notification of a quality control violation resulting in possible monetary penalties as governed by Section 106 – Quality.

The Contractor shall cease paving operations whenever one of the following occurs:

- a. The quality level for density using all quality control tests for the current Lot is less than 60 PWL.
- b. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Section 703.07, Table 3: Aggregate Consensus Properties Criteria for the design traffic level.
- c. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.
- d. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
- e. The Contractor fails to follow the approved QCP.

The Contractor shall notify the Resident in writing as to the reason for shutdown, as well as the corrective action, by the end of the workday. Failure to do so will be treated as a second incident under 106.4.6 QCP Non-compliance. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production. The Department

retains the exclusive right, with the exception of the first day's production of a new JMF, to determine whether the resumption of production involves a significant change to the production process. If the Department so determines, then the current lot will be terminated, a pay factor established, and a new lot will begin.

The Contractor may utilize innovative equipment or techniques not addressed by the Contract documents to produce or monitor the production of the mix, subject to approval by the Department.

401.192 Quality Control and Acceptance for Item 403.209 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size, (sidewalks, drives, islands & incidentals) and visual acceptance items Item 403.209 will be accepted under method D acceptance unless otherwise noted in the 403 special provision. A QCP, certified QC personnel, or Prepave Meeting shall not be required for Item 403.209 - Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands & incidentals) when accepted under either visual acceptance or under Method D acceptance unless otherwise specified in the 403 SP. An approved JMF shall be provided to the Resident prior to placement.

401.20 Acceptance Method A & C These methods utilize Quality Level Analysis and pay factor specifications. For Hot Mix Asphalt Pavement designated for acceptance under Quality Assurance provisions, the Department will sample once per subplot on a statistically random basis, test, and evaluate in accordance with the Acceptance Properties as outlined in Table 8:

TABLE 8: ACCEPTANCE PROPERTIES – METHOD A &amp; C

| Properties                | Point of Sampling      | Test Method  |
|---------------------------|------------------------|--------------|
| Gradation                 | Paver Hopper           | AASHTO T 30  |
| PGAB Content              | Paver Hopper           | AASHTO T 308 |
| % TMD (In-Place Density)  | Mat behind all Rollers | AASHTO T 269 |
| Voids at $N_{design}$     | Paver Hopper           | AASHTO T 312 |
| VMA at $N_{design}$       | Paver Hopper           | AASHTO T 312 |
| Fines to Effective Binder | Paver Hopper           | AASHTO T 312 |
| VFB                       | Paver Hopper           | AASHTO T 312 |

The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO R 97, Sampling Asphalt Mixtures, and the MaineDOT Policies and Procedures for HMA Sampling and Testing. The Contractor shall transport the samples in containers provided by the Department to the designated MaineDOT Laboratory within 48 hours except when otherwise noted in the project specific QCP or as directed by the Resident. Failure to deliver an acceptance sample to the designated acceptance laboratory will be considered the second incident under 106.4.6–QCP Non-Compliance.

Target values shall be as specified in the JMF. The Department will withhold reporting of the test results for the Acceptance sample until 7:00 AM, on the second working day of receipt of the sample, or after receipt of the Contractors results of the Acceptance sample split. Upon conclusion of each lot being evaluated under quality level analysis, where there is a minimum of four sublots, results shall be examined for statistical outliers, as stated in Section 106.7.2 - Statistical Outliers.

Lot sizes and subplot sizes shall be determined as outlined in Table 9.

TABLE 9: LOT AND SUBLOT SIZES – METHOD A &amp; C

| Lot Size*                           | Entire production per item per contract per year up to 6000 ton  |
|-------------------------------------|------------------------------------------------------------------|
| Maximum Sublot Size – Mix           | 750 ton                                                          |
| Maximum Sublot Size – Density       | Surface Layers – 250 ton<br>Base / Intermediate Layers – 500 ton |
| Minimum Number of Samples – Mix     | Four                                                             |
| Minimum Number of Samples – Density | Five                                                             |

\*General – Lot and Sublot size may be adjusted to accommodate the work scope and schedule, or as otherwise agreed upon at the Prepave Meeting

If there is less than one-half of a subplot remaining at the end of production for the year, then it shall be combined with the previous subplot. If there is more than one-half subplot remaining at the end of production for the year, then it shall constitute the last subplot and shall be represented by test results. If it becomes apparent partway through a Lot that, due to an underrun, there will be insufficient mix quantity to obtain the minimum number of sublots needed, the Resident may adjust the size of the remaining sublots and select new sample locations based on the estimated quantity of material remaining in the Lot. Unanticipated over-runs of up to 1500 ton shall be rolled into the last lot. Cases where the lot is terminated prior to reaching completion shall be handled in accordance with Section 106.7.3 Early Termination of Lots. In cases where a density incentive/disincentive provision apply, additional cores shall be taken to attain a minimum of three for the Lot.

Isolated Areas During the course of inspection, should it appear that there is an isolated area that is not representative of the lot based on a lack of observed compactive effort, excessive segregation, a change in process or any other questionable practice, that area may be isolated and tested separately.

An area so isolated that has a calculated pay factor below 0.80 for Method A, based on three random tests shall be removed and replaced at the expense of the Contractor for the full lane width and a length not to be less than 150 ft.

TABLE 10: ACCEPTANCE LIMITS – METHOD A &amp; C

| Property                                  | USL and LSL                                    |                 |
|-------------------------------------------|------------------------------------------------|-----------------|
|                                           | Method A                                       | Method C        |
| Percent Passing 4.75 mm and larger sieves | Target +/- 7%                                  | Target +/- 7%   |
| Percent Passing 2.36 mm to 1.18 mm sieves | Target +/- 4%                                  | Target +/- 5%   |
| Percent Passing 0.60 mm sieve             | Target +/- 3%                                  | Target +/- 4%   |
| Percent Passing 0.30 mm to 0.075 mm sieve | Target +/- 2%                                  | Target +/- 2%   |
| PGAB Content                              | Target +/- 0.4%                                | Target +/- 0.4% |
| Voids at $N_{design}$                     | 4.0% +/- 1.5%                                  | N/A             |
| Fines to Effective Binder                 | 0.9 +/- 0.3                                    | N/A             |
| VMA at $N_{design}$                       | LSL from Table 1                               | N/A             |
| VFB                                       | Table 1 plus a 4% production tolerance for USL | N/A             |
| % TMD (In-place Density)                  | 94.5% +/- 2.5%                                 | 94.5% +/- 2.5%  |

Cease Production The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

TABLE 11: CEASE PRODUCTION – METHOD A &amp; C

| Property                        | Percent Within Limits (PWL) |          |
|---------------------------------|-----------------------------|----------|
|                                 | Method A                    | Method C |
| Percent Passing NMAS sieve*     | <60 PWL                     | <60 PWL  |
| Percent Passing 2.36 mm sieve*  |                             |          |
| Percent Passing 0.30 mm sieve*  |                             |          |
| Percent Passing 0.075 mm sieve* |                             |          |
| PGAB Content                    |                             | N/A      |
| Voids at $N_{design}$           |                             |          |
| Fines to Effective Binder*      |                             |          |
| VMA at $N_{design}$             |                             |          |
| VFB                             |                             |          |
| % TMD (In-place Density)        |                             | <60 PWL  |

\*Paving operations shall not be required to cease if the mean test value is equal to the LSL or USL and  $s = 0$ .

In cases where the Contractor is to cease paving operations based upon an Acceptance result or payfactor, the Contractor will submit a corrective action plan to the Department. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production.

401.201 Pay Adjustment - Method A & C The Department will use the following criteria for pay adjustment at the completion of the Lot using the pay adjustment factors under Section 106.7 - Quality Level Analysis.

**Density** Upon conclusion of each lot, density results shall be examined for statistical outliers as stated in Section 106.7.2. If the pay factor for Density falls below 0.80, all of the cores will be randomly re-cut by Sublot. A new pay factor will be calculated that combines all initial and retest results. If the resulting pay factor is below 0.80, the entire Lot shall be removed and replaced with material meeting the specifications at no additional cost to the Department, except that the Department may, when it appears that there is a distinct pattern of defective material, isolate any defective material by investigating each mix sample subplot and require removal of defective mix sample sublots only, leaving any acceptable material in place if it is found to be free of defective material. Pay factors equal to or greater than the reject level will be paid accordingly.

**Mix Properties** The Department will determine a pay factor (PF) using the applicable Acceptance Limits. If all three pay factors for PGAB Content, VMA at  $N_{design}$ , and Voids at  $N_{design}$  fall below 0.80 for Method A, then the composite pay factor for PGAB Content, VMA at  $N_{design}$ , and Voids at  $N_{design}$  shall be 0.50.

The following variables will be used for pay adjustment:

PA = Pay Adjustment  
 Q = Quantity represented by PF in ton  
 P = Contract price per ton  
 PF = Pay Factor

The Department will determine a pay adjustment using Table 12: Pay Adjustment Calculations as follows:

TABLE 12: PAY ADJUSTMENT CALCULATIONS – METHOD A & C

| Acceptance Method | Mix Properties / Gradation                                                                                                                                                                                                                                     | Density                                     |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Method A          | $PA = (\text{Voids @ } N_d \text{ PF} - 1.0)(Q)(P)x0.20 + (\text{VMA @ } N_d - 1.0)(Q)(P)x0.20 + (\text{PGAB Content PF} - 1.0)(Q)(P)x0.10$                                                                                                                    | $PA = (\text{density PF} - 1.0)(Q)(P)x0.50$ |
| Method C          | $PA = (\% \text{ Passing Nom. Max PF} - 1.0)(Q)(P)x0.05 + (\% \text{ passing 2.36 mm PF} - 1.0)(Q)(P)x0.05 + (\% \text{ passing 0.30 mm PF} - 1.0)(Q)(P)x0.05 + (\% \text{ passing 0.075 mm PF} - 1.0)(Q)(P)x0.10 + (\text{PGAB Content PF} - 1.0)(Q)(P)x0.25$ | $PA = (\text{density PF} - 1.0)(Q)(P)x0.50$ |

In addition, for 9.5 mm NMAS mixtures the following pay adjustment shall also apply:

The average percent passing for the 0.075 mm sieve shall be evaluated for each Lot. If the average is greater than 6.5%, a pay adjustment according to Table 13 below shall apply in addition to the other pay adjustments for the given method of testing.

TABLE 13: 0.075 MM SIEVE PAY ADJUSTMENT

| Average Percent Passing 0.075 mm Sieve | Pay Adjustment |
|----------------------------------------|----------------|
| 6.6% - 7.0%                            | -5%            |
| > 7.0%                                 | -10%           |

The Department shall notify the Contractor whenever the average of at least three samples in a given Lot is greater than 6.5%.

**401.21 Acceptance Method B & D** Unless otherwise stated in the 403 special provision, the Lot shall be the entire mix quantity per item per contract per year. The Department will sample once per subplot per pay item on a statistically random basis, test, and evaluate in accordance with the Acceptance Properties in Table 14. The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO R 97, Sampling Asphalt Mixtures, and the MaineDOT Policies and Procedures for HMA Sampling and Testing. The Contractor shall transport the samples in containers provided by the Department to the designated MaineDOT Laboratory within 48 hours except when otherwise noted in the project specific QCP or as directed by the Resident. Failure to deliver an acceptance sample to the designated acceptance laboratory will be considered the second incident under 106.4.6–QCP Non-Compliance. Target values shall be as specified in the JMF. The Department will withhold reporting of the test results for the Acceptance sample until 7:00 AM, on the second working day of receipt of the sample, or after receipt of the Contractors results of the Acceptance sample split.

TABLE 14: ACCEPTANCE PROPERTIES – METHOD B &amp; D

| Properties                | Point of Sampling      |                        | Test Method  |
|---------------------------|------------------------|------------------------|--------------|
|                           | Method B               | Method D               |              |
| Gradation                 | Paver Hopper           | Paver Hopper or Truck  | AASHTO T 30  |
| PGAB Content              | Paver Hopper           | Paver Hopper or Truck  | AASHTO T 308 |
| % TMD (In-Place Density)  | Mat behind all Rollers | Mat behind all Rollers | AASHTO T 269 |
| Voids at $N_{design}$     | Paver Hopper           | N/A                    | AASHTO T 312 |
| VMA at $N_{design}$       | Paver Hopper           | N/A                    | AASHTO T 312 |
| Fines to Effective Binder | Paver Hopper           | N/A                    | AASHTO T 312 |
| VFB                       | Paver Hopper           | N/A                    | AASHTO T 312 |

TABLE 15: LOT AND SUBLOT SIZES – METHOD B &amp; D

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Lot Size*                 | Entire mix quantity per item per contract per year |
| Maximum Sublot Size – Mix | 250 ton (Max 4 Sublots)                            |
| Sublot Size – Density     | 125 ton (Max 5 Sublots)                            |

\*General – Lot and Sublot size may be adjusted to accommodate the work scope and schedule, or as otherwise agreed upon at the Prepave Meeting

If there is less than one-half of a subplot remaining at the end of production for the year, then it shall be combined with the previous subplot. If there is more than one-half subplot remaining at the end of production for the year, then it shall constitute the last subplot.

TABLE 16: ACCEPTANCE LIMITS – METHOD B &amp; D

| Property                           | USL and LSL                                    |                 |
|------------------------------------|------------------------------------------------|-----------------|
|                                    | Method B                                       | Method D        |
| Percent Passing 4.75 mm and larger | Target +/- 7%                                  | Target +/- 7%   |
| Percent Passing 2.36 mm sieve      | Target +/- 5%                                  | Target +/- 7%   |
| Percent Passing 1.18 mm sieve      | Target +/- 5%                                  | Target +/- 5%   |
| Percent Passing 0.60 mm sieve      | Target +/- 4%                                  | Target +/- 4%   |
| Percent Passing 0.30 mm sieve      | Target +/- 3%                                  | Target +/- 3%   |
| Percent Passing 0.075 mm sieve     | Target +/- 3%                                  | Target +/- 3%   |
| PGAB Content                       | Target +/- 0.5%                                | Target +/- 0.5% |
| Voids at N <sub>design</sub>       | 4.0% +/- 2.0%                                  | N/A             |
| Fines to Effective Binder          | 0.9 +/- 0.3                                    | N/A             |
| VMA at N <sub>design</sub>         | LSL from Table 1                               | N/A             |
| VFB                                | Table 1 plus a 4% production tolerance for USL | N/A             |
| % TMD (In-place Density)           | 94.5% +/- 2.5%                                 | LSL of 92.0%    |

The Contractor shall cease paving operations whenever two consecutive Method B or D tests fall outside specification limits on the same property. The Contractor will submit a corrective action plan to the Department. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production.

**401.211 Pay Adjustment - Method B & D** For items accepted under Method B or D, if the mix is within the tolerances listed in Table 16, the Department will pay the contract unit price. Otherwise, pay adjustments as shown in Table 17 shall be applied to the quantity of mix represented by the test. The Contractor shall cut one 6 in core per subplot unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. If the density result is not within the specified limits the disincentive shall apply. If the subplot density is less than 88.5 percent or greater than 99.0 percent of the subplot TMD, two additional cores shall be cut at random locations determined by the Department. If either of the additional cores has a density less than 88.5 percent or greater than 99.0 percent of the subplot TMD, the subplot shall be removed and replaced at no cost to the Department; otherwise, the average of the three cores will be used to determine the subplot pay adjustment.

TABLE 17: PAY ADJUSTMENTS – METHOD B &amp; D

| Property                       | Method B                       |        | Method D         |        |
|--------------------------------|--------------------------------|--------|------------------|--------|
| Percent Passing 2.36 mm sieve  | N/A                            |        | -2.0%            |        |
| Percent Passing 0.30 mm sieve  | N/A                            |        | -1.0%            |        |
| Percent Passing 0.075 mm sieve | -2.0%                          |        | -2.0%            |        |
| PGAB Content                   | -5.0%                          |        | -5.0%            |        |
| Voids at N <sub>design</sub>   | -3.0%                          |        | N/A              |        |
| % TMD (In-place Density)       | 91.5% - 91.9% or 97.1% - 97.5% | -5.0%  | 91.5% - 91.9%    | -5.0%  |
|                                | 90.5% - 91.4% or 97.6% - 98.5% | -10.0% | 90.5% - 91.4%    | -10.0% |
|                                | 89.5% - 90.4% or 98.6% - 99.0% | -20.0% | 89.5% - 90.4%    | -20.0% |
|                                | 88.5% - 89.4%                  | -30.0% | 88.5% - 89.4%    | -30.0% |
|                                | <88.5% or >99.0%               | Reject | <88.5% or >99.0% | Reject |

401.30 Method of Measurement The Department will measure Hot Mix Asphalt Pavement by the ton in accordance with Section 108.1 - Measurement of Quantities for Payment.

401.40 Basis of Payment The Department will pay for the work, in place and accepted, in accordance with the applicable sections of this Section, for each type of HMA specified.

The Department will pay for the work specified in Section 401.12, for the HMA used, except that cleaning objectionable material from the pavement and furnishing and applying bituminous material to joints and contact surfaces is incidental.-Payment for this work under the appropriate pay items shall be full compensation for all labor, equipment, materials, and incidentals necessary to meet all related contract requirements, including design of the JMF, implementation of the QCP, obtaining core samples, transporting cores and samples, filling core holes, applying emulsified asphalt to joints, and providing testing facilities and equipment. The Department will make a pay adjustment for quality as specified in Section 401.20 Acceptance Method A & B or 401.21 Acceptance Method C & D.

401.50 Process for Dispute Resolution At the time of Hot-Mix Asphalt sampling, the Department will obtain a split sample of each Acceptance test random sample for possible dispute resolution testing. The Contractor shall also obtain a split sample of the HMA at this same time. If the Contractor wishes to retain the option of requesting dispute testing of the initial Acceptance sample, the Contractor will test their split of the Acceptance sample in accordance with applicable AASHTO procedure and accepted supplemental practice as described in the Department's HMA Sampling and Testing Policies and Procedures manual. The Contractor shall report their results to the Resident, with a copy to Contractor.mainedot@maine.gov by 7:00 AM, on the second working day from time of QA sampling, otherwise dispute resolution will not be initiated. The Department's dispute resolution split sample will be properly labeled and stored for a period of at least two weeks after it has been reported, or until the sample is tested. The properties eligible for dispute and the respective variances are shown in Table 18.

The Contractor may dispute the Department's Acceptance results and request that the dispute resolution split sample be tested by notifying the Department's Resident and QA Engineer in writing within two working days after the results of the Acceptance test are reported. The following shall be provided in the request:

- Acceptance sample reference number
- The specific test result(s) or property(ies) being disputed, and
- The complete, signed report of the Contractor's testing (In a lab certified by the NETTCP and MaineDOT) of their split of the Acceptance sample indicating that the variances in Table 18 for the specific test result(s) or property(ies) were met or exceeded.

TABLE 18: DISPUTE RESOLUTION VARIANCE LIMITS

| Property                                  | Method A & B                                                 | Method C & D*                | Variance Limits |
|-------------------------------------------|--------------------------------------------------------------|------------------------------|-----------------|
| PGAB Content                              | Yes                                                          | Yes                          | +/- 0.4%        |
| G <sub>mb</sub>                           | Yes                                                          | No                           | +/- 0.030       |
| G <sub>mm</sub>                           | Yes                                                          | Only if referenced to a Core | +/- 0.020       |
| Voids at N <sub>design</sub>              | Only if G <sub>mb</sub> or G <sub>mm</sub> is not disputable | No                           | +/- 0.8%        |
| VMA at N <sub>design</sub>                | Only if G <sub>mb</sub> or G <sub>mm</sub> is not disputable | No                           | +/- 0.8%        |
| Percent Passing 4.75 mm and larger sieves | No                                                           | Yes^                         | +/- 4.0%        |
| Percent Passing 2.36 mm to 0.60 mm sieves | No                                                           | Yes^                         | +/- 3.0%        |
| Percent Passing 0.30 mm to 0.15 mm sieves | No                                                           | Yes^                         | +/- 2.0 %       |
| 0.075 mm sieve                            | Only for 9.5 mm NMAS mixes                                   | Yes                          | +/- 0.8%        |

\*Disputes will not be allowed on Item 403.209

^Disputes will only be allowed on Sieve Sizes used for pay adjustment calculations

The value of any disputed result or property reported for the initial Acceptance sample shall stand if the value reported for the dispute resolution sample is not closer to the value the Contractor reported for their split sample than to the value reported for the initial Acceptance sample. If the value reported for the dispute resolution falls precisely half-way between the other two values the value reported for the dispute resolution will replace the original acceptance value. Otherwise, the value reported for the dispute resolution sample will replace the value reported for the initial Acceptance sample and will be used to re-calculate any other affected results or properties.

## SECTION 402 - PAVEMENT SMOOTHNESS

**402.00 Smoothness Projects** Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Hot Mix Asphalt Pavement.

**402.01 Pavement Smoothness** The final pavement surface shall be evaluated for smoothness using a Class I or Class II profiler as defined by ASTM E950 (94). Smoothness measurements will be expressed in terms of the International Roughness Index (IRI) as defined by the World Bank, in units of inches/mile.

**402.02 Lot Size** Lot size for smoothness will be 3000 lane-feet. A subplot will consist of 50 lane-feet. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If equal to or greater than one-half the normal lot size, it will be tested as a separate lot.

**402.03 Acceptance Testing** The Department will conduct Acceptance testing following completion of the surface course. Sections to be excluded from testing include the following:

- Bridge decks and joints (no smoothness measurements will be taken within 100 ft of bridge joints)
- Acceleration and deceleration lanes
- Shoulders and ramps
- Side streets and roads
- Within 100 ft of transverse joints at the beginning and end of the project
- Within 100 ft of railroad crossings
- Urban areas with speed limits of 30 mph or lower

Each lot shall have 2 measurements made in each wheel path. The average of the 4 measurements will determine the smoothness for that lot. The smoothness measurements will be statistically evaluated for pay factors as described in Subsection 106.7 - Quality Level Analysis, using the specification limits shown below.

TABLE 1: ACCEPTANCE LIMITS

| Level | USL        |
|-------|------------|
| I     | 55 in/mile |
| II    | 65 in/mile |
| III   | 75 in/mile |

Computation of Smoothness Pay Adjustment:

$PA = (PF - 1.0)(Q)(P)$  where:

Q = Quantity of surface course in the Lot (excluding shoulders, side streets, bridge decks, ramps, acceleration and deceleration lanes)

PF = smoothness pay factor for the Lot

P = Contract unit price for surface pavement

PA = pay adjustment

**402.04 Unacceptable Work** In the event that any Lot is found to have a pay factor less than 0.80, the Contractor shall take whatever remedial action is required to correct the pavement surface in that Lot at no additional expense to the Department. Such remedial action may include but is not limited to removal and replacement of the unacceptable pavement. In the event remedial action is necessary, the Contractor shall submit a written plan to the Resident outlining the scope of the remedial work. The Resident must approve this plan before the remedial work can begin. Following remedial work, the Lot shall be retested, and will be subject to the specification limits listed above. The resulting pay factor, if within the acceptable range, will be used in the final pay adjustment. The Contractor shall pay the cost of retesting the pavement following corrective action.

Localized surface tolerance defects will be subject to the provisions outlined in Section 401.11 Surface Tolerances.

Payment will be made under:

Pay Item

402.10 Incentive/Disincentive - Pavement Smoothness

Pay Unit

Lump Sum

## SECTION 403 - HOT MIX ASPHALT PAVEMENT

**403.01 Description** This work shall consist of constructing one or more courses of Hot Mix Asphalt pavement on an approved base in accordance with these specifications, and in reasonably close conformity with the lines, grades, thickness and typical cross sections shown on the plans or established. The HMA pavement shall be composed of a mixture of aggregate, filler if required, and asphalt material.

**403.02 General** The materials and their use shall conform to the requirements of Section 401 - Hot Mix Asphalt Pavement.

**403.03 Construction** The construction requirements shall be as specified in Section 401 - Hot Mix Asphalt Pavement.

**403.04 Method of Measurement** Hot mix asphalt pavement will be measured as specified in Section 401.21- Method of Measurement.

**403.05 Basis of Payment** The accepted quantities of hot mix asphalt pavement will be paid for at the contract unit price per ton for the mixtures, including hot mix asphalt material complete in place. Method A, Method B, Method C and Method D shall be used for acceptance as specified in Section 401 - Hot Mix Asphalt Pavements. (See Complementary Notes, Section 403 - Hot Mix Asphalt Pavement, for Method location).

Payment will be made under:

| <u>Pay Item</u>                                                                                                    | <u>Pay Unit</u> |
|--------------------------------------------------------------------------------------------------------------------|-----------------|
| 403.102 Hot Mix Asphalt Pavement for Special Areas                                                                 | Ton             |
| 403.206 Hot Mix Asphalt, 25 mm Nominal Maximum Size                                                                | Ton             |
| 403.207 Hot Mix Asphalt, 19.0 mm Nominal Maximum Size                                                              | Ton             |
| 403.2071 Hot Mix Asphalt, 19.0 mm Nominal Maximum Size (Polymer Modified)                                          | Ton             |
| 403.2072 Asphalt Rich Hot Mix Asphalt, 19.0 mm Nominal Maximum Size<br>(Asphalt Rich Base and Intermediate course) | Ton             |
| 403.208 Hot Mix Asphalt, 12.5 mm Nominal Maximum Size                                                              | Ton             |
| 403.2081 Hot Mix Asphalt - 12.5 mm Nominal Maximum Size (Polymer Modified)                                         | Ton             |
| 403.209 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size<br>(Sidewalks, Drives, Islands & Incidentals)                 | Ton             |
| 403.210 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size                                                               | Ton             |
| 403.2101 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Polymer Modified)                                           | Ton             |
| 403.2104 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Thin Lift Surface Treatment)                                | Ton             |
| 403.211 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)                                                    | Ton             |
| 403.2111 Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming, Polymer Modified))                                | Ton             |
| 403.212 Hot Mix Asphalt, 4.75 mm Nominal Maximum Size                                                              | Ton             |
| 403.213 Hot Mix Asphalt, 12.5 mm Nominal Maximum Size<br>(Base and Intermediate Base course)                       | Ton             |
| 403.2131 Hot Mix Asphalt, 12.5 mm Nominal Maximum Size<br>(Base and Intermediate Base course, Polymer Modified)    | Ton             |
| 403.2132 Asphalt Rich Hot Mix Asphalt, 12.5 mm Nominal Maximum Size<br>(Base and Intermediate Base course)         | Ton             |
| 403.214 Hot Mix Asphalt, 4.75 Nominal Maximum Size (5/8" Surface Treatment)                                        | Ton             |

**SPECIAL PROVISION**  
**DIVISION 401**  
**HOT MIX ASPHALT PAVEMENTS**  
**(Asphalt Rich Hot Mix)**

The Special Provision 400 – Pavements; Section 401 – Hot Mix Asphalt Pavements; the following subsections have been modified with the following:

**Description** The Contractor shall furnish and place one or more courses of Asphalt Rich Hot Mix on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the MaineDOT Policies and Procedures for HMA Sampling and Testing.

**MATERIALS**

**401.02 Materials** The required PGAB shall be a storage-stable, homogeneous, polymer modified asphalt binder that meets or exceeds **PG 70E-28** grading requirements in AASHTO M 332 unless otherwise specified in the contract documents.

The Asphalt Rich Hot Mix shall be designed for an Air Void Target of 2.0 % at 65 Gyration.

**401.03 Composition of Mixtures** The Asphalt Rich Hot Mix shall meet the following design criteria:

The mixture shall be based upon a MaineDOT approved and active 9.5 mm 65 gyration JMF. The gradation aims of the design shall exactly match the aims of the base approved design it is based upon. No aim changes shall be permitted to the asphalt-rich design unless they exactly match those applied to the base design. Asphalt-rich designs shall only be permitted to be carried over from year to year if the base JMF from which it was generated is carried over as well and the gradation aims remain identical. If the base JMF is terminated for any reason, the asphalt-rich design shall be terminated as well.

Before the start of paving, the Contractor and the Department shall split a production sample for evaluation. The Contractor shall test its split of the sample and determine if the results meet the following requirements for verification:

**ASPHALT-RICH VERIFICATION CRITERIA**

| <b>Property</b>                | <b>Criteria</b>                                                                                                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PGAB Content                   | Design Value $\pm$ 0.3%                                                                                                                                                                           |
| Air Voids at $N_d$             | 2.0% $\pm$ 1.0%                                                                                                                                                                                   |
| Voids in the Mineral Aggregate | See Section 401.03 Composition of Mixtures <u>Table 1</u>                                                                                                                                         |
| Voids Filled with Binder       | 74% - 88%                                                                                                                                                                                         |
| Fines/Eff. Binder Ratio        | 0.4-1.2                                                                                                                                                                                           |
| Gradation                      | Passing 4.75 mm and larger sieves: Target $\pm$ 7%<br>Passing 2.36 mm to 1.18 mm sieve: Target $\pm$ 4%<br>Passing 0.60 mm: Target $\pm$ 3%<br>Passing 0.30 mm to 0.075 mm sieve: Target $\pm$ 2% |
| Passing NMAS sieve minimum     | 90.0%                                                                                                                                                                                             |
| Average $G_{mm}$               | Design Value $\pm$ 0.02                                                                                                                                                                           |

If the results are found to be acceptable, the Contractor will forward their results to the Department's Lab, which will test the Department's split of the sample. The results of the two split samples will be compared and shared between the

Department and the Contractor. If the Department finds the mixture acceptable, an approved JMF will be forwarded to the Contractor and paving may commence.

**401.15 Compaction** As a minimum, compaction of the asphalt-rich layer will be obtained using a roller train consisting of a 10 ton vibratory roller, a 10 ton intermediate roller, and a 3-5 ton finish roller unless otherwise approved by the Department. Once the methods are established, rolling patterns, equipment, and methods will become part of the QCP. Failure to conform to these requirements will be treated as a second incident under 106.4.6 QCP Non-compliance.

Increased placement rates may require additional rollers as determined by the Department or authorized representative. If mixture temperatures during interruptions in mix delivery are determined to be outside the specification temperature range outlined in this contract, the Contractor may be directed to halt placement operations. Any defective materials shall be immediately removed and replaced with material that meets contract specifications at no cost to the Department.

The Contractor shall be responsible for protecting the pavement from damage due to traffic or environmental factors until the pavement has sufficiently cooled enough to support traffic.

**401.201 Method B** Lot Size will be the entire production per JMF for the project, or if so agreed at the Pre-paving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 250 ton for mixture properties. The minimum number of sublots for mixture properties shall be 1.

TABLE 7: METHOD A ACCEPTANCE LIMITS

| Property                          | USL and LSL           |
|-----------------------------------|-----------------------|
| Passing 4.75 mm and larger sieves | Target +/-7%          |
| Passing 2.36 mm to 1.18 mm sieves | Target +/-4%          |
| Passing 0.60 mm                   | Target +/-3%          |
| Passing 0.30 mm to 0.075 mm sieve | Target +/-2%          |
| PGAB Content                      | Target +/-0.4%        |
| Air Voids                         | 2.0% +/-1.5%          |
| Fines to Effective Binder         | 0.4 to 1.2            |
| Voids in the Mineral Aggregate    | LSL Only from Table 1 |
| Voids Filled with Binder          | 74% – 93%             |
| % TMD (In place density)          | See section 401.15    |

Payment will be made under:

Pay Item

Pay Unit

403.2102 – 9.5mm Asphalt Rich Base HMA

Ton

**SPECIAL PROVISION**  
**SECTION 461**  
**HOT MIX ASPHALT**

| Desc. Of Course                                                                                          | Grad Design. | Item Number | Total Thick | No. Of Layers | Comp. Notes     |
|----------------------------------------------------------------------------------------------------------|--------------|-------------|-------------|---------------|-----------------|
| <b><u>¾" HMA Overlay - Light Capital Paving Preservation</u></b>                                         |              |             |             |               |                 |
| <b><u>Travelway, Shoulders &amp; Sideroads (As Directed)</u></b>                                         |              |             |             |               |                 |
| Wearing                                                                                                  | See Note 24  | 461.13      | ¾"          | 1             | 3,6,24          |
| Shim                                                                                                     | See Note 24  | 461.13      | variable    | 1/more        | 3,6,24          |
| <b><u>1 ½" Mill &amp; 1 ½" HMA Overlay - Bridge Deck &amp; Approaches (Bridge #3113 &amp; #3101)</u></b> |              |             |             |               |                 |
| <b><u>Travelway &amp; Shoulders (As Directed)</u></b>                                                    |              |             |             |               |                 |
| Wearing                                                                                                  | 9.5 mm       | 403.2102    | 1 ½"        | 1/more        | 2,4,25,30,31,52 |
| <b><u>Drives, Misc. (As Directed)</u></b>                                                                |              |             |             |               |                 |
| Wearing                                                                                                  | 9.5 mm       | 403.209     | 1-2"        | 1/more        | 3,20,30,32,52   |

**COMPLEMENTARY NOTES**

2. The required PGAB shall be a storage-stable, homogeneous, polymer modified asphalt binder that meets or exceeds **PG 70E-28** grading requirements in AASHTO M 332. All polymer modified asphalt grades utilized on the Project shall be treated with an approved liquid anti-strip. PG binders shall be treated either at the asphalt source terminal with the required dose rate on the delivery documentation, or at the hot mix asphalt plant utilizing a system integrated with the plants controls that will introduce a minimum 0.50 percent anti-strip by weight of asphalt binder used unless a rate is otherwise recommended by the anti-strip manufacturer. The PGAB and anti-strip blend shall meet or exceed the **PG 70E-28** requirements. The Contractor shall provide supporting test data showing the PGAB and anti-strip blend meet the required criteria.
3. The aggregate qualities shall meet the design traffic level of <3 million ESALS for mix placed under this contract. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **65 gyrations**.
4. The aggregate qualities shall meet the design traffic level of 3 to <10 million ESALS for mix placed under this contract. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **65 gyrations**.
6. Aggregates mixture shall be required to meet the requirements of Section 703.07 Aggregates for HMA Pavements.
20. The combined aggregate gradation required for this item shall be classified as a 9.5mm Thin Lift Mixture (TLM) mixture, using the Aggregate Gradation Control Points as defined in 703.09.
24. See Special Provision 461 - **Light Capital Pavement Preservation** for project specifics.
25. See Special Provision 401 - **Asphalt Rich Hot Mix** for project specifics.
30. The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on **bridge decks**.

31. A **Quality Control Technician (QCT) equipped with a density meter** shall be required for all roadway mixtures placed under this contract. Density testing of the mixture will be performed by the QCT in accordance with AASHTO T355 or AASHTO T343. The mixture will be rolled until the density readings show less than 1 pcf change for the final roller passes. This density will be used as the target TMD for the mixture. The remaining mixture shall be compacted to a minimum density of 95% of the target density as determined in the control section. The Contractor shall make density test results, including randomly sampled densities, available to the Department's representative onsite. Summaries of each day's results, including a daily paving report, summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and number of roller passes, shall be recorded and signed by the QCT and presented to the Department's representative by the **end of the working day**. The Department may require cores for informational purposes.
32. Compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **3-5 ton** vibratory roller. Areas less than 2 feet wide shall be compacted with a minimum of a **150 pound** plate compactor. An approved release agent is required to ensure the mixture does not adhere to hand tools, rollers, pavers, and truck bodies. The use of petroleum based fuel oils, or asphalt stripping solvents will not be permitted.
52. A tack coat of emulsified asphalt, RS-1, RS-1h, CRS-1 or CRS-1h, Item 409.15 shall be applied to any existing pavement at a rate of approximately **0.030 gal/yd<sup>2</sup>**, and on milled pavement approximately **0.05 gal/yd<sup>2</sup>** prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim /base courses and surface course as well as to any bridge membrane prior to the placement of HMA layers at a rate not to exceed **0.030 gal/yd<sup>2</sup>**. Cleaning objectionable material from the pavement and furnishing and applying Item 409.15 bituminous materials to joints and contact surfaces is **incidental to the contract paving items**.

## SPECIAL PROVISION

### SECTION 461

(Light Capital Paving)

Description The Contractor shall furnish a uniformly blended, homogenous mixture placed as one or more courses of Hot Mix Asphalt Pavement (HMA) for use as Light Capital Paving. Mixtures shall be placed in accordance with the contract documents or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with this Special Provision, provisions of AASHTO M 323, the most recent revision of Section 106 – Quality, Sections 401 and 703 as referenced to in this specification, and the MaineDOT Policies and Procedures for HMA Sampling and Testing. The Department will accept this work under the provisions outlined in this specification, except where otherwise referenced to.

## MATERIALS

Bituminous Material The bituminous material shall meet the requirements of the most recent revision of the State of Maine Department of Transportation Standard Specifications. The asphalt shall be a PG 64-28, or PG 58-28 grading, unless otherwise approved by the Department.

For bidding purposes, the bidder shall use a PGAB content of **6.7%** for all job mixes. The MaineDOT will determine the target PGAB content following submission of the Job Mix Formula and all related aggregates. Should the Department determine that the required PGAB content be adjusted from the **6.7 %** target to maintain the air void range specified in Table 1, the following payment adjustments shall be made:

- a.) The Contractor shall have the contract price per ton increased an additional fifty cents (\$0.50/ton) per ton for each one-tenth of one percent (0.1%) increase in the target PGAB content.
- b.) The Contractor shall have the contract unit price per ton decreased an additional fifty cents (\$0.50/ton) per ton for each one-tenth of one percent (0.1%) decrease in the target PGAB content.

Aggregate Materials Materials shall meet the requirements specified in Section 700 – Materials, or as described in this Special Provision.

|                             |        |
|-----------------------------|--------|
| Asphalt Cement              | 702.01 |
| Aggregates for HMA Pavement | 703.07 |

Aggregate shall consist of clean, tough, durable fragments free from an excess of flat, elongated, soft or disintegrated particles. In addition, the absorption of the fine aggregate, as determined by AASHTO T84, shall not exceed 3.0 percent by weight. It shall be processed from approved aggregate sources consisting of gravel, quarried stone, or sand source in such a manner that a uniformly graded stockpile of sufficient quantity for at least one day's normal production will be available at all times. Production of the mix will come from prepared stockpiles.

Recycled Asphalt Materials Recycled Asphalt Pavement (RAP) or Recycled Asphalt Shingles (RAS) may be introduced into the mixture at percentages specified in Table 2. RAP shall meet the requirements outlined in the Composition of Mixtures section of this specification. If approved by the Department, the Contractor shall provide documentation stating the source, test results for

average residual asphalt content, and stockpile gradations showing RAP materials have been sized to meet the maximum aggregate size requirements of each mix designation. The Department may obtain samples for verification and approval prior to its use.

The use of RAS will require additional testing and material certification. The Contractor will be required to provide additional documentation for any RAS products used stating the source and test data showing that the material has been tested for asbestos content, and the percent found, if any.

A Bill of Lading and/or other documentation signed by a responsible party for the solid waste or recycling facility and asbestos sampling results indicating that no asbestos is present in the material, must accompany each pre-tested load. Additionally, the asbestos sampling documentation shall identify the name, address and license number of the person(s) collecting the samples and analytical laboratory that conducted the asbestos analysis. The Bill of Lading must identify the permitted facility and the date the load was shipped.

Pre-consumer loads shipped directly from the manufacturer will not require testing. Each load shall be accompanied by appropriate shipping document such as a trip ticket or receipt to demonstrate the point of generation of the load. The RAS processing facility shall maintain on file a Safety Data Sheet (or document indicating that a SDS is not required for that material) for each type of material received for each manufacturer, which shall indicate that no asbestos is present in the material. If asbestos containing material is detected in any of the asphalt roofing materials, then the facility will reject the entire load and inform the supplier of their responsibility to properly dispose of the rejected load in accordance with all local, state and/or federal regulations. In the event that RAP or RAS source or properties change, the Contractor shall notify the Department of the change and submit new documentation stating the new source or properties a minimum of 72 hours prior to the change to allow for obtaining new samples and approval.

Composition of Mixtures The Contractor shall submit for Department approval a Job Mix Formula (JMF) composed of aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required for each mixture to be supplied. The JMF will be recreated in the Department's Central Laboratory and tested at the submitted target asphalt aim, as well as at percentages 0.05 below and above the target. If an acceptable air void content meeting the requirements of Table 1 can be obtained with the supplied gradation blend, then the target PGAB will be as specified in the contract.

TABLE 1: JMF TARGET VALUES

| Gyrations              | PGAB (%) | Air Void Range (%) |
|------------------------|----------|--------------------|
| 65 N <sub>design</sub> | 6.7      | 0.02 - 0.08        |

If an acceptable air void content meeting the Table 1 cannot be obtained, then the Department may require a redesign of the mixture before assigning a target PGAB target. An adjustment to the contract unit price will be made in accordance to this specification if an adjustment to the target PGAB is made as outlined in this special provision.

The Contractor shall provide aggregate samples to the Department unless otherwise required. The Contractor shall also make available to the Department the PGAB proposed for use in the mix in sufficient quantity to test the properties of the asphalt and to produce samples for testing of the

mixture. The first day's production shall be monitored, and the approval may be withdrawn if the mixture exhibits undesirable characteristics such as checking, shoving or displacement.

The Contractor may use a RAP or RAS in mixtures used for Light Capital Paving provided that the material meets the requirements of Table 2.

**TABLE 2: RECYCLED ASPHALT MATERIAL REQUIREMENTS**

| <b>Material</b> | <b>Classification</b> | <b>Percent of Total Mixture</b> |
|-----------------|-----------------------|---------------------------------|
| RAP             | I, II, II             | ≤ 20 Max                        |
| RAP             | Unclassified          | ≤ 15 Max                        |
| RAS*            | Unclassified          | ≤ 3 Max                         |

\*The combined RAP and RAS percentage shall not exceed 20% of the total mixture.

The Contractor shall size, uniformly grade, and combine the Aggregate fractions in proportions to provide a mixture meeting the requirements of Table 3.

The HMA supplier shall submit a proposed Job Mix Formula (JMF) to the Central Laboratory in Bangor, which shall include the following information:

- A. Plant data (make, size, type, location)
- B. PG binder data (grade, refiner, supplier)
- C. Aggregate data – Aggregate sizes, (including RAP and RAS if utilized) original source & owner, current location, percentage of each aggregate used, gradation of each aggregate and the target gradation of the mixture.

**TABLE 3: MIXTURE LIMITS**

| <b>Square Mesh Sieve</b> | <b>Standard Range (% Passing)</b> |
|--------------------------|-----------------------------------|
| ½"                       | 100                               |
| #4                       | 75-90                             |
| #16                      | 30-60                             |
| #50                      | 10-30                             |
| #200                     | 0.0-8.0                           |
| <b>PGAB Content</b>      | <b>6.7% +/- 0.4%</b>              |

The Contractor shall submit stockpile samples of aggregate for Department approval to the Central Laboratory in Bangor, for each plant location. These samples shall establish a single percentage/target of aggregate passing each required sieve size within the limits shown in Table 3.

Warm Mix Technology The Contractor may place Hot Mix Asphalt Pavement produced with an accepted WMA technology meeting the requirements of Standard Specification, Section 401.031 Warm Mix Technology.

Hot Mix Asphalt Plant Requirements All Bituminous mixing plants shall conform to Special Provision 400 – Hot Mix Asphalt Pavement, section 401.07 – Hot Mix Asphalt Plant.

Mixing Operations The processing of the aggregate, handling of the asphalt binder, drying of aggregate, and mixing shall conform to acceptable practices of the paving Industry. The Contractor shall furnish and place a uniformly blended, homogenous mixture. Plant locations with a rated

capacity of 100 tons/hour or above shall supply a minimum of 100 tons/hour at the paver. In locations where the Hot Mix Asphalt plant's maximum production rate is less than 100 TPH, the maximum production rate for that location shall determine the minimum rate of supply to the paver.

The Contractor shall provide an adequate supply of approved release agent, as well as the necessary application equipment to safely apply sufficient material to prevent the mixture from adhering to the truck beds. Solvent based agents developed to strip asphalts from aggregates will not be allowed as release agents. Failure to provide an approved release agent will result in the suspension of paving until corrective actions have been taken and MaineDOT representatives are satisfied with the results. The Contractor shall provide silicon additive when requested by the Department.

Pre-Pave Conference The MaineDOT and Contractor shall hold a pre-pave conference prior to placing any Hot Mix Asphalt to discuss specifics related to the sections of highway being paved under the contract. Specifics discussed shall include, but are not limited to; work schedule for each section, Hot Mix Asphalt plants and JMFs to be used, and testing requirements. Production rates (tons per hour) and the number of trucks to be supplied for each location will be discussed and an agreement will be made regarding both issues.

Quality Control The Contractor will be responsible for Quality Control and will determine what is appropriate for Quality Control.

Should the Contractor utilize the option of using Warm Mix Asphalt technology to produce the Light Capital Paving mixture for this contract, the Contractor shall submit a plan to the Department at the pre-pave conference. The plan shall include a modified Quality Control Plan (QCP) outlining the production facility details, technology to be used, production and placement details, including the warm mix asphalt manufacturers' recommended additive percentages ( if applicable).

Should the Contractor utilize the option of using RAS to produce the Light Capital Paving mixture for this contract, the Contractor shall submit a plan to the Department at the pre-pave conference. As a minimum, the plan shall include a Quality Control Plan (QCP) outlining material source and stockpile management, percentages to be used, blending of the RAS with any supplemental aggregate or RAP, and method of introduction into the plant.

Acceptance For Hot Mix Asphalt items designated as LCP (Light Capital Paving), Pay Item 461.13, a lot size shall be 1500 tons. The first project identification number in the contract paving area will be used for the purpose of tracking pavement Lots.

The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO T168 Sampling Bituminous Paving Mixtures, and the Maine DOT Policies and Procedures for HMA Sampling and Testing, which will then be transported by the contractor in approved transport containers to the designated acceptance laboratory within 48 hours. The Contractor shall notify the Department, in writing, with an alternative proposal for sample delivery if local conditions make adherence to the required timeframe impossible.

The Department will take two (2) full sample boxes randomly for each lot for acceptance or informational testing. The Contractor may obtain split samples of all Department samples for

Quality Control testing. The Contractor shall take immediate possession of acceptance samples once released by MaineDOT and deliver said samples to the designated acceptance laboratory.

The mixtures shall be tested for percent PGAB and gradation. Disputes will be allowed as provided for in Special Provision 401 – Hot Mix Asphalt Pavements; TABLE 10: DISPUTE RESOLUTION VARIANCE LIMITS for percent PGAB and the percent material passing the #200 sieve,

Each test result will represent the Lot, which will be evaluated for price adjustments based upon Table 4 below.

**TABLE 4: PRICE ADJUSTMENTS**

|                                 |                 |                     |
|---------------------------------|-----------------|---------------------|
| <b>#200 Sieve</b>               | 0% - 8.0%       | Contract Unit Price |
|                                 | 8.1% - 8.5%     | -1% Pay Adjustment  |
|                                 | 8.6% - 9.0%     | -2% Pay Adjustment  |
|                                 | > 9.0%          | -3% Pay Adjustment  |
| <b>JMF % PGAB<sup>1,2</sup></b> | Target +/- 0.4% | Contract Unit Price |
|                                 | 0.5% below JMF  | -3% Pay Adjustment  |

1. There will be an additional 1% Deduct for every 0.1% PGAB below the 0.5% listed above.
2. There will be no deducts for PGAB content above the JMF.

In addition to the deductions for PGAB above, if the average of all test results (based on more than one test result, calculated to the nearest hundredth) for the approved JMF is 0.3 percent or lower than the target for the JMF an additional 2% deduct shall be applied to the entire tonnage produced under the approved JMF.

The Contractor shall cease paving operations whenever two consecutive Acceptance tests for the approved JMF fall outside the upper or lower limits for Percent PGAB or individual gradations on the ½", #4, #16, #50 and #200 sieves. Paving operations shall not resume until the Contractor and the Department determines that material meeting the Contract requirements will be produced.

Nothing in this section prevents MaineDOT personnel or their representatives from obtaining additional samples of products to verify the acceptability of the product.

## CONSTRUCTION REQUIREMENTS

Seasonal and Weather Limitations The Contractor may place Hot Mix Asphalt Pavement for use as Light Capital Paving between the dates of May 1st and the Saturday following October 1<sup>st</sup>. Weather conditions shall be satisfactory for the safe set up and operation of traffic control for work zones, and safe operation of equipment. Paving shall be allowed when the atmospheric air temperature is above 45° F and pavement surface temperature is above 40° F.

Temperature Requirements After the JMF is established, the temperatures of the mixture shall conform to the following tolerances:

**TABLE 5: ALLOWABLE TEMPERATURE RANGES**

| <b>Location of Sampling</b>      | <b>Temperature Range (°F)</b> |
|----------------------------------|-------------------------------|
| In the truck at the mixing plant | 275-325                       |
| At the Paver                     |                               |

Tack Coat - A tack coat of RS-1 or RS-1h emulsified asphalt shall be applied to any existing pavement or recycled layer at a rate of 0.025 gal/yd<sup>2</sup> and at a rate of 0.05 gal/yd<sup>2</sup> on milled pavement prior to placing a new course. A tack coat of emulsified asphalt shall be applied between shim layers and subsequent layers at a rate not to exceed 0.025 gal/yd<sup>2</sup>. HFMS-1 emulsified asphalts may be used with approval of the Region LCP Manager.

Traffic Control The MaineDOT will provide all necessary traffic control devices, flaggers and sweeping operations; unless otherwise provided for in the contract documents or added by contract modification.

Placing Operations The Contractor shall be responsible for the actual placing and rolling operations. Placing operations shall conform to acceptable paving practices. Mixtures produced under this contract shall be placed on the roadway with a highway class paver, equipped with a power adjustable main screed. Pavers shall meet the following minimum requirements.

- a. A track or rubber tire mounted highway class paver with a minimum tractor weight of 28,000 pounds, and a minimum main screed width of 8 feet.
- b. All paver screeds shall be outfitted with auger and tunnel extensions as recommended by the manufacturer, and have power extendible, activated, and heated screed extensions designed by the manufacturer for highway paving. Screeds shall be configured to place mixtures to the required width, crown, and breakpoints as directed by the Department.
- c. The paver must have a material receiving hopper size capable of accepting haul trucks, and be of sufficient size and weight to maintain the required rate of placement, line of travel, depth, and cross section while engaged with a loaded tri-axle or trailer haul unit.

If it is determined by the Department that the 8 foot paver supplied is not adequate in meeting the material receiving hopper size, not of sufficient size and weight to maintain the required rate of placement, line of travel, depth and cross section, then a replacement paver meeting the requirements of the contract shall be supplied before work progresses.

Longitudinal joints shall be generally straight to the line of travel, and constructed in a manner that best ensure joint integrity. Longitudinal joints shall not exceed 3/8 inch when matching adjacent lanes. Methods or activities that prove detrimental to the construction of straight, sound longitudinal joints will be discontinued.

Immediately after the material is spread it shall be rolled and compacted by two or more 7 - 10 ton steel 2-axle wheel (one being vibratory) rollers.

During placing operations, the paver shall be operated at a rate of speed not to exceed the mixture delivery rate. The paver speed shall be adjusted in relation to the amount of material actually being delivered to the paver, based on project conditions, plant production, and ability to finish the Hot Mix Asphalt mixture without pushing, shoving or cracking the mixtures.

Increasing placement rates may require additional rollers as determined by the Department or authorized representative. If mixture temperatures during interruptions in mix delivery are

determined to be outside the specification temperature range outlined in this contract, the Contractor may be directed to halt placement operations. The defective materials shall be immediately removed and replaced with material that meets contract specifications at no cost to the Department.

Trucking and placing operations shall be scheduled to provide continuous placement of the mixture regardless of haul distance. The Contractor shall provide sufficient personnel at the paver to assure placement of the pavement in an orderly, safe, and efficient manner so as to assure a quality mat and proper overall yield.

The Contractor shall spot shim in locations as directed by the Department.

If the exposed centerline joint is  $\frac{3}{4}$ " or less, the Contractor shall close exposed longitudinal joints before suspending for Memorial Day, 4<sup>th</sup> of July, Labor Day, and absences greater than 3 days. Exposed centerline joints greater than  $\frac{3}{4}$ " will be matched up within  $\frac{1}{2}$  mile the next day and prior to weekends, holidays, and absences.

Dust Control The Contractor is responsible for dust control on the access roads for the bituminous plant as described in Section 637 of the Standard Specifications. This work shall be incidental to the contract.

Method of Measurement Light Capital Paving will be measured by the ton, at the contract price, according to delivery slips. Material not placed and compacted satisfactorily due to Contractor's equipment failure, daylight limitations, or weather will not be measured for payment. The delivery slips shall conform to the requirements of the most current edition of the Standard Specifications in use at the time of contract bid. Cover slips will be required to be delivered on the next working day after each paving day. Cover slips shall have the Item number, date and quantity listed.

Basis of Payment Light Capital Paving will be paid for at the contract unit price per ton, adjusted by any applicable material escalator or disincentives based on Acceptance test results. Such payment shall be full compensation for the following: obtaining, furnishing and processing all aggregate; supplying the specified PGAB bituminous material; processing, heating, mixing, weighing, placing, and compaction of the HMA mixtures; supplying and applying RS-1 emulsified asphalt to the existing pavement prior to placing any HMA; furnishing all labor, equipment, tools and all incidentals necessary to complete the work; and performing quality control testing. The maximum composite pay factor for mixes evaluated under this special provision shall be 1.00.

Payment will be made under:

| <u>Pay Item</u> |                      | <u>Pay Unit</u> |
|-----------------|----------------------|-----------------|
| 461.13          | Light Capital Paving | Ton             |

**SPECIAL PROVISION**  
**SECTION 461**  
(Light Capital Paving Preservation)

Description The Contractor shall furnish a uniformly blended, homogeneous mixture of Hot Mix Asphalt Pavement (HMA) meeting the requirements of one of the following Special Provisions with the modifications as outlined in this specification.

461 SP - Light Capital Paving  
461 SP - 9.5mm Hot Mix Asphalt Mix Design

Pavement will be placed as one or more courses and shall be in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under the provisions outlined in this specification, except where otherwise referenced to.

**MATERIALS**

Bituminous Material The bituminous material shall meet the requirements of the most recent revision of the State of Maine Department of Transportation Standard Specifications. The asphalt shall be a PG 64-28 unless otherwise specified in the contract documents.

Materials Materials shall meet the requirements specified in Section 700 – Materials, unless otherwise revised in this special provision.

Aggregates shall be required to meet the requirements of Section 703.07 Aggregates for HMA Pavements. The several aggregate fractions for mixtures shall be sized, graded, and combined in such proportions that the resulting composite blends, including RAP aggregate will meet the grading requirements for the respective mix type to be used.

Recycled Asphalt Materials The use of Recycled Asphalt Shingles (RAS) will **not be** permitted.

Hot Mix Asphalt Plant Requirements All Bituminous mixing plants shall conform to Special Provision 400 – Hot Mix Asphalt Pavement, section 401.07 – Hot Mix Asphalt Plant.

Pre-Pave Conference The MaineDOT and Contractor shall hold a pre-pave conference prior to placing any Hot Mix Asphalt to discuss specifics related to the sections of highway being paved under the contract. Specifics discussed shall include, but are not limited to; work schedule for each section, Hot Mix Asphalt plants and JMFs to be used, and testing requirements. Production rates (tons per hour) and the number of trucks to be supplied for each location will be discussed and an agreement will be made regarding both issues.

Quality Control The Contractor will be responsible for Quality Control and will determine what is appropriate for Quality Control.

Acceptance For Hot Mix Asphalt items designated as LCPP (Light Capital Paving Preservation), a lot size shall be 1500 tons. The first project identification number in the contract paving area will be used for the purpose of tracking pavement Lots.

If the Contractor options to use a design meeting the requirements of Special Provision 461 - 9.5mm Hot Mix Asphalt Mix Design, sampling and testing will be completed under item 461.210, otherwise sampling and testing will be completed under 461.13.

The Contractor shall cease paving operations whenever two consecutive Acceptance tests for the approved JMF fall outside the upper or lower limits for Percent PGAB or individual gradations on the ½", #4, #16, #50 and #200 sieves specified in Table 2. Paving operations shall not resume until the Contractor and the Department determines that material meeting the Contract requirements will be produced.

TABLE 1: MIXTURE LIMITS

| <b>Square Mesh Sieve</b> | <b>461.13 – LCP</b>  | <b>461.210 – 9.5mm</b> |
|--------------------------|----------------------|------------------------|
| ½"                       | 100%                 | 100%                   |
| #4 (4.75 mm)             | 75% - 90%            | Target +/- 7%          |
| #16 (1.18 mm)            | 30% - 60%            | Target +/- 5%          |
| #50 (0.30 mm)            | 10% - 30%            | Target +/- 3%          |
| #200 (0.075 mm)          | 0.0% - 8.0%          | 0.0% - 8.0%            |
| <b>PGAB Content</b>      | <b>6.7% +/- 0.4%</b> | <b>Target +/- 0.4%</b> |

Each test result will represent the Lot, which will be evaluated for price adjustments based upon Table 2 below.

TABLE 2: PRICE ADJUSTMENTS

|                           |                 |                     |
|---------------------------|-----------------|---------------------|
| #200 Sieve                | 0% - 8.0%       | Contract Unit Price |
|                           | 8.1% - 8.5%     | -1% Pay Adjustment  |
|                           | 8.6% - 9.0%     | -2% Pay Adjustment  |
|                           | > 9.0%          | -3% Pay Adjustment  |
| JMF % PGAB <sup>1,2</sup> | Target +/- 0.4% | Contract Unit Price |
|                           | 0.5% below JMF  | -3% Pay Adjustment  |

1. There will be an additional 1% Deduct for every 0.1% PGAB below the 0.5% listed above.
2. There will be no deducts for PGAB content above the JMF.

In addition to the deductions for PGAB above, if the average of all test results (based on more than one test result, calculated to the nearest hundredth) for the approved JMF is 0.3 percent or lower than the target for the JMF an additional 2% deduct shall be applied to the entire tonnage produced under the approved JMF.

Nothing in this section prevents MaineDOT personnel or their representatives from obtaining additional samples of products to verify the acceptability of the product.

## CONSTRUCTION REQUIREMENTS

Seasonal and Weather Limitations The Contractor may place Hot Mix Asphalt Pavement for use as Light Capital Paving Preservation between May 1<sup>st</sup> and the Saturday following October 1<sup>st</sup>. Weather conditions shall be satisfactory for the safe set up and operation of traffic control for work zones, and safe operation of equipment. Paving shall be allowed when the atmospheric air temperature is above 45° F, the pavement surface temperature is above 40° F.

Temperature Requirements The temperature of the mixture shall conform to the tolerances in Table 3 as measured at the truck at the mixing plant and at the paver unless otherwise authorized by the Department.

TABLE 3: ALLOWABLE TEMPERATURE RANGES

| <b>PGAB Grade(s)</b> | <b>Temperature Range (°F)</b> |
|----------------------|-------------------------------|
| PG64-28              | 275-325                       |
| PG64E-28             | 285-335                       |

Tack Coat A tack coat of RS-1, RS-1h, CRS-1 or CRS-1h emulsified asphalt shall be applied to any existing pavement or recycled layer at a rate of 0.03 gal/yd<sup>2</sup> and at a rate of 0.05 gal/yd<sup>2</sup> on milled pavement prior to placing a new course. A tack coat of emulsified asphalt shall be applied between shim layers and subsequent layers at a rate not to exceed 0.03 gal/yd<sup>2</sup>. HFMS-1 emulsified asphalts may be used with approval of the Department.

Traffic Control The MaineDOT will provide all necessary traffic control devices, flaggers and sweeping operations; unless otherwise provided for in the contract documents or added by contract modification.

Placing Operations The Contractor shall be responsible for the actual placing and rolling operations. Placing operations shall conform to acceptable paving practices. Mixtures produced under this contract shall be placed on the roadway with a highway class paver, equipped with a power adjustable main screed. Pavers shall meet the following minimum requirements.

- a. A track or rubber tire mounted highway class paver with a minimum tractor weight of 28,000 pounds, and a minimum main screed width of 8 feet.
- b. All paver screeds shall be outfitted with auger and tunnel extensions as recommended by the manufacturer, and have power extendible, activated, and heated screed extensions designed by the manufacturer for highway paving. Screeds shall be configured to place mixtures to the required width, crown, and breakpoints as directed by the Department.
- c. The paver used for the wearing surface shall be equipped with automatic grade controls that automatically adjust the screed and increase or decrease the layer thickness to compensate for irregularities in the preceding course. The controls shall operate from a fixed or moving reference such as a grade wire or ski type device (floating beam) with a minimum length of 30 ft, a non-contact grade control with a minimum span of 24 ft.
- d. The paver must have a material receiving hopper size capable of accepting haul trucks, and be of sufficient size and weight to maintain the required rate of placement, line of travel, depth, and cross section while engaged with a loaded tri-axle or trailer haul unit.

If it is determined by the Department that the 8 foot paver supplied is not adequate in meeting the material receiving hopper size, not of sufficient size and weight to maintain the required rate of placement, line of travel, depth and cross section, then a replacement paver meeting the requirements of the contract shall be supplied before work progresses.

The widths and breakpoints of existing lanes and shoulders will be matched and maintained, and will received a  $\frac{3}{4}$ " wearing surface at a minimum. The Contractor will plan their construction sequencing and paver setup so that there is no excessive overlap and paved aprons can be adequately matched during placement unless otherwise approved by the Department.

During placing operations, the paver shall be operated at a rate of speed not to exceed the mixture delivery rate. The paver speed shall be adjusted in relation to the amount of material actually being delivered to the paver, based on project conditions, plant production, and ability to finish the Hot Mix Asphalt mixture without pushing, shoving or cracking the mixtures.

Trucking and placing operations shall be scheduled to provide continuous placement of the mixture regardless of haul distance. The Contractor shall provide sufficient personnel at the paver to assure placement of the pavement in an orderly, safe, and efficient manner so as to assure a quality mat and proper overall yield.

The Contractor shall shim and spot shim in locations as directed by the Department or as specified in the Contract.

Compaction As a minimum, compaction of the LCPP will be obtained using a roller train consisting of a 10 ton vibratory roller, 12 ton pneumatic roller, and a 10 ton finish roller for shim layers. For wearing surfaces, as a minimum, compaction of the LCPP will be obtained using a roller train consisting of a 10 ton vibratory roller, a 10 ton intermediate roller, and a 3-5 ton finish roller unless otherwise approved by the Department. Once the methods are established, rolling patterns, equipment, and methods will become part of the QCP. Failure to conform to these requirements will be treated as a second incident under 106.4.6 QCP Non-compliance.

Increasing placement rates may require additional rollers as determined by the Department or authorized representative. If mixture temperatures during interruptions in mix delivery are determined to be outside the specification temperature range outlined in this contract, the Contractor may be directed to halt placement operations. The defective materials shall be immediately removed and replaced with material that meets contract specifications at no cost to the Department.

Joint Construction Longitudinal joints shall be generally straight to the line of travel, placed at existing centerline and shoulder joints, and constructed in a manner that best ensure joint integrity. Methods or activities that prove detrimental to the construction of straight, sound longitudinal joints will be discontinued.

Paving sequencing will be planned so that longitudinal joints are parallel to the existing centerline and **do not** fall within the **mainline travelway lanes (excluding center turn lanes)**. Lanes shall be shimmed and surfaced in a manner so that no crown is created within the traveled lanes (straight graded) with the exception of center turn lanes with existing crowns.

If the exposed centerline joint is  $\frac{3}{4}$ " or less, the Contractor shall close exposed longitudinal joints before suspending for Memorial Day, 4<sup>th</sup> of July, Labor Day, and absences greater than 3 days. Exposed centerline joints greater than  $\frac{3}{4}$ " will be matched up within  $\frac{1}{2}$  mile the next day and prior to weekends, holidays, and absences.

Dust Control The Contractor is responsible for dust control on the access roads for the bituminous plant as described in Section 637 of the Standard Specifications. This work shall be incidental to the contract.

Method of Measurement Light Capital Paving Preservation will be measured by the ton, at the contract price, according to delivery slips. Material not placed and compacted satisfactorily due to Contractor's equipment failure, daylight limitations, or weather will not be measured for payment. The delivery slips shall conform to the requirements of the most current edition of the Standard Specifications in use at the time of contract bid. Cover slips will be required to be delivered on the next working day after each paving day. Cover slips shall have the Item number, date and quantity listed.

Basis of Payment Light Capital Paving Preservation will be paid for at the contract unit price per ton, adjusted by any applicable material escalator or disincentives based on Acceptance test results. Such payment shall be full compensation for the following: obtaining, furnishing and processing all aggregate; supplying the specified PGAB bituminous material; processing, heating, mixing, weighing, placing, and compaction of the HMA mixtures; supplying and applying an emulsified tack coat to the existing pavement prior to placing any HMA; furnishing all labor, equipment, tools and all incidentals necessary to complete the work; and performing quality control testing. The maximum composite pay factor for mixes evaluated under this special provision shall be 1.00.

Payment will be made under:

| <u>Pay Item</u> |                      | <u>Pay Unit</u> |
|-----------------|----------------------|-----------------|
| 461.13          | Light Capital Paving | Ton             |

**SPECIAL PROVISION**  
**SECTION 631**  
(Contractor Trucking)

Description The Contractor shall deliver Hot Mix Asphalt Pavement (HMA) for use as Light Capital Paving.

**CONSTRUCTION REQUIREMENTS**

Hauling The Contractor will haul all mixtures, unless otherwise outlined in the contract.

Method of Measurement Contractor Trucking will be measured by the ton, at the contract price, according to delivery slips for item #461.13. Material not placed and compacted satisfactorily due to Contractor's equipment failure, daylight limitations, or weather will not be measured for payment.

Basis of Payment Contractor Trucking will be paid for at the contract unit price per ton. Such payment shall be full compensation for hauling the HMA mixtures from the plant to the paver.

Payment will be made under:

| <u>Pay Item</u> |                     | <u>Pay Unit</u> |
|-----------------|---------------------|-----------------|
| 631.175         | Contractor Trucking | Ton             |

SPECIAL PROVISION  
SECTION 631  
EQUIPMENT RENTAL  
(Small Pavement Grinder)

Amend Section 631 by adding the following to the noted subsections:

631.03 General

At a minimum the equipment for pulverizing the bituminous pavement layers shall be a skid-steer mounted cold milling machine or a power operated planer capable of pulverizing the existing pavement to the required depth, width, grade, and slope up to a maximum depth of 6 inches, or as directed by the Resident.

Hourly time will begin when the Contractor commences physical work for the day and will end when physical work for the day is complete. Payment will not be included for the following conditions:

- When travel time is greater than 15 minutes.
- Idle time greater than 15 minutes.
- Swapping of equipment “heads”, milling head tip replacement, or general maintenance.

Layout and any required preparation of the locations to be pulverized will be considered incidental to Item 631.212.

In areas of shoulder narrowing, grading or removal of the pulverized pavement shall be paid for under an appropriate hourly rental item, as directed by the Resident.

631.08 Basis of Payment

Payment will be made under:

| <u>Pay Item</u>                                          | <u>Pay Unit</u> |
|----------------------------------------------------------|-----------------|
| 631.212      Small Pavement Grinder (Including Operator) | Hour            |

**SPECIAL PROVISION**  
**SECTION 652**  
**TRAFFIC CONTROL**  
(Light Capital Paving Signage)

**Description** This work shall consist of providing two laborers, a broom capable of efficiently removing sand and debris from the roadway such as a tow behind broom, a pickup truck capable of hauling a tag along broom, and enough signage for two daily work zones. All work will be performed under the direction of a MaineDOT Supervisor. If the laborers are not certified flaggers, they will be certified by the Region.

**General** The two laborers will perform duties as assigned by the MaineDOT Supervisor; duties will include but not be limited to setting up and taking down work zone signage, roadway sweeping incidental to the project including and not limited to: winter sand clean up, sweeping alongside curb or as directed by the MaineDOT Supervisor, placing Temporary Object Marker's and highway delineators supplied by the MaineDOT, and spot flagging.

**Equipment requirements** A pickup truck capable of transporting two laborers, and all the signs needed for two daily work zones (26 signs) and able to tow a tag-a-long broom, a tag-a-long broom capable of sweeping the roadway surface, 2-hand brooms and shovels. Signs shall consist of 4 road work 2 miles ahead, 4 work area ahead signs, 6 one lane road ahead signs and 12 flagger ahead signs. All signs will be 350 compliant.

**Method of Measurement** The Department will measure the work by the ½ working day. A half working day will be considered starting time until 12:00 noon and 12:00 noon until the end of the day.

**Basis of Payment** Payment will be full compensation for all work specified, including furnishing all equipment and fuel, furnishing and installing daily work zone signage and sweeping as directed by M&O.

| Pay Item                                  | Pay Unit    |
|-------------------------------------------|-------------|
| 652.352      LIGHT CAPITAL PAVING SIGNAGE | Working Day |

SPECIAL PROVISION SECTION 656  
SPILL PREVENTION CONTROL AND  
COUNTERMEASURE PLAN

Amend 656.3.1 Qualification of Preparer to “The preparer of the Spill Prevention Control and Countermeasure Plan (SPCCP) must be knowledgeable and experienced with the handling, use, or storage of petroleum products or the hazardous matter/substances utilized on the project including the onsite fueling of equipment.”

Amend 656.3.4 Water Pollution Control Requirements to “This Work includes the handling, use, or storage of petroleum products or hazardous Matter/Substances including the onsite fueling of Equipment. At a minimum, the SPCCP must include:

- a. The name and qualifications of the person preparing the SPCCP.
- b. The name of the on-site person, responsible for spill prevention and response, who must be the Prime Contractor's Superintendent or other supervisory employee with the authority to immediately remedy any deficient controls, with their phone number and emergency number (personal cellular phone or pager).
- c. General description and location of (1) handling, transfer, storage, and containment facilities of such products or hazardous Matter/Substances ("activities and facilities") and (2) potential receptors of such products or hazardous Matter/Substances including oceans, lakes, ponds, rivers, streams, wetlands, and sand and gravel aquifers ("sensitive resources") including the distances between said activities and facilities and said sensitive resources;
- d. Description of preventative measures to be used to minimize the possibility of a spill including Equipment and/or Materials to be used to prevent discharges including containment and diversionary structures, inspections and personnel training;
- e. A contingency response plan to be implemented if spill should occur including a list of emergency phone/pager numbers including the Contractor's representative, MDEP Spill Response, the National Response Center (if spill enters the water), the Resident, and local police and fire authorities, a list of emergency response equipment and locations and a description of the capabilities of the equipment, a description of the general response and clean up protocols by product or Matter/Substances and an overview of the verbal and written notification procedures for federal, state and local officials. For a related provision, see 105.2.2 - "Project Specific Emergency Planning".

For a related provision, see Section 105.8.3 - "Wetland and Waterbody Impacts".

Amend 656.5.2 If No Pay Item to “Preparation of the SPCCP will be considered incidental to the contract.”

## 2020 STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:  
<http://maine.gov/mdot/contractors/publications/standarddetail/>

| <b><u>Detail #</u></b> | <b><u>Description</u></b>           | <b><u>Posted Date</u></b> |
|------------------------|-------------------------------------|---------------------------|
| 502(06)                | Concrete Sidewalk on Bridges        | 9/22/2025                 |
| 502(19)                | Bridge Drains                       | 3/17/2023                 |
| 502(15)                | Bridge Drains                       | 3/17/2023                 |
| 502(20)                | Bridge Drains                       | 3/17/2023                 |
| 502(23)                | Bridge Drains                       | 3/17/2023                 |
| 502(24)                | Bridge Drains                       | 3/17/2023                 |
| 502(25)                | Bridge Drains                       | 3/17/2023                 |
| 502(26)                | Bridge Drains                       | 3/17/2023                 |
| 504(07)                | Diaphragm & Crossframe Notes        | 3/17/2023                 |
| 507(04)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(05)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(06)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(07)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(14)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(15)                | Steel Bridge Railing                | 9/22/2025                 |
| 507(20)                | Steel Approach Railing 3-Bar        | 2/11/2021                 |
| 507(21)                | Steel Approach Railing 3-Bar        | 2/11/2021                 |
| 507(22)                | Steel Approach Railing, 3 Bar       | 9/22/2025                 |
| 507(23)                | Steel Approach Railing, 3 Bar       | 9/22/2025                 |
| 507(26)                | Steel Approach Railing, 3 Bar       | 9/22/2025                 |
| 507(27)                | Steel Approach Railing              | 9/22/2025                 |
| 507(39)                | Barrier – Mounted Steel Bridge Rail | 9/22/2025                 |
| 526(01)                | Portable Concrete Barrier           | 1/14/2021                 |
| 526(01A)               | Portable Concrete Barrier           | 1/14/2021                 |
| 526(01B)               | Portable Concrete Barrier           | 1/14/2021                 |
| 526(02)                | Portable Concrete Barrier           | 1/14/2021                 |
| 526(02A)               | Portable Concrete Barrier           | 1/14/2021                 |
| 526(03)                | Portable Concrete Barrier           | 1/14/2021                 |
| 526(04)                | Portable Concrete Barrier           | 1/14/2021                 |

|           |                                               |           |
|-----------|-----------------------------------------------|-----------|
| 526(04A)  | Portable Concrete Barrier                     | 1/14/2021 |
| 526(04B)  | Portable Concrete Barrier                     | 1/14/2021 |
| 526(05)   | Permanent Concrete Barrier                    | 3/17/2023 |
| 526(21)   | Permanent Concrete Barrier                    | 3/17/2023 |
| 526(22)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(23)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(23)A  | Concrete Transition Barrier                   | 9/22/2025 |
| 526(34)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(35)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(36)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(37)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(37) A | Concrete Transition Barrier                   | 9/22/2025 |
| 526(38)   | Concrete Transition Barrier                   | 9/22/2025 |
| 526(39)   | Texas Classic Rail                            | 3/17/2023 |
| 526(55)   | Texas Classic Rail                            | 3/17/2023 |
| 603(10)   | Concrete Pipe Ties                            | 6/10/2021 |
| 605(01)   | Underdrain                                    | 7/8/2022  |
| 605(01)   | Underdrain Notes                              | 7/8/2022  |
| 606(17)   | Midway Splice Guardrail Transition            | 6/10/2022 |
| 606(21)   | Guardrail Type 3 – Single Rail Bridge Mounted | 9/22/2025 |
| 606(22)   | Guardrail Treatment over Buried Structures    | 9/22/2025 |
| 606(23)   | Standard Bridge Transition – Type “1”         | 2/11/2021 |
| 606(24)   | Bridge Transition – Type “1A”                 | 9/22/2025 |
| 606(25)   | Bridge Transition – Type “2”                  | 9/22/2025 |
| 607(10)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(11)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(12)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(13)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(14)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(15)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 607(16)   | Snow Fence Details (New Detail)               | 9/22/2025 |
| 608(02)   | Detectable Warnings                           | 6/10/2021 |
| 609(08)   | Precast Concrete Transition Curb              | 9/22/2025 |
| 609(09)   | Precast Concrete Vertical Curb                | 9/22/2025 |
| 627(07)   | Crosswalk                                     | 2/22/2022 |
| 627(08)   | Crosswalk                                     | 2/22/2022 |

|                                                                          |                                                  |            |
|--------------------------------------------------------------------------|--------------------------------------------------|------------|
| 643(11)                                                                  | ATCC Cabinet                                     | 12/14/2020 |
| 645(06)                                                                  | H Beam Posts Highway Signing                     | 12/17/2024 |
| 645(21)                                                                  | Overpass Mounted Sign Support Highway Signing    | 9/22/2025  |
| 645 (22)                                                                 | Overpass Mounted Sign Support Highway Signing    | 9/22/2025  |
| <u>801(10) Pavement Transition at Bridge</u> DISCONTINUE THIS STD DETAIL |                                                  | 9/22/2025  |
| 801(11)                                                                  | Pedestrian Ramp Notes                            | 11/20/2023 |
| 801(12)                                                                  | Pedestrian Ramp Requirements                     | 11/20/2023 |
| 801(13)                                                                  | Ramp Length Table                                | 11/20/2023 |
| 801(14)                                                                  | Parallel Pedestrian Ramp                         | 11/20/2023 |
| 801(15)                                                                  | Perpendicular Pedestrian Ramp – Option 1         | 11/20/2023 |
| 801(16)                                                                  | Parallel Pedestrian Ramp – Option 2A             | 11/20/2023 |
| 801(17)                                                                  | Perpendicular Pedestrian Ramp – Option 2A        | 11/20/2023 |
| 801(18)                                                                  | Parallel Pedestrian Ramp – Option 2B             | 11/20/2023 |
| 801(19)                                                                  | Perpendicular Pedestrian Ramp – Option 2B        | 11/20/2023 |
| 801(20)                                                                  | Parallel Pedestrian Ramp – Option 3              | 11/20/2023 |
| 801(21)                                                                  | Perpendicular Pedestrian Ramp – Option 3         | 11/20/2023 |
| 801(22)                                                                  | Side Street Pedestrian Ramp                      | 11/20/2023 |
| 801(23)                                                                  | Parallel Pedestrian Ramp – Esplanade             | 11/20/2023 |
| 801(24)                                                                  | Perpendicular Pedestrian Ramp – Esplanade        | 11/20/2023 |
| 801(25)                                                                  | Island Crossings                                 | 11/20/2023 |
| 801(26)                                                                  | Blended Transition                               | 11/20/2023 |
| 801(26)                                                                  | Blended Transition                               | 1/19/2024  |
| 801(27)                                                                  | Pedestrian Ramp Adjacent to Driveway or Entrance | 11/20/2023 |
| 802(05)                                                                  | Roadway Culvert End Slope Treatment              | 1/03/2017  |
| 802(05)                                                                  | Roadway Culvert End Slope Treatment              | 11/01/2024 |

**SUPPLEMENTAL SPECIFICATIONS**  
**(Corrections, Additions, & Revisions to Standard Specifications – March 2020)**

**SECTION 101**  
**CONTRACT INTERPRETATION**

**101.2 Definitions**

**Construction Easement** revise this definition by removing it in its entirety and replace with:  
**“A right acquired by the Department for a specific use of private property outside of the established Right-of-Way. Examples include but are not limited to Drainage Easements, Construction and Maintenance Easements, and Slope Easements. Construction Easement areas, including Temporary Construction Limits and Temporary Road Limits, outside of the Right-of-Way remain private property. No use other than to access and perform the specified work activity is permitted without written permission of the owner.”**

**Construction Limit Line** Remove this definition in its entirety.

**Holidays** Amend this paragraph by adding “**Juneteenth**” between ‘Memorial Day’ and ‘Independence Day’.

**Plans** Revise this paragraph by removing “**Standard Details, Supplemental Standard Details**” from the first sentence.

**Project Limits** Revise this definition by removing it in its entirety and replacing it with:  
**“Areas within the Right-of-Way, Construction Easements, or Temporary Construction Limits shown on the Plans or otherwise indicated in the Contract. If no Project Limits are indicated in the Contract, the Project Limits shall be determined by the Department. For a related Maine statute, see 23 MRSA § 653.”**

**Right-Of-Way** Revise this definition by removing it in its entirety and replacing it with:  
**“The area of land, property, or interest therein, acquired for or devoted to the Project or other purposes. Portions of the Right-of-Way may be used for storage of materials and equipment and the location of engineering facilities, subject to written approval by the Department.”**

Amend this Section by adding the following two definitions (that replace Construction Limit Line);

**Temporary Construction Limits** The area within which the Contractor may access and perform the Physical Work and outside of which Work may not be performed without written authorization by the property owner.

**Temporary Road Limits** The area within which the Contractor may construct and maintain a temporary detour for maintenance of traffic.

## SECTION 102 BIDDING

102.11 Bid Responsiveness Revise the paragraph that states  
“The Bid is not signed by a duly authorized representative of the Bidder.” So that it reads:

“The Bid is not signed by a duly authorized representative of the Bidder.

- Properly submitted electronic bids meet this requirement.
- Paper bids must include at least one signed copy of the Contract Agreement Offer & Award form.”

## SECTION 103 AWARD AND CONTRACTING

103.3.1 Qualification Requirement for Award Revise this subsection so that it reads:

**“103.3.1 Qualification Requirement for Award If the Notice to Contractors lists a Prequalification requirement, the Apparent Successful Bidder must successfully complete the Prequalification process as a condition of Award. The Apparent Successful Bidder who does not already hold an Annual Prequalification shall have 21 days to provide the Department with their Prequal documents or the Department may move on to the next low bidder.”**

## SECTION 104 GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way Revise this subsection by removing it in its entirety and replace with the new subsection:

**“104.2.1 Furnishing of Property Rights The Department will secure all necessary rights to real property within the Project Limits shown on the Right-of-Way Plans that are provided with the Bid Documents. For related provisions, see Sections 104.3.2 – Furnishing of Other Property Rights, Licenses and Permits and 105.4.5 - Maintenance of Existing Structures. For related definitions, see Construction Easements and Right-of-Way.”**

104.3.2 Furnishing of Other Property Rights, Licenses and Permits Revise this subsection by replacing “104.2.1 Furnishing of Right-of-Way” with “**104.2.1 Furnishing of Property Rights**”.

## SECTION 105 GENERAL SCOPE OF WORK

Amend this Section by adding this new sub-section:

**105.8.8 Protected Species If the Contractor witnesses a bat (dead or alive), any activities that may injure any live bats must cease immediately and the Contractor shall contact the**

**Resident. Dead and/or injured bats will be collected by the Department. Work in the vicinity of the live/dead bat sighting will not resume until the Department confirms it is acceptable to do so.**

**If the Contractor observes an active bird nest within the project limits, any activities that may disturb the nest or injure birds (i.e., nesting adults, chicks, eggs) must cease immediately, and the Contractor shall contact the Resident.**

Amend this Section by adding this new sub-section to cover incidents in the field:

**105.6.5 Survey Control Markers If a survey control marker will be disturbed by Work on a project, the Resident shall be informed a minimum of 2 weeks prior to performing any Work that may disturb the marker. If a survey control marker is accidentally disturbed by Work on a project, the Resident shall be informed immediately. A disturbed marker will remain the property of the Department.**

**105.10.1.4 Race-conscious Project Goals Revise the second paragraph of this section so it reads as follows:**

**“At the time of the bid opening, all Bidders shall submit with their bid a Disadvantaged Business Enterprise (DBE) Commitment Form provided by the Department. This form will list the DBE and non-DBE firms that are proposed to be used during the execution of the Work. This form must be filled out in its entirety. The dollar total of each commitment shall be totaled and a percentage determined.”**

**105.10.2 Requirements Applicable to All Contracts Under section A, number 2, in the first sentence of the first paragraph, revise this Section by replacing the word “handicap” in two places with the word “disability” so it now reads:**

**“2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, State that all qualified applicants will receive consideration for employment without regard to race, color, sexual orientation, religious creed, sex, national origin, ancestry, age, physical disability, or mental disability.”**

**105.10.1.6 Bidders’ List Survey This section shall be revised to meet the May 9, 2024 CFR changes as follows:**

**Revise the title of this Section to “**Bidders’ List**” by removing the word “**Survey**”.**

**Revise the current information required to:**

- (i) Firm name;**
- (ii) Firm address including ZIP code;**
- (iii) Firm’s status as a DBE or non-DBE;**
- (iv) Race and gender information for the firm’s majority owner;**
- (v) NAICS code applicable to each scope of work the firm sought to perform in its bid;**
- (vi) Age of the firm; and**

(vii) The annual gross receipts of the firm. You may obtain this information by asking each firm to indicate into what gross receipts bracket they fit (*e.g.*, less than \$1 million; \$1-3 million; \$3-6 million; \$6-10 million; etc.) rather than requesting an exact figure from the firm.

Revise this section by removing the paragraph beginning with “This information...” and replacing it with the following:

**“This data is required from all bidders for federally assisted contracts to be submitted with their bids as this information is critical in determining the availability of DBE Businesses relative to other businesses that do similar work.”**

## SECTION 106 QUALITY

106.6 Acceptance Revise this Subsection by replacing the paragraph beginning with “Acceptance of Hot Mix Asphalt Pavement will be based” with:

**“Acceptance of Hot Mix Asphalt Pavement will be based on Method A or C Statistical Acceptance, or Method B or D Acceptance as specified. The method of acceptance for each item is defined in Special Provision, Section 403, Hot Mix Asphalt Pavement. When items of Hot Mix Asphalt Pavement are not so designated, Method A will be utilized whenever there are more than 1000 tons per Hot Mix Asphalt Pavement item, and Method B will be utilized when there are less than or equal to 1000 tons per Hot Mix Asphalt Pavement item.”**

Revise Subsection “B” by removing it and replacing it with:

**“B. Items not designated for Statistical Acceptance will utilize Method B or D Acceptance testing to validate the quality of the material incorporated into the Project. For material paid under Item 403.209 – Method D, or designated to be visually accepted, the Contractor shall provide the Department with a Certification Letter that indicates that the material supplied complies with the Specifications. Test results representative of the certified material shall be attached to the letter.**

**The Department will randomly sample and test the certified Material for properties noted in Table 1 of Section 502 - Structural Concrete or Table 14 of Section –401.21 Acceptance Method B & D. Material will be subject to rejection as noted in Structural Concrete Section 502.195 - Quality Assurance Method C Concrete or Hot Mix Asphalt, Section 401.2022 Pay Adjustment – Method B & D.”**

106.7.1 Standard Deviation Method Revise 106.7.1, subsection H by removing the following from the first paragraph:

“Method B:  $PF = [70 + (Quality\ Level * 0.33)] * 0.01$ ”

106.9.1 Warranty by Contractor Revise the third paragraph of this section so that it reads:

**“For a related provision regarding obligations regarding plantings, see section 621.36 – Maintenance Period. “**

**SECTION 107**  
**TIME**

107.3.1 General Amend this paragraph by adding “**Juneteenth**” between ‘Patriot’s Day’ and ‘the Friday after Thanksgiving’.

**SECTION 108**  
**PAYMENT**

108.2.3 Mobilization Payments Replace Standard Specification 108.2.3 – Mobilization Payments with the following:

**“108.2.3 Mobilization Payments “Mobilization” includes the mobilization and demobilization of all resources as many times as necessary during the Work.**

**Percent Mobilization Bid will be determined by taking the amount Bid for Mobilization and dividing by the Total Contract Amount less Mobilization. Mob/(Total Contract – Mob).**

**Payment will be made at the following intervals:**

| <b>% Mobilization Bid</b>   | <b>% Mobilization Paid at Contract Award</b> | <b>% Mobilization Paid after the Department determines 50% of the work is Complete</b> | <b>% Mobilization Paid at Final Acceptance</b> |
|-----------------------------|----------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------|
| <b>10% or less</b>          | <b>50%</b>                                   | <b>50%</b>                                                                             |                                                |
| <b>More than 10% to 15%</b> | <b>33%</b>                                   | <b>33%</b>                                                                             | <b>34%</b>                                     |
| <b>More than 15% to 20%</b> | <b>25%</b>                                   | <b>25%</b>                                                                             | <b>50%</b>                                     |
| <b>More than 20% to 30%</b> | <b>15%</b>                                   | <b>15%</b>                                                                             | <b>70%</b>                                     |
| <b>Greater than 30%</b>     | <b>10%</b>                                   | <b>10%</b>                                                                             | <b>80%</b>                                     |

108.3 Retainage Revise the third paragraph of this section so that it reads:

**“Upon Final Acceptance, and determination by the department that there are no claims either by or on the Contractor or Subcontractors; no over payments by the department; no LDs due; and no disincentives due, the Department will reduce Retent to 1% of the original Contract Award amount, or \$100,000, whichever is less, as it deems desirable and prudent.”**

**108.4.1 Price Adjustment for Hot Mix Asphalt** Revise this section by removing it in its entirety and replacing it with the following:

**“108.4.1 Price Adjustment for Hot Mix Asphalt:** For each Contract, a price adjustment for performance graded binder will be made for the following pay items, when the total quantity of Hot Mix Asphalt included in these items is in excess of 500 tons, based on the estimated quantities of these items at the time of bid.

|                |                                                                           |
|----------------|---------------------------------------------------------------------------|
| Item 403.102   | Hot Mix Asphalt – Special Areas                                           |
| Item 403.207   | Hot Mix Asphalt - 19 mm                                                   |
| Item 403.2071  | Hot Mix Asphalt - 19 mm (Polymer Modified)                                |
| Item 403.2072  | Hot Mix Asphalt - 19 mm (Asphalt Rich Base)                               |
| Item 403.208   | Hot Mix Asphalt - 12.5 mm                                                 |
| Item 403.2081  | Hot Mix Asphalt - 12.5 mm (Polymer Modified)                              |
| Item 403.2084  | Hot Mix Asphalt - 12.5 mm (Highly Modified HiMAP)                         |
| Item 403.209   | Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)               |
| Item 403.210   | Hot Mix Asphalt - 9.5 mm                                                  |
| Item 403.2101  | Hot Mix Asphalt - 9.5 mm (Polymer Modified)                               |
| Item 403.2104  | Hot Mix Asphalt - 9.5 mm (Thin Lift Surface Treatment)                    |
| Item 403.21041 | Hot Mix Asphalt - 9.5 mm (Polymer Modified Thin Lift Surface Treatment)   |
| Item 403.211   | Hot Mix Asphalt – Shim                                                    |
| Item 403.2111  | Hot Mix Asphalt – Shim (Polymer Modified)                                 |
| Item 403.212   | Hot Mix Asphalt - 4.75 mm (Shim)                                          |
| Item 403.213   | Hot Mix Asphalt - 12.5 mm (base and intermediate course)                  |
| Item 403.2131  | Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified) |
| Item 403.2132  | Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate course)     |
| Item 403.301   | Hot Mix Asphalt (Asphalt Rubber Gap-Graded)                               |
| Item 461.13    | Light Capital Pavement                                                    |
| Item 461.210   | 9.5 mm HMA - Paver Placed Surface                                         |
| Item 461.2101  | Hot Mix Asphalt - 9.5 mm (Polymer Modified)                               |
| Item 461.216   | Hot Mix Asphalt (Shim)                                                    |
| Item 462.30    | Ultra-Thin Bonded Wearing Course                                          |
| Item 462.301   | Polymer Modified Ultra-Thin Bonded Wearing Course                         |

**Price adjustments will be based on the variance in costs for the performance graded binder component of hot mix asphalt. They will be determined as follows:**

**The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.**

Item 403.102–6.2%  
Item 403.207–5.2%  
Item 403.2071–5.2%  
Item 403.2072–5.8%  
Item 403.208–5.6%  
Item 403.2081–5.6%  
Item 403.2084 – 6.2%  
Item 403.209–6.2%  
Item 403.210–6.2%  
Item 403.2101–6.2%  
Item 403.2104–6.2%  
Item 403.21041–6.2%  
Item 403.211–6.2%  
Item 403.2111–6.2%  
Item 403.212–6.8%  
Item 403.213–5.6%  
Item 403.2131–5.6%  
Item 403.2132–6.2%  
Item 403.301–6.2%  
Item 461.13–6.7%  
Item 461.210 – 6.4%  
Item 461.2101 – 6.4%  
Item 461.216 – 6.7%  
Item 462.30–0.0021 tons/SY  
Item 462.301–0.0021 tons/SY”

## **SECTION 110**

### **INDEMNIFICATION, BONDING, AND INSURANCE**

**110.3.2 Commercial General Liability** Revise the last sentence in this Section that starts with “The coverage shall also...” and add a sentence to the end so that it reads:

**“The coverage shall also include protection against damage claims due to explosives, collapse, and underground coverage. No endorsement excluding damage caused by subsidence, earth movement, and/or earth pressure shall be permitted.”**

**110.3.9 Administrative & General Provisions** Amend this subsection by adding “**Automobile Liability**” under letter A) Additional Insured to the list of exceptions.

10. Assurance Required by 49 CFR: 26.13(a)(b) Revise this section by removing it in its entirety and replacing it with the following:

**“a. MaineDOT shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE Program or the requirements of 49 CFR part 26. MaineDOT shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. MaineDOT’s DBE Program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. The implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the MaineDOT of its failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the MaineDOT of its failure to carry out its approved program, the Department may impose sanctions as provided for under 49 CFR Part 26, and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Remedies Act of 1986 (31 U.S.C. 3801 et seq.). This language will appear in financial assistance agreements with sub-recipients.**

**b. The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, including, but not limited to:**

- 1. Withholding monthly progress payments;**
- 2. Assessing sanctions;**
- 3. Liquidated damages; and/or**
- 4. Disqualifying the contractor from future bidding as non-responsible.”**

## SECTION 206 STRUCTURAL EXCAVATION

206.01 Description – *Structural Earth Excavation, Below Grade* delete the entire sentence and replace with **“shall consist of the removal of excavation required for unknown or unanticipated subsurface condition. See 206.04 – Method of Measurement for pay limits.”**

206.04 Method of Measurement – Drainage and Minor Structures Paragraph 1, sentence 2, delete the remainder of the sentence beginning with “...provided the maximum allowable...” And replace with: **“...in accordance with the following limits:”**

- Vertical pay limits:**

- Below a plane parallel with and 12 inches below the bottom of the drainage or minor structure or
  - Below the excavation limits shown in the Bid Documents; whichever is greater.
- **Horizontal pay limits** – The maximum allowable horizontal dimensions shall not exceed those bounded by vertical surfaces 18 inches outside the base, or extreme limits of, the structure, and to the vertical neat lines of underdrain trenches, as shown in the Contract Documents.

## SECTION 401 HOT MIX ASPHALT PAVEMENT

401.19 Contractor Quality Control Amend this Section by adding the following to the end:  
“Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all items covered by the QCP as identified in Special Provision 403.”

## SECTION 501 FOUNDATION PILES

501.044 Special Requirements for Steel Pipe Piles and Steel Casings Amend this section by deleting it in its entirety and replacing with:

**Pipe piles shall be driven closed ended, unless otherwise specified. When open-ended pipe piles are specified or when the ends are not completely closed ended when driven, the inside of the pile shall be thoroughly cleaned out, and the inside walls cleaned by jetting or other means approved by the Resident. The sediment control required for the cleaning operations shall be covered in the Contractor’s SEWPCP.**

**Pipe piles shall be inspected and approved by the Resident immediately before concrete is placed in them. They shall be free from rupture and undue deformation and shall be free from water unless the Resident determines that the concrete can be placed without damage to the pile and such that the discharged water will be contained. The Contractor shall provide lights and other equipment necessary to enable the Resident to inspect each pipe pile.**

**Portland cement concrete for filling the pipe piles shall be placed in one continuous operation to fill the pile completely without causing water contamination. An internal type vibrator shall be used in the top 25 feet. Pile heads shall be protected and cured in accordance with Section 502, Structural Concrete.**

**The placing of concrete and the driving of piles shall be scheduled so that fresh and setting concrete will not be injured by the pile driving.**

Concrete shall not be placed in pipe piles until pile driving has progressed beyond a radius of 15 feet from the pile to be concreted. If pile heave is detected for pipe piles that have been filled with concrete, the piles shall be redriven to the original position after the concrete has attained sufficient strength and a proper hammer-pile cushion system, is in place and is satisfactory to the Resident.

When a reinforcing steel cage is specified, it shall be placed inside the piles to allow for a minimum of 2 inches of concrete cover and the piles shall be filled with concrete to the elevation shown on the Plans.

Full-length pipe piles and steel casings shall be used wherever practicable; however, splicing may be permitted when approved by the Resident. The method of splicing shall be as follows:

- a. Steel pipe piles and steel casings shall be spliced by full penetration butt joint welds.
- b. When the pipe piles and steel casings are to be spliced while in a vertical position, splicing shall be accomplished utilizing single-bevel groove welds with the use of back-up rings. When the pipe piles and steel casings are to be spliced while in a horizontal position, splicing shall be accomplished utilizing single-vee groove welds with the use of back-up rings.
- c. Welded joints shall conform to the Standard Details.

501.047 Splicing Piles Amend this section by deleting it in its entirety and replacing it with:

Full-length piles shall always be used wherever practicable. When full-length piles cannot be used, the number of splices, locations, and details shall be noted in the QCP. Piles fabricated from multiple pieces will be acceptable only if they comply with the following:

| H-Beam Piles <sup>a</sup>                                                                                                                                                                                                                                                                     |                           | Pipe Piles and Steel Casings <sup>a,b</sup> |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------|---------------------------|
| Lengths                                                                                                                                                                                                                                                                                       | Maximum No. Field Splices | Lengths                                     | Maximum No. Field Splices |
| Less than 20 ft.                                                                                                                                                                                                                                                                              | 0                         | Less than 20 ft.                            | 0                         |
| Over 20 – 35 ft.                                                                                                                                                                                                                                                                              | 1                         | Over 20 – 40 ft.                            | 1                         |
| Over 35 – 79 ft.                                                                                                                                                                                                                                                                              | 2                         | Over 40 – 60 ft.                            | 2                         |
| Over 79 ft.                                                                                                                                                                                                                                                                                   | 1 per 40 ft.              | Over 60 – 80 ft.                            | 3                         |
|                                                                                                                                                                                                                                                                                               |                           | Over 80 ft.                                 | 1 per 20 ft.              |
| <sup>a</sup> Pile lengths less than 10 feet will not be spliced, except as the final (top) section of the pile.<br><sup>b</sup> Where pipe piles are used for pile bent piers, no splices will be allowed in the length of pile from the cutoff elevation to 2 feet below the channel bottom. |                           |                                             |                           |

When pre-planned splicing is approved, the pile piece of lesser length shall be placed at the tip of the pile (the first part of the pile that enters the ground).

When splicing is allowed, the work shall be done in accordance with the following:

- A. Welding shall be done in accordance with the requirements of the AWS D1.1 welding code.**
- B. Qualify welders in accordance with the most recent edition of the AWS D1.5 code.**
- C. Submit a written Weld Procedure Specification (WPS) for each joint to be included as part of the QCP. The WPSs shall be provided to the Fabrication Engineer for review and approval prior to beginning welding. Provide copies of the approved WPSs to the welder, QC Inspector and Resident prior to beginning welding. Welding performed without an approved WPS and approved QCP will be considered Unacceptable Work.**
- D. Provide a list of qualified welders with copies of their AWS certifications to the Fabrication Engineer for review prior to beginning welding. Welders shall have in their possession, at the time of welding, a valid certification for the process and position to be used in production from the AWS. The welder shall show the Resident their credentials upon request.**
- E. The Contractor shall only use electrodes that are on the Department's Qualified Products List for Welding Electrodes or shall submit alternative electrodes for review and approval by the Fabrication Engineer. Electrodes used shall match those approved for use in the WPS.**
- F. Welding shall not be done: When the temperature in the immediate vicinity of the weld is below 0°F; when the surfaces are damp or exposed to rain, snow, or high wind; or when the welders or welding operators are exposed to inclement conditions.**
- G. The pile shall be preheated to and maintained at 150°F minimum, within 6 inches from the joint during welding.**
- H. Power sources for welders shall have meters indicating amperage/voltage that have been calibrated within 1 year at the time of welding.**
- I. The Contractor shall provide the Department with notice, a minimum of, 7 Days prior to the start of any welding.**
- J. The Contractor shall provide a QC Inspector to perform QC for the welds in accordance with the AWS D1.1 welding code. The QC Inspector shall be an AWS Certified Welding Inspector (CWI) in conformance with the requirements of AWS QC1, Standard for AWS Certifications of Welding Inspectors. The Contractor may submit, in lieu of a CWI, an alternative QC Inspector with documented training and experience in metals fabrication, inspection, and testing for approval by the Fabrication Engineer. The QC Inspector shall be someone other than the welder performing the welds to be inspected.**
- K. The QC Inspector shall inspect all production stages of the welded splice to ensure that workmanship and materials meet the requirements of the AWS D1.1 welding code and the Contract. The QC Inspector shall submit a signed record of all weld inspection documentation to the Resident after welding is completed.**

**Record of weld inspection shall include, but not be limited to, the following:**

- 1. Name of QC Inspector**
- 2. Project WIN and Location**
- 3. Date**
- 4. Weather conditions**
- 5. Type, size, length, and location of welds.**

6. Confirmation of appropriate equipment and materials used, including proper handling of welding electrodes.
7. Confirmation that welder has approved WPS onsite, and welding is performed in accordance with approved WPS.
8. Confirmation that welder is qualified to perform work per approved WPS. Include name and certifications of qualified welder who performed the work.
9. Confirm that 100% visual testing, in accordance with AWS D1.1 Table 8.1, has been conducted and any subsequent repairs are made prior to non-destructive testing (NDT).
10. Document NDT testing including name of NDT technician, NDT personnel qualifications, type and extent of NDT testing performed, and include NDT testing reports provided by the NDT testing technician.

L. Piles shall not be driven until all pile welding has been inspected and accepted by the Department.

#### **501.0471 Specific Requirements for Splicing H-Beam Piles**

- A. Damaged material shall be removed from the end of the driven pile. Lifting holes shall be repaired or trimmed off. The ends of both pieces to be spliced shall be cut off square with the longitudinal axis of the pile and beveled per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.
- B. The Contractor shall use an approved mechanical splicer or a full penetration butt weld for the entire cross section of the pile. Mechanical splicers shall be installed per the manufacturer's recommendations, except that the flanges shall be welded using a complete joint penetration weld, per the AWS D1.1 welding code.
- C. In addition to the 100% visual testing (VT) performed by the QC Inspector, the Contractor shall perform NDT on the first two welded splices of the same type/size. The welds shall be radiographically (RT) or ultrasonically (UT) tested for their full length for acceptance per Table 8.2 of AWS D1.1. If both RT/UT-tested splices are determined to be acceptable, no further NDT will be required. If either of the first two RT/UT-tested splices contain defects warranting rejection, RT/UT testing of splices shall continue until two consecutive splices are found to be acceptable.
- D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.

#### **501.0472 Specific Requirements for Splicing Steel Pipe Piles and Steel Casings**

- A. Damaged material shall be removed from the end of the driven pile. Lifting holes shall be trimmed off. The ends of both pieces to be spliced shall be cut off square with the

longitudinal axis of the pile and beveled per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.

B. Splices shall be welded using an AWS D1.1 Complete Joint Penetration butt weld with a backer ring.

C. In addition to the 100% VT performed by the QC Inspector, the Contractor shall perform NDT on the first two welded splices of the same type/size. The welds shall be RT or UT tested for their full length for acceptance per Table 8.2 of AWS D1.1. If both RT/UT-tested splices are determined to be acceptable, no further NDT will be required. If either of the first two RT/UT-tested splices contain defects warranting rejection, RT/UT testing of splices shall continue until two consecutive splices are found to be acceptable.

D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.

501.048 Prefabricated Pile Tips Amend this section by deleting it in its entirety and replacing it with:

Welding of pile tips shall be done in accordance with the following:

A. Welding shall be done in accordance with the requirements of the AWS D1.1 welding code.

B. Qualify welders in accordance with the most recent edition of the AWS D1.5 code.

C. Submit a written WPS for each tip to be included as part of the QCP. The WPSs shall be provided to the Fabrication Engineer for review and approval prior to beginning welding. Provide copies of the approved the WPS to the welder and Resident prior to beginning welding. Welding performed without an approved WPS and approved QCP will be considered Unacceptable Work.

D. Provide a list of qualified welders with copies of their AWS certifications to the Fabrication Engineer for review prior to beginning welding. Welders shall have in their possession, at the time of welding, a valid certification for the process and position to be used in production from the AWS or other organization acceptable to the Resident. The welder shall show the Resident their credentials upon request.

E. The Contractor shall only use electrodes that are on the Department's Qualified Products List for Welding Electrodes or shall submit alternative electrodes for review and approval by the Fabrication Engineer. Electrodes used shall match those approved for use in the WPS.

F. Pile tips shall be approved by the Resident.

G. Welding shall not be done: When the temperature in the immediate vicinity of the weld is below 0°F; when the surfaces are damp or exposed to rain, snow, or high wind; or when the welders or welding operators are exposed to inclement conditions.

H. The pile shall be preheated to and maintained at 150°F minimum within 6 inches from the joint during welding.

I. Power sources for welders shall have meters indicating amperage/voltage that have been calibrated within 1 year at the time of welding.

J. Pile tips may be welded to the piles by the pile supplier upon approval by the Department. Approval is contingent upon submission of the following: A welding QC Plan; proof that the proposed welder(s) is certified per AWS D1.5; and an AWS D1.1 WPS, with base metal preheated to a minimum of 150°F. The Contractor shall provide notice a minimum of 14 Days prior to the start of any welding by the pile supplier. At a minimum, welds shall be 100% visually inspected by the pile supplier's QC representative.

K. The Contractor shall provide a QC Inspector to perform QC for the welds in accordance with the AWS D1.1 welding code. The QC Inspector shall be an CWI in conformance with the requirements of AWS QC1, Standard for AWS Certifications of Welding Inspectors. The Contractor may submit, in lieu of a CWI, an alternative QC Inspector with documented training and experience in metals fabrication, inspection, and testing for approval by the Fabrication Engineer. The QC Inspector shall be someone other than the welder performing the welds to be inspected.

L. The QC Inspector shall inspect all production stages of the welded splice to ensure that workmanship and materials meet the requirements of the AWS D1.1 welding code and the Contract. The QC Inspector shall submit a signed record of all weld inspection documentation to the Resident after welding is completed.

**M.**

**Record of weld inspection shall include, but not be limited to, the following:**

- 1. Name of QC Inspector**
- 2. Project WIN and Location**
- 3. Date**
- 4. Weather conditions**
- 5. Type, size, length, and location of welds.**
- 6. Confirmation of appropriate equipment and materials used, including proper handling of welding electrodes.**
- 7. Confirmation that welder has approved WPS onsite, and welding is performed in accordance with approved WPS.**
- 8. Confirmation that welder is qualified to perform work per approved WPS. Include name and certifications of qualified welder who performed the work.**
- 9. Confirm that 100% VT, in accordance with AWS D1.1 Table 8.1, has been conducted and any subsequent repairs are made prior to NDT.**
- 10. Document NDT testing including name of NDT technician, NDT personnel qualifications, type and extent of NDT testing performed, and include NDT testing reports provided by the NDT testing technician.**

N. The Contractor shall provide notice a minimum of 7 Days prior to the start of any field welding.

- O. Piles shall not be driven until all pile welding has been inspected and accepted by the Department.

**501.0481 Specific Requirements for Installing H-Beam Pile Tips**

- A. Damaged material shall be removed from the end of the driven pile, as applicable. Lifting holes shall be trimmed off. The end of the pile to which the tip is to be attached shall be cut off square with the longitudinal axis of the pile and prepared per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.
- B. Regarding weld size, prefabricated pile tips shall be attached to H-beam piles with 5/16-inch groove welds along each flange, or as recommended by the manufacturer of the pile tips, whichever weld size is larger.
- C. The QC Inspector shall, at a minimum, perform 100% VT on each pile tip weld.
- D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.

**501.0482 Specific Requirements for Installing Steel Pipe Pile Tips**

- A. Damaged material shall be removed from the end of the driven pile, as applicable. Lifting holes shall be trimmed off. The end of the pile to which the tip is to be attached shall be cut off square with the longitudinal axis of the pile and prepared per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.
- B. Unless otherwise shown on the Plans, steel pipe piles shall have pointed cast steel pile tips.
- C. Regarding weld size, prefabricated pile tips shall be attached to steel pipe piles with a continuous 5/16-inch groove weld along the full perimeter of the pile, or as recommended by the manufacturer of the pile tips, whichever weld size is larger.
- D. The QC Inspector shall, at a minimum, perform 100% VT on each pile tip weld.
- E. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.

501.05 Method of Measurement

c. Piles in Place Revise the third paragraph by replacing the “10” with “20” so that it reads:

Unused pile cutoffs **20** feet or more in length, except those required to accommodate the Contractor’s construction method, as discussed herein, will remain the property of the Department and will be stored at a bridge maintenance yard nearest the project. Hauling and unloading of piles will be done by the Contractor or by the Department, depending upon availability of services.

SECTION 502  
STRUCTURAL CONCRETE

502.03 Materials Amend this section by adding the following to the list of materials:

Combined Aggregate Grading for Concrete    703.03

502.07 Mixing and Delivery Remove the last sentence in Paragraph A that starts with “With prior approval...” and replace with the following:

**“An approved hydration stabilizing admixture may be used to increase the discharge time. Justification for the need for a hydration stabilizing admixture shall be provided in the QC Plan. When a hydration stabilizing admixture is used, the manufacturer, dosage rate and discharge time, from the time cement is added to the aggregate, shall be documented in the approved QC Plan. The proposed discharge time(s) shall be based on the manufacturer’s written recommendations, the anticipated concrete temperatures and anticipated ambient conditions at the time of placement(s). Discharge time(s) shall be adjusted when conditions change or are not as anticipated as outlined in the approved QC Plan. The discharge time(s) approved by the Department shall be subject to change at any time, and discharge of concrete into the permanent work shall cease immediately if the concrete is determined to have attained Accelerated Hydration Gain. Accelerated Hydration Gain being the condition where the fresh concrete has hydrated to the point where the workability and finishability is detrimental to the quality of the final product. Determination of when concrete has attained Accelerated Hydration Gain shall be made by the Contractor’s Quality Control Technician(s) and shall be based on parameters proposed by the Contractor in the QC Plan, such as, but not limited to, loss of slump, plasticity, or workability, an increase in concrete temperature, or a change in the percentage of entrained air.”**

502.09 Forms and Falsework Amend this subsection by adding the subsection title **“502.10 Placing Concrete”** after section “D” Removal of Forms and False work” and after the paragraph beginning with “2. Forms and False work, including blocking...”. So that a new subsection starts and reads:

**“502.10 Placing Concrete**

**A. General Concrete shall not be placed until forms ....”**

502.1701 Quality Control, Method A and B Revise this Section so that the first paragraph and the first sentence of the second paragraph read:

**“502.17 Quality Control** The Contractor shall control the quality of the concrete through testing, inspection, and practices which shall be described in the QCP, sufficient to assure a product meeting the Contract requirements. The QCP shall meet the requirements of Section 106, Quality, and this specification. No work under this item shall proceed until the QCP is submitted to and approved by the Department. Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all cast-in-place items covered by the QCP, using the P value listed in Special Provision 502. If no P value is listed, a value of \$350, or bid value per cubic yard, whichever is less, shall be used.

**502.1701 Quality Control, Method A and B** The QCP shall address all elements that affect the quality of the structural concrete including, but not limited to, the following: “

Under the list with the heading, “The QCP shall address all elements that affect the quality of the structural concrete including, but not limited to, the following.”:

Replace “F” to read: “**Mix and Transportation, including Time from Batching to Completion of Delivery, as well as manufacturer, product name, proposed dosage(s) and discharge time(s) if a hydration stabilizing admixture is used.**”

Replace “H” to read: “**Process QC Testing, including monitoring for attainment of Accelerated Hydration Gain when a hydration stabilizing admixture is used.**”

Revise this section by replacing the paragraph before Table 4 that starts out “The Contractor shall maintain...” to read:

**“The Contractor shall maintain records of all QC tests and calculations. All QC test data shall be signed by the person who performed the test. The representative gradation test results shall be reported to the Department before the placement they represent. This initial representative gradation test shall be sampled a maximum of 30 days prior to the production day. The Contractor or supplier shall retain split samples of the most recent QC gradations for possible testing by the Department. In addition, the Department will sample the aggregates at the plant monthly to determine compliance with 703.03 Combined Aggregate Grading for Concrete. The Combined Aggregate Grading will be calculated by mathematically blending the individual aggregate gradations using the batch percentages from the approved mix design. If the Department’s gradation tests determine that the aggregate does not meet the specified gradation limits, the current procedure mentioned in MaineDOT PCC Policies and Procedures Manual shall be followed. The compressive strength test results shall be reported to the Department by 10:00 A.M. of the first working day following the test. The Contractor shall record all onsite QC test data and calculations at the time of the placement and present this information, on a form acceptable to the Department, to the Department by 10:00 A.M. of the first working day following the concrete placement. Batch tickets shall be representative of that day’s total moisture in aggregate value, QC test data for total moisture in aggregate shall be provided to the**

**Department by 10:00 A.M. of the first working day following the concrete placement. All Method A and B QC testing shall meet the minimum requirements found in Table 4.”**

Section 502.1701, Quality Control, Revise Table 4 of this Subsection by removing it in its entirety and replacing it with:

**TABLE 4  
METHOD A & B MINIMUM QUALITY CONTROL TESTING REQUIREMENTS\***

| TEST                         | TEST METHOD        | SAMPLING LOCATION | FREQUENCY                                                                                                                    |
|------------------------------|--------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Gradation                    | AASHTO T 27 & T 11 | Stockpile         | One representative set per proposed grading before production<br>One set every 100 yd <sup>3</sup><br>(Min. 1 set per month) |
| Organic Impurities           | AASHTO T 21        | Stockpile         | Once per fine aggregate per year**                                                                                           |
| % Absorption                 | AASHTO T 84 & T 85 | Stockpile         | Once per aggregate per year                                                                                                  |
| Specific Gravity             | AASHTO T 84 & T 85 | Stockpile         | Once per aggregate per year                                                                                                  |
| Total Moisture in Aggregate  | AASHTO T 255       | Stockpile         | One set per day's production                                                                                                 |
| Free Water and Aggregate Wt. | N/A                |                   | One per day's production                                                                                                     |
| % Entrained Air              | AASHTO T 152       | On Project        | On first two loads and every third load thereafter provided consistent results are achieved                                  |
| Compressive Strength         | AASHTO T 22        | On Project        | One set per subplot                                                                                                          |
| Compressive Strength         | AASHTO T 22        | On Project        | One set per subplot                                                                                                          |

\*Additional QC testing will be required any time a process change occurs during a placement, including changes in type or dosage of admixture. Additional testing shall include, but is not limited to, entrained air testing.

\*\*If the color produced is a laboratory designation Plate III, then the fine aggregate shall be tested once per month

502.1702 Quality Control, Method C Remove this sub section and replace it with:

**“The Contractor shall submit a QCP listing the mix design(s) to be used, the name and location of the production facility, a brief description of the placement and curing process and the name and qualifications of any QCT to be used. When a hydration stabilizing admixture is proposed for use, the manufacturer, product name, dosage rate and discharge time, from the time cement is added to the aggregate, shall be included, as well as procedures for monitoring attainment of Accelerated Hydration Gain. A QCT will be required. The Contractor shall provide a Certificate of Compliance for each truckload of concrete to the Department at the time of the load placement.”**

502.18, Method of Measurement, Revise Subsection ‘F’ by removing the word ‘transverse’ so that it reads: **“Saw cut grooving of concrete wearing surfaces, complete and accepted, will be measured for payment as one lump sum.”**

502.19, Basis of Payment, Revise the third paragraph by removing the word ‘transverse’ so that it reads: **“Saw cut grooving of concrete wearing surfaces will be paid for at the Contract Lump Sum Price, which shall be payment for furnishing all materials, labor, and equipment, including depth gauges and all incidentals, to satisfactorily complete the work.”**  
(Also see 535.24 and 535.25 for related changes)

## SECTION 503 REINFORCING STEEL

Section 503.07 Splicing Revise this section by removing the table and following footnote and replacing them with:

| Minimum Lap Splice Length (inches) |          |    |    |    |    |    |    |     |     |
|------------------------------------|----------|----|----|----|----|----|----|-----|-----|
| Bar Type                           | Bar Size |    |    |    |    |    |    |     |     |
|                                    | #3       | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
| Plain or Galvanized                | 16       | 20 | 24 | 29 | 38 | 47 | 59 | 72  | 85  |
| Epoxy or Dual Coated               | 17       | 24 | 36 | 43 | 56 | 71 | 88 | 107 | 128 |
| Stainless                          | 19       | 24 | 30 | 36 | 47 | 59 | 73 | 89  | 107 |
| Low-carbon Chromium                | 24       | 32 | 39 | 47 | 63 | 78 | 97 | 119 | 142 |

**“The minimum lap splice lengths in the table above are based on the parameters below. When any of these parameters are altered, appropriate minimum lap splice lengths will be as shown on the Plans.**

- Normal weight concrete
- Minimum 28-day concrete compressive strength from 4,000 psi to 10,000 psi

- **Class B tension lap splice**
- **Minimum center-to-center spacing between bars of 6 inches**
- **Minimum clear cover of 2 inches**
- **Nominal reinforcing steel yield strengths**
  - **Low-carbon Chromium = 100 ksi**
  - **Stainless = 75 ksi**
  - **All others = 60 ksi**
- **Reinforcement with yield strengths greater than 75 ksi shall have beam transverse reinforcement and column ties provided over the required lap splice length in accordance with the current edition of the AASHTO LRFD Bridge Design Specifications**

**When lap splices are placed horizontally in an element where the concrete depth below the splice will be 12 inches, or more, the indicated lap splice lengths shall be multiplied by a factor of 1.3.”**

Amend the Paragraph starting with Welded Splices may be made...” by adding to the last sentence beginning so that it reads **“The Contractor shall submit complete details of their proposed method of making welded splices for the Resident's approval at least 10 days prior to use.”**

504.12 Protective Coatings Revise this subsection by removing the paragraph beginning with “When galvanizing is specified” and replacing it with:

**“When galvanizing is specified, clean the steel in accordance with SSPC-SP 6 prior to galvanizing. Galvanize in accordance with AASHTO M 111 (ASTM A123). Galvanize fasteners in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I. Galvanized nuts shall be lubricated with a water-soluble lubricant containing a dye that contrasts with the color of the galvanizing.”**

## SECTION 506

### SHOP APPLIED PROTECTIVE COATING – STEEL

506.10 Description Revise this subsection by removing the entire paragraph in its entirety and replacing it with:

**“This work shall consist of surface preparation and application of coating systems in accordance with the Plans and this Specification. The color of structural steel painted in its entirety shall comply with SAE AMS-STD-595 – Colors Used in Government Procurement Color No. 14272 (Green), unless otherwise specified in the Contract. The color of partially painted weathering steel shall comply with SAE AMS-STD-595 – Colors Used in Government Procurement Color No. 30045 (Brown), unless otherwise specified in the Contract. All other coating colors shall be as specified in the Contract.”**

506.13 Surface Preparation Amend this section by adding this paragraph to the end:

**“Steel shall meet the requirements of SSPC SP8 Pickling prior to being immersed in the zinc tanks. Verification of the surface preparation shall be included in the QC documentation.”**

## SECTION 518 STRUCTURAL CONCRETE REPAIR

**518.02 Repair Materials** Replace the paragraph beginning with “Where the depth of placement...” with the following:

**“Where the depth of placement is equal to or greater than 1 inch, the Contractor may use concrete as the repair material. When concrete is used, the coarse aggregate shall conform to the requirements of the table below and Standard Specification Section 703.02, Coarse Aggregate for Concrete, or 703.03, Combined Aggregate Grading for Concrete.”**

Remove the second table with the heading, “Sieve Designation Percent by Weight Passing a Square Mesh Sieve”

## SECTION 523 BEARINGS

**523.051 Protective Coating** Revise this subsection by removing the paragraph beginning with “Anchor rods shall be galvanized...” and replacing with:

**“Anchor rods shall be galvanized. When anchor rods are designated to secure bare unpainted steel or painted steel, a dielectric coating (epoxy or bituminous type coatings are acceptable) shall be applied to the anchor rod and/or adjacent steel to prevent contact between galvanized surfaces and painted or unpainted steel.”**

**523.22 Fabrication** Amend this subsection by adding the following: **“Elastomeric Bearings shall be fabricated in accordance with AASHTO M251.”**

## SECTION 526 CONCRETE BARRIER

Amend this section by deleting it in its entirety and replacing it with:

**“526.01 Description This work shall consist of the furnishing, constructing, erecting, setting, resetting, and removal of concrete barrier and associated elements in accordance with these specifications, the Standard Details, and the lines and grades shown on the Plans or established by the Resident.**

**The types of concrete barrier are designated as follows:**

**Portable Concrete Barrier Type I** Double faced removable barrier in accordance with the Standard Details.

**Permanent Concrete Barrier Type II** Double faced barrier as shown on the Plans.

**Permanent Concrete Barrier Type IIIa** Single faced barrier 32 inches high in accordance with the Standard Details or as shown on the Plans.

**Permanent Concrete Barrier Type IIIb** Single faced barrier 42 inches high in accordance with the Standard Details or as shown on the Plans.

**Permanent Concrete Transition Barrier** Barrier of various heights joining steel bridge rail to steel guardrail in accordance with the Standard Details or as shown on the Plans.

**Permanent Texas Classic Rail Barrier** Traffic rail or sidewalk rail, in accordance with the Standard Details or as shown on the Plans.

#### **526.02 Materials**

a. **Concrete** Concrete for barriers, both permanent and portable, shall have a design strength of 5,000 psi.

For cast-in-place barrier: The concrete shall be Class LP, in accordance with Standard Specification Section 502, Structural Concrete.

For precast barrier: The concrete shall meet the requirements of Standard Specification 712.061, Structural Precast Concrete Units, except that the stripping strength for precast barriers is 4,000 psi.

b. **Reinforcing Steel** Reinforcing steel shall meet the requirements of Section 503, Reinforcing Steel.

c. **Structural Steel** Plates and barrier connections shall meet the requirements specified in Standard Specification 504 - Structural Steel and shall be hot dip galvanized after fabrication in accordance with Standard Specification 506, Shop Applied Protective Coating – Steel

d. **Bolts** Bolts shall meet the requirements specified in Section 713.02, High Strength Bolts.

e. **Connecting Pins for Portable Concrete Barrier** Portable concrete barriers must be connected using a 1- inch diameter pin. The connecting pin must be smooth, not deformed, i.e., reinforcing bar may not be used, and shall meet the strength requirements of ASTM A449 steel. Materials with greater strength may be used with the approval of the Department.

**f. Anchor Pins for Portable Concrete Barrier** Anchoring to concrete or asphalt will be required when specified on the Plans. When required, portable concrete barriers must be anchored using a 1 ½ - inch diameter anchor pin. The anchor pin must be smooth, not deformed, i.e., reinforcing bar may not be used, and shall meet the strength requirements of ASTM A36 steel. Materials with greater strength may be used with the approval of the Department.

**g. Device Crashworthiness** MaineDOT is transitioning to MASH2016 criteria for Portable Concrete Barrier on the following schedule:

New Portable Concrete Barrier shall be crash tested and/or evaluated to MASH2016 criteria.

Current Portable Concrete Barrier in useful serviceable condition that is successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.

Other current Portable Concrete Barrier that is deemed acceptable by the Department may be utilized on projects off the National Highway System through December 31, 2024.

#### **526.03 Construction Requirements**

Cast-in-place barriers shall be fabricated in accordance with Standard Specification Section 502, Structural Concrete. Precast barriers shall be fabricated in accordance with Standard Specification 534, Precast Structural Concrete.

Concrete finish for permanent barrier shall be rubbed as defined in Standard Specification Section 502, Structural Concrete, 502.13 D2 or an approved equal.

Portable concrete barrier shall be generally free from fins and porous areas and shall present a neat and uniform appearance.

Permanent barrier shall have a protective coating applied in accordance with Standard Specification Section 515, Protective Coating for Concrete Surfaces.

Reflective delineators for concrete median barrier shall meet the requirements of Special Provision 645, Highway Signing.

Preformed Joint Filler shall meet the requirements specified in Subsection 705.01, Preformed Expansion Joint Filler.

Permissible dimensional tolerances for all concrete barriers shall be as follows:

a. Cross-sectional dimensions shall not vary from design dimensions by more than ¼ inch. The vertical centerline shall not be out of plumb by more than ¼ inch.

b. Longitudinal dimensions shall not vary from the design dimensions by more than  $\frac{1}{4}$  inch per 10 feet of barrier section and shall not exceed  $\frac{3}{4}$  inches per section.

c. Location of anchoring holes shall not vary by more than  $\frac{1}{2}$  inch from the dimensions shown in the concrete barrier details on the Plans.

d. Surface straightness shall not vary more than  $\frac{1}{4}$  inch under a 10-foot straightedge.

e. The barrier shall have no significant cracking. Significant cracking is defined as fractures or cracks passing through the section, or any continuous crack extending for a length of 12 inches or more, regardless of position in the section.

**526.04 Method of Measurement** Permanent Concrete Barrier Type II, IIIa, IIIb, Texas Classic Rail, and Precast Median Barrier will be measured for payment by lump sum, complete in place.

Portable concrete barrier, both anchored and unanchored will be measured for payment by lump sum. Lump sum measurement will include verification of the installation and removal of all portable concrete at the completion of the Contractor's operations.

The Contractor shall replace sections of portable concrete barrier, including anchored barrier damaged by the traveling public when directed by the Resident. Replacement sections will be measured for payment in accordance with Standard Specification 109.7, Equitable Adjustments to Compensation and Time.

Transition barrier will be measured by each, complete in place.

**526.05 Basis of Payment** The accepted quantities of Concrete Barrier Type II, IIIa, IIIb, Texas Classic Rail, and Precast Median Barrier will be paid for at the Contract lump sum price for the type specified, complete in place.

The accepted quantities of Portable Concrete Barrier Type I, both anchored and unanchored will be paid for at the Contract lump sum price. Such payment shall be full compensation for furnishing all materials, assembling, moving, resetting, transporting, temporarily storing, removing barrier, furnishing new parts as necessary, and all incidentals necessary to complete the work.

Portable barrier shall become the property of the Contractor upon completion of the use of the barrier on the project and shall be removed from the project site by the Contractor.

Transition barrier will be paid for at the Contract price each, complete in place.

The accepted quantity of all types of concrete barrier, whether portable or permanent, will be paid for at the lump sum or per each price, as applicable, which payment shall be full compensation for all materials, including reinforcing steel, protective coating, reflective

delineators, steel plates and hardware, equipment, labor and incidentals required, as necessary, to complete the work.

Payment will be made under:

|         | <u>Pay Item</u>                            | <u>Pay Unit</u> |
|---------|--------------------------------------------|-----------------|
| 526.301 | Portable Concrete Barrier, Type I          | Lump Sum        |
| 526.304 | Portable Concrete Barrier, Anchored Type I | Lump Sum        |
| 526.312 | Permanent Concrete Barrier Type II         | Lump Sum        |
| 526.321 | Permanent Concrete Barrier Type IIIa       | Lump Sum        |
| 526.323 | Texas Classic Rail                         | Lump Sum        |
| 526.331 | Permanent Concrete Barrier Type IIIb       | Lump Sum        |
| 526.34  | Permanent Concrete Transition Barrier      | Each            |
| 526.502 | Precast Concrete Median Barrier            | Lump Sum”       |

## SECTION 527 ENERGY ABSORBING UNIT

527.02 Materials Amend this section by deleting it in its entirety and replacing it with:

**“MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Portable Crash Cushions will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 3 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.**

**Work Zone Crash Cushions shall be selected from the Department’s Qualified Products List of Crash Cushions/Impact Attenuators or approved equal.”**

## SECTION 535 PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.02 Materials Replace the description of “Coarse Aggregate for Concrete (Class A, AA, or Latex) in its entirety with: **“Coarse Aggregate for Concrete (Class A, AA, or SP-1-7)”**

535.22 Tolerances Amend this section by deleting it in its entirety and replacing it with: **“Product dimensional tolerances shall be in conformance with the latest edition of PCI MNL-135, Tolerance Manual for Precast and Prestressed Concrete Construction, as applicable to the particular product (e.g., slab, I-girder, box beam), the Plans, and this Specification. Use Box**

**Beam fabrication tolerances for voided or solid slab beams and use Double Tee tolerances for NEXT beams. In case of dispute, the Fabrication Engineer shall determine the allowable tolerance.”**

535.24 Installation of Slabs, Beams, and Girders Revise the 5<sup>th</sup> paragraph by replacing “6.0 and 9.0” to “5.0 and 8.0” so it reads: **“Ready mixed grout shall achieve a design compressive strength of 6,000 psi at 28 days, have an entrained air content of between 5.0 and 8.0 percent, be non-shrink, flowable, and contain a non-shrink additive listed on the Department QPL for expansive cements.”**

535.25, Installation of Precast/Prestressed Deck Panels Revise the 2<sup>nd</sup> paragraph by replacing “6.0 and 9.0” to “5.0 and 8.0” so it reads: **“Ready mixed grout shall achieve a design compressive strength of 6,000 psi at 28 days, have an entrained air content of between 5.0 and 8.0 percent, be non-shrink, flowable, and contain a non-shrink additive listed on the Department QPL for expansive cements.”**

## SECTION 606 GUARDRAIL

Amend this section by replacing it with the following:

606.01 Description This work shall consist of furnishing and installing guardrail components in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or as established. Guardrail is designated as:

31” W-Beam Guardrail - Mid-Way Splice

Galvanized steel w-beam, 8” wood or composite offset blocks, galvanized steel posts

Thrie Beam

Galvanized steel thrie beam, 8” wood or composite offset blocks, galvanized steel posts

Median guardrail shall consist of two beams of the above types, mounted on single posts.

Bridge mounted guardrail shall consist of furnishing all labor, materials, and equipment necessary to install guardrail as shown on the plans. This work shall also include drilling for and installation of offset blocks if specified, and incidental hardware necessary for satisfactory completion of the work.

Remove and Reset and Remove, Modify, and Reset guardrail shall consist of removing the existing designated guardrail and resetting in a new location as shown on the plans or directed by the Resident. Remove, Modify, and Reset guardrail and Modify guardrail include the following guardrail modifications: Removing plate washers at all posts, except at anchorage assemblies as noted on the Standard Details, adding offset blocks, and other modifications as listed in the Construction Notes or General Notes. Modifications shall conform to the guardrail Standard Details.

Bridge Connection shall consist of the installation and attachment of beam guardrail to the existing bridge. This work shall consist of constructing a concrete end post or modifying an existing end post as required, furnishing, and installing a terminal connector, necessary hardware, and incidentals required to complete the work as shown on the plans. Bridge Transition shall consist of a bridge connection and furnishing and installing guardrail components as shown in the Standard Details.

606.02 Materials Materials shall meet the requirements specified in the following Sections of Division 700 - Materials:

|                     |        |
|---------------------|--------|
| Timber Preservative | 708.05 |
| Metal Beam Rail     | 710.04 |
| Guardrail Posts     | 710.07 |
| Guardrail Hardware  | 710.08 |

Guardrail components shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report.

Posts for underdrain delineators shall be "U" channel steel, 8 ft long, 2 ½ lb/ft minimum and have 3/8-inch round holes, 1-inch center to center for a minimum distance of 2 ft from the top of the post.

Reflectorized Flexible Guardrail Markers shall be mounted on all guardrails. A marker shall be mounted onto guardrail posts at the flared guardrail terminal end point and tangent point, both at the leading and trailing ends of each run of guardrail. The marker's flexible posts shall be gray with either silver-white or yellow reflectors (to match the edge line striping) at the tangents, red at leading ends, and green at trailing ends. Whenever the guardrail terminal is not flared, markers will only be required at the terminal end point. These shall be red or green as appropriate. Markers shall be installed on the protected side of guardrail posts unless otherwise approved by the Resident. Reflectorized flexible guardrail markers shall be from the Department's Qualified Products List of Delineators. The marker shall be gray, flexible, durable, and of a non-discoloring material to which 3-inch by 9-inch reflectors shall be applied, and capable of recovering from repeated impacts and meeting MASH 16 requirements. Reflective material shall meet the requirements of Section 719.01 for ASTM D 4956 Type III reflective sheeting. The marker shall be secured to the guardrail post with two fasteners, as shown in the Standard Details.

Reflectorized beam guardrail reflectors shall be mounted on all "w" beam guardrail and shall be either the "butterfly" type or linear delineation system panels. "Butterfly" or linear delineation panels shall be installed at approximately 62.5 foot intervals on tangents (after every tenth post) and 31.25 feet on curves (after every fifth post), and shall be centered on the guardrail beam. On Divided highways, the left-hand delineators shall be yellow and the right-hand delineators shall be silver/ white. On two-way directional highways, the right-hand side will have silver / white reflectors and no reflectorized delineator used on the left. Delineators shall have reflective sheeting that meets or exceeds the requirements of Section 719.01.

“Butterfly” reflectors shall be fabricated from high-impact, ultraviolet & weather resistant thermoplastic. Aluminum, galvanized metal or other materials shall not be used. Reflective sheeting will be applied to only one side of the delineator facing the direction of traffic and shall be centered vertically on the guardrail beam as shown in the Standard Detail 606(7).

Linear delineation system panels shall be 1.5 inches wide by approximately 11 inches nominal length, with a minimum of 5 raised lateral ridges spaced at approximately 2.25 inches. The height of each ridge shall be 0.34 inches with a 45 degree profile and a 0.28 inches radius at the top. Sheeting shall be laminated to thin gauge aluminum with a pre-applied adhesive tape on the back. Panels shall not be installed over seams or bolt heads and shall be centered horizontally on the guardrail beam; linear delineation panels shall be attached to only one guardrail beam. The guardrail beam surface shall be cleaned and prepared according to the manufacturer’s instructions. Air temperature and guardrail surface temperature must be a minimum of 50 degrees F (10 C) with rising temperature at the time of installation.

Exact locations of the either the “butterfly” type or the linear delineation panels shall be approved by the Resident prior to installation.

Single wood post shall be of cedar, white oak, or tamarack, well-seasoned, straight, and sound and have been cut from live trees. The outer and inner bark shall be removed, and all knots trimmed flush with the surface of the post. Posts shall be uniform taper and free of kinks and bends.

Single steel post shall conform to the requirements of Section 710.07 b.

Single steel pipe post shall be galvanized, seamless steel pipe conforming to the requirements of ASTM A120, Schedule No. 40, Standard Weight.

Acceptable multiple mailbox assemblies shall be listed on the Department’s Qualified Products List and shall be MASH 16 tested and approved.

Flared and Tangent w-beam guardrail terminals and guardrail offset blocks shall be from the Department’s Qualified Products List. Flared terminals shall be installed with a 4 ft offset as shown in the Manufacturer’s installation instructions.

Anchorage assemblies used to anchor trailing ends, radius guardrail, or other ends not exposed to traffic shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report, Drawing SEW02a.

Existing materials damaged or lost during adjusting, removing and resetting, or removing, modifying, and resetting, shall be replaced by the Contractor without additional compensation. Existing guardrail posts and guardrail beams found to be unfit for reuse shall be replaced when directed by the Resident.

606.03 Posts Posts for guardrail shall be set plumb in holes or they may be driven if suitable driving equipment is used to prevent battering and distorting the post. When posts are driven

through pavement, the damaged area around the post shall be repaired with approved bituminous patching. Damage to lighting and signal conduit and conductors shall be repaired by the Contractor.

When set in holes, posts shall be on a stable foundation and the space around the posts, backfilled in layers with suitable material, thoroughly tamped.

The reflectorized flexible guardrail markers shall be set plumb with the reflective surface facing the oncoming traffic. Markers shall be installed on the protected side of guardrail posts. Markers, which become bent or otherwise damaged, shall be removed and replaced with new markers.

Single wood posts shall be set plumb in holes and backfilled in layers with suitable material, thoroughly tamped. The Resident will designate the elevation and shape of the top. The posts, that are not pressure treated, shall be painted two coats of good quality oil base exterior house paint.

Single steel posts shall be set plumb in holes as specified for single wood posts or they may be driven if suitable driving equipment is used to prevent battering and distorting the post.

Additional bolt holes required in existing posts shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.04 Rails Brackets and fittings shall be placed and fastened as shown on the plans. Rail beams shall be erected and aligned to provide a smooth, continuous barrier. Beams shall be lapped with the exposed end away from approaching traffic.

End assemblies shall be installed as shown on the plans and shall be securely attached to the rail section and end post.

All bolts shall be of sufficient length to extend beyond the nuts but not more than ½ inch. Nuts shall be drawn tight.

Additional bolt holes required in existing beams shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.045 Offset Blocks The same offset block material is to be provided for the entire project unless otherwise specified.

606.05 Shoulder Widening At designated locations the existing shoulder of the roadway shall be widened as shown on the plans. All grading, paving, seeding, and other necessary work shall be in accordance with the Specifications for the type work being done.

606.06 Mail Box Post Single wood post shall be installed at the designated location for the support of the mailbox. The multiple mailbox assemblies shall be installed at the designated location in

accordance with the Standard Details and as recommended by the Manufacturer. Attachment of the mailbox to the post will be the responsibility of the home or business owner.

606.07 Abraded Surfaces All galvanized surfaces of new guardrail and posts, which have been abraded so that the base metal is exposed, and the threaded portions of all fittings and fasteners and cut ends of bolts shall be cleaned and painted with two coats of approved rust resistant paint.

606.08 Method of Measurement Guardrail will be measured by the linear foot from center to center of end posts along the gradient of the rail except where end connections are made to masonry or steel structures, in which case measurement will be as shown on the plans. When connected to radius rail, measurement will be to the end of the last tangent beam.

Guardrail terminal, reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be measured by each unit of the kind specified and installed.

Widened shoulder will be measured as a unit of grading within the limits shown on the plans.

Excavation in solid rock for placement of posts will be paid under force account unless otherwise indicated in the Bid Documents.

Reflectorized beam guardrail reflectors ("butterfly" type or linear delineation system panels) when identified by pay item, will be measured for payment by each.

606.09 Basis of Payment The accepted quantities of guardrail will be paid for at the contract unit price per linear foot for the type specified, complete in place. Reflectorized beam guardrail ("butterfly"-type) delineators will not be paid for directly but will be considered incidental to guardrail items. Reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be paid for at the contract unit price each for the kind specified complete in place.

Guardrail terminals will be paid for at the contract price each, complete in place which price shall be full payment for furnishing and installing all components including the terminal section, posts, offset blocks, "w" beam, cable foundation posts, plates and for all incidentals necessary to complete the installation within the limits as shown on the Standard Details or the Manufacturer's installation instructions. Pay limits for a flared terminal will be 37.5 feet. Pay limits for a tangent terminal will be 50 feet. Each guardrail terminal will be clearly marked with the Manufacturer's name and model number to facilitate any future needed repair. Such payment shall also be full compensation for furnishing all material, excavating, backfilling holes, assembling, and all incidentals necessary to complete the work, except that for excavation for posts or anchorages in solid ledge rock, payment will be made under 109.7.5 – Force Account. Type III Retroreflective Adhesive Sheeting shall be applied to the approach buffer end sections and sized to substantially cover the end section. On all roadways, the ends shall be marked with alternating black and retroreflective yellow stripes. The stripes shall be 3 in wide and sloped down at an angle of 45 degrees toward the side on which traffic is to pass the end section. Guardrail terminals shall also include a set of installation drawings supplied to the Resident.

Anchorage to bridge end posts will be part of the bridge work. Connections thereto will be considered included in the unit bid price for guardrail.

Guardrail to be placed on a radius of curvature of 150 ft or less will be paid for under the designated radius pay item for the type guardrail being placed.

Widened shoulder will be paid for at the contract unit price each complete in place and will be full compensation for furnishing and placing, grading and compaction of aggregate subbase and any required fill material.

Adjust guardrail will be paid for at the contract unit price per linear foot and will be full compensation for adjusting to grade. Payment shall also include adjusting guardrail terminals where required.

Modify guardrail will be paid for at the contract unit price per linear foot and will be full compensation for furnishing and installing offset blocks, additional posts, and other specified modifications; removing, modifying, installing, and adjusting to grade existing posts and beams; removing plate washers and backup plates, and all incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals where required.

Remove and Reset guardrail will be paid for at the contract unit price per linear foot and will be full compensation for removing, transporting, storing, reassembling all parts, necessary cutting, furnishing new parts when necessary, reinstalling at the new location, and all other incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals when required.

Remove, Modify, and Reset guardrail will be paid for at the contract unit price per foot and will be full compensation for the requirements listed in Modify guardrail and Remove and Reset guardrail.

Bridge Connections will be paid for at the contract unit price each. Payment shall include, attaching the connection to the endpost including furnishing and placing concrete and reinforcing steel necessary to construct new endposts if required, furnishing and installing the terminal connector, and all miscellaneous hardware, labor, equipment, and incidentals necessary to complete the work.

Bridge Transitions will be paid for at the contract unit price each. Payment shall include furnishing and installing the thrie beam or "w"-beam terminal connector, doubled beam section, and transition section, where called for, posts, hardware, precast concrete transition and vertical curb, and any other necessary materials and labor, including the bridge connection as stated in the previous paragraph.

No payment will be made for guardrail removed, but not reset and all costs for such removal shall be considered incidental to the various contract pay items.

Reflectorized beam guardrail reflectors ( "butterfly" type and the linear delineation panels ) will not be paid for directly but will be considered incidental to all new guardrail items. The Contractor shall

furnish and install either the “butterfly” type or linear delineation panels, at its discretion, for new guardrail items.

Reflectorized beam guardrail reflectors ( either “butterfly” type or linear delineation system panels) will be paid for under the applicable pay items for installation in conjunction with Adjust, Modify, Remove and Reset, Remove Modify and Reset guardrail items. The accepted quantity of “butterfly” type or linear delineation system panels will be paid for at the contract unit price each for all work and materials furnished to install, complete in place, including all incidentals necessary to complete the work.

Payment will be made under:

| <u>Pay Item</u>                                                     | <u>Pay Unit</u> |
|---------------------------------------------------------------------|-----------------|
| 606.1301 31” W-Beam Guardrail - Mid-Way Splice – Single Faced       | Linear Foot     |
| 606.1302 31” W-Beam Guardrail - Mid-Way Splice – Double Faced       | Linear Foot     |
| 606.1303 31” W-Beam Guardrail - Mid-Way Splice, 15’ Radius and Less | Linear Foot     |
| 606.1304 31” W-Beam Guardrail - Mid-Way Splice, Over 15’ Radius     | Linear Foot     |
| 606.1305 31” W-Beam Guardrail - Mid-Way Splice Flared Terminal      | Each            |
| 606.1306 31” W-Beam Guardrail - Mid-Way Splice Tangent Terminal     | Each            |
| 606.1307 Bridge Transition (Asymmetrical) – Type IA                 | Each            |
| 606.1721 Bridge Transition - Type I                                 | Each            |
| 606.1722 Bridge Transition - Type II                                | Each            |
| 606.1731 Bridge Connection - Type I                                 | Each            |
| 606.1732 Bridge Connection - Type II                                | Each            |
| 606.178 Guardrail Beam                                              | Linear Foot     |
| 606.25 Terminal Connector                                           | Each            |
| 606.257 Terminal Connector - Thrie Beam                             | Each            |
| 606.259 Anchorage Assembly                                          | Each            |
| 606.265 Terminal End-Single Rail - Galvanized Steel                 | Each            |
| 606.266 Terminal End-Single Rail - Corrosion Resistant Steel        | Each            |
| 606.275 Terminal End-Double Rail - Galvanized Steel                 | Each            |
| 606.276 Terminal End-Double Rail - Corrosion Resistant Steel        | Each            |
| 606.352 Reflectorized Beam Guardrail Delineators (“Butterfly” type) | Each            |
| 606.3521 Linear Delineation System Panel                            | Each            |
| 606.353 Reflectorized Flexible Guardrail Marker                     | Each            |
| 606.354 Remove and Reset Reflectorized Flexible Guardrail Marker    | Each            |
| 606.356 Underdrain Delineator Post                                  | Each            |
| 606.358 Guardrail, Modify                                           | Linear Foot     |
| 606.362 Guardrail, Adjust                                           | Linear Foot     |
| 606.365 Guardrail, Remove, Modify, and Reset                        | Linear Foot     |
| 606.366 Guardrail, Remove and Reset                                 | Linear Foot     |
| 606.367 Replace Unusable Existing Guardrail Posts                   | Each            |
| 606.3671 Replace Unusable Offset Blocks                             | Each            |
| 606.47 Single Wood Post                                             | Each            |
| 606.48 Single Galvanized Steel Post                                 | Each            |

|         |                                                   |             |
|---------|---------------------------------------------------|-------------|
| 606.50  | Single Steel Pipe Post                            | Each        |
| 606.51  | Multiple Mailbox Support                          | Each        |
| 606.568 | Guardrail, Modify - Double Rail                   | Linear Foot |
| 606.63  | Thrie Beam Rail Beam                              | Linear Foot |
| 606.64  | Guardrail Thrie Beam - Double Rail                | Linear Foot |
| 606.65  | Guardrail Thrie Beam - Single Rail                | Linear Foot |
| 606.66  | Terminal End Thrie Beam                           | Each        |
| 606.70  | Transition Section - Thrie Beam                   | Each        |
| 606.71  | Guardrail Thrie Beam - 15 ft radius and less      | Linear Foot |
| 606.72  | Guardrail Thrie Beam - over 15 ft radius          | Linear Foot |
| 606.73  | Guardrail Thrie Beam - Single Rail Bridge Mounted | Linear Foot |
| 606.74  | Guardrail - Single Rail Bridge Mounted            | Linear Foot |
| 606.753 | Widen Shoulder for Low Volume Guardrail End       | Each        |
| 606.754 | Widen Shoulder for Flared Guardrail Terminal      | Each        |
| 606.78  | Low Volume Guardrail End                          | Each        |
| 606.80  | Buried-in-Slope Guardrail End                     | Each        |

## SECTION 608 SIDEWALKS

Section 608.022 Detectable Warning Materials Standard Revise this section by removing the last sentence of this section beginning with “Concrete...” and replacing it with “**Concrete shall meet the requirements of Section 608.021, Sidewalk Materials, of this specification or may be a prepackaged concrete mix from the Department’s Qualified Products List (QPL).**”

## SECTION 609 CURB

Remove this section in its entirety and replace with the following:

609.01 Description Construct or reset curb, gutter, or combination curb and gutter, paved ditch, and paved flume. The types of curb are designated as follows:

- Type 1 - Stone curbing of quarried granite stone
- Type 2 – Concrete Curbing
- Type 3 - Bituminous curbing
- Type 5 - Stone edging of quarried granite stone

609.02 Materials Except as provided below, the materials used shall meet the requirements of the following Sections of Division 700 - Materials:

|                                              |        |
|----------------------------------------------|--------|
| Portland Cement and Portland Pozzolan Cement | 701.01 |
| Water                                        | 701.02 |
| Air Entraining Chemical Admixture            | 701.03 |
| Fine Aggregate for Concrete                  | 703.01 |

|                                                   |         |
|---------------------------------------------------|---------|
| Coarse Aggregate for Concrete                     | 703.02  |
| Joint Mortar                                      | 705.02  |
| Reinforcing Steel                                 | 709.01  |
| Stone Curbing and Edging                          | 712.04  |
| Epoxy Resin                                       | 712.35  |
| Hot Mix Asphalt Curbing                           | 712.36  |
| Structural Precast Concrete Units (Concrete Curb) | 712.061 |

The Contractor shall submit a concrete mix design for the Portland Cement Concrete to the Resident, for the uses specified below or in accordance with the Contract Documents.

Circular curb, terminal sections and transition sections shall be in reasonably close conformity with the shape and dimensions shown on the Plans and to the applicable material requirements herein for the type of curb specified.

Dowels shall be reinforcing steel deformed bars.

Concrete for Slipform Concrete Curb shall meet the requirements below:

- a. Class A, with the exception that permeability requirements shall be waived.
- b. Entrained air content of Slipform Concrete Curb shall be 4.0% to 7.0%
- c. Concrete temperature, prior to discharge, shall not exceed 90 F.
- d. Proposed mix designs may contain polypropylene fibers.
- e. Partially discharged loads may be retempered with water provided the maximum water to cement ratio is not exceeded.

609.03 Vertical Stone Curb, Terminal Section and Transition Sections and Portland Cement Concrete Curb, Terminal Sections and Transition Sections

a. Installation The curb stone shall be set on a compacted foundation so that the front top arris line conforms to the lines and grades required. The foundation shall be prepared in advance of setting the stone by grading the proper elevation and shaping to conform as closely as possible to the shape of the bottom of the stone. The required spacing between stones shall be assured by the use of an approved spacing device to provide an open joint between stones of at least ¼ inch and no greater than ⅝ inch.

b. Backfilling All remaining spaces under the curb shall be filled with approved material and thoroughly hand tamped so the stones will have a firm uniform bearing on the foundation for the entire length and width. Any remaining excavated areas surrounding the curb shall be filled to the required grade with approved materials. This material shall be placed in layers not exceeding 8 inches in depth, loose measure and thoroughly tamped.

When backfill material infiltrates through the joints between the stones, small amounts of joint mortar or other approved material shall be placed in the back portion of the joint to prevent such infiltrating.

c. Protection The curb shall be protected and kept in good condition. All exposed surfaces smeared or discolored shall be cleaned and restored to a satisfactory condition or the curb stone removed and replaced.

d. Curb Inlets Curb placed adjacent to curb inlets shall be installed with steel dowels cemented into each stone with epoxy grout as shown in the Standard Details.

The epoxy grout shall be used in accordance with the manufacturer's instructions. The grout shall be forced into the hole, after which the dowel shall be coated with grout for one-half its length and inserted into the grout filled hole. The hole shall be completely filled with grout around the dowel. All tools and containers must be clean before using.

The Contractor may elect to substitute concrete to backfill Stone Curbing or Stone Edging at their option. If the concrete backfill option is elected, the Concrete Fill shall meet the requirements of 609.02. The Contractor shall submit a concrete design for the Portland Cement Concrete, with a minimum designated compressive strength of 3000 PSI meeting the requirements of Class S or Class Fill Concrete. The Contractor may elect to choose a Prepackaged Concrete Mix from the Departments Qualified Products list (QPL). Concrete backfill shall be completed in conformance with a Department supplied concrete backfill detail.

#### 609.04 Bituminous Curb

a. Preparation of Base Before placing the curb, the foundation course shall be thoroughly cleaned of all foreign and objectionable material. String or chalk lines shall be positioned on the prepared base to provide guidelines. The foundation shall be uniformly painted with tack coat at a rate of 0.04 to 0.14 gal/yd<sup>2</sup>.

b. Placing The curb shall be placed by an approved power operated extruding type machine using the shape mold called for. A tight bond shall be obtained between the base and the curb. The Resident may permit the placing of curbing by other than mechanical curb placing machines when short sections or sections with short radii are required. The resulting curbing shall conform in all respects to the curbing produced by the machine.

c. When required, the curb shall be painted and coated with glass beads in accordance with Section 627 - Pavement Marking. Curb designated to be painted shall not be sealed with bituminous sealing compound.

d. Acceptance Curb may be accepted or rejected based on appearance concerning texture, alignment, or both. All damaged curb shall be removed and replaced at the Contractor's expense.

e. Polyester fibers shall be uniformly incorporated into the dry mix at a rate of 0.25 percent of the total batch weight. Certification shall be provided from the supplier with each shipment meeting the following requirements:

|                     |                            |
|---------------------|----------------------------|
| Average Length      | 0.25 inches $\pm$ 0.005    |
| Average Diameter    | 0.0008 inches $\pm$ 0.0001 |
| Specific Gravity    | 1.32-1.40                  |
| Melting Temperature | 480 °F Minimum             |

#### 609.05 Slipform Concrete Curb

a. Preparation of Base Before placing the curb, the foundation course shall be thoroughly cleaned of all foreign and objectionable material. The Contractor shall not place Slipform Concrete Curb on a wet or frozen foundation. The foundation (HMA or concrete) may be in a Saturated Surface Dry condition, but no standing water shall be allowed. String or chalk lines shall be positioned on the prepared foundation to provide guidelines. Prior to placing the curb, the foundation shall be uniformly coated with an epoxy resin adhesive that meets the requirements of AASHTO M 235, Type I, II, III, IV or V and has been tested by AASHTO Product Evaluation & Audit Solutions. The Contractor shall submit the epoxy resin adhesive that they propose to utilize with the concrete mix design. The epoxy resin adhesive must be approved prior to placement and used in accordance with manufacturer's recommendations.

b. Placing Concrete shall be placed with an approved Slipform machine that will produce a finished product according to the design specified in the Plans. For cold weather slip forming, the outside temperature must be at least 36°F and rising. The curb shall be placed on a firm, uniform foundation, shall conform to the section profile specified in the Plans, and shall match the appropriate grade. Expansion joints shall be placed in the curb where it meets rigid structures such as but not limited to building foundations, catch basin headers or fire hydrants. Contraction joints will be placed at 10-foot intervals using sawing methods, which shall cut 1 to 3 inches into the concrete. Contraction joints shall be cut between 1 and 7 days after placement of the concrete. Joints shall be constructed perpendicular to the subgrade and match other joints in roadways, sidewalks, or other structures when applicable.

c. Curing and Sealing Proper curing shall be provided using either a combination curing/sealing compound spray that meets ASTM 1315 Type 1-Class A, or a curing compound spray that meets ASTM 309 Type 1-D – Class A. Curing may also be accomplished by the methods specified in Standard Specification Section 502.14, Curing Concrete.

If a combination curing/sealing compound spray is not used, a separate sealing compound from the MaineDOT Qualified Products List for a Type 1c sealer shall be applied after the concrete has cured.

d. Protection Slipform curb must be adequately protected after placement. The concrete shall be allowed to cure for at least 72 hours. During cold weather conditions, when temperatures drop below the required temperature of 36°F after placement, curbing shall be protected by concrete blankets or a combination of plastic sheeting and straw. After any

placement of Slipform curb, regardless of weather conditions, the placed curb shall be adequately protected by traffic control devices as necessary.

e. Marking When required, the curb shall be painted and coated with glass beads in accordance with Section 627 - Pavement Marking. Curb designated to be painted shall not be sealed unless a combination curing/sealing compound is used.

f. Acceptance Curb shall be accepted or rejected based on finish, alignment, entrained air content, and compressive strength. Concrete Quality Control and Acceptance shall be done in accordance with Standard Specification Section 502, Method C. All damaged curb shall be removed and replaced at the Contractor's expense.

609.06 Stone Edging The curb shall be installed, backfilled and protected in accordance with Section 609.03, except as follows:

a. Slope The edging shall be set on a slope as shown on the Plans or as directed.

b. Joints Joints shall be open and not greater than 1½ inch in width.

#### 609.07 Stone Bridge Curb

a. Installation Each stone and the bed upon which it is to be placed shall be cleaned and thoroughly wetted with water before placing the mortar for bedding and setting the stone. The stone shall be set on a fresh bed of joint mortar and well bedded before the mortar has set so that the front top arris line conforms to the line and grade required. Whenever temporary supporting wedges or other devices are used in setting the stones, they shall be removed before the mortar in the bed has become set, and the holes left by them shall be filled with mortar. Concrete behind the stones shall not be placed until the stones have been in place at least two days. Bedding and pointing mortar for joints shall be cured as required under Section 502 - Structural Concrete.

b. Joints Vertical joints shall be ½ inch in width plus or minus ⅛ inch. Whenever possible, the face and top of the joint shall be pointed with joint mortar to a depth of 1½ inch, before the bedding mortar has set. Joints which cannot be so pointed, shall be prepared for pointing by raking them to a depth of 1½ inch before the mortar has set. Joints not pointed at the time the stone is laid shall be thoroughly wetted with clean water and filled with mortar. The mortar shall be well driven into the joint and finished with an approved pointing tool, flush with the pitch line of the stones.

#### 609.08 Resetting Stone or Portland Cement Concrete Curb, Including Terminal Sections and Transitions

The curb shall be installed, backfilled and protected in accordance with Section 609.03, except as follows:

a. Removal of Curbing The Contractor shall carefully remove and store curb specified on the Plans or designated for resetting. Curb damaged or destroyed, because of the

Contractor's operations or because of their failure to store and protect it in a manner that would prevent its loss or damage, shall be replaced with curbing of equal quality at the Contractor's expense.

b. Cutting and Fitting Cutting or fitting necessary in order to install the curbing at the locations directed shall be done by the Contractor.

609.09 Method of Measurement Curb, both new and reset, will be measured by the linear foot along the front face of the curb at the elevation of the finished pavement, complete in place and accepted. Curb inlets at catch basins, including doweling, will not be measured for payment but shall be considered included in the cost of the catch basin. New transition sections and terminal curb will be measured by the unit. Reset transition sections and terminal curb will be included in the measurement for resetting curb.

Concrete Slipform Curb and terminal ends will be measured by the linear foot along the front face of the curb at the elevation of the finished pavement, complete in place and accepted.

609.10 Basis of Payment The accepted quantities of curbing will be paid for at the contract unit price per linear foot for each kind and type of curbing as specified.

Payment for terminal curb shall include only that portion of the curbing modified for installation at ends of curb runs shown in the Standard Details. Curb adjacent to terminal ends shall be paid for at the contract unit price per linear foot for the type of curb installed.

Vertical Curb Type 1 is required to have a radius of 60 feet or less, will be paid for as Vertical Curb Type 1 - Circular.

Curb, Type 5 required to have a radius of 30 feet or less will be paid for as Curb Type 5 - Circular.

There will be no separate payment for concrete fill, mortar, reinforcing steel, anchors, tack coat, drilling for and grouting anchors, pointing and bedding of curbing, and for cutting and fitting, but these will be considered included in the work of the related curb.

Removal of existing curb and necessary excavation for installing new or reset curbing will not be paid for directly but shall be considered to be included in the appropriate new or reset curb pay item. Base and Subbase material will be paid for under Section 304 - Aggregate Base and Subbase Course. Backing up bituminous curb is incidental to the curb items. Loam, as directed, will be paid under 615 - Loam.

Payment will be made under:

|          | <u>Pay Item</u>                          | <u>Pay Unit</u> |
|----------|------------------------------------------|-----------------|
| 609.11   | Vertical Curb Type 1                     | Linear Foot     |
| 609.12   | Vertical Curb Type 1 - Circular          | Linear Foot     |
| 609.13   | Vertical Bridge Curb Type 1              | Linear Foot     |
| 609.131  | Vertical Bridge Curb Type 1A             | Linear Foot     |
| 609.132  | Vertical Bridge Curb Type 1B             | Linear Foot     |
| 609.142  | Vertical Bridge Curb Type 1B - Circular  | Linear Foot     |
| 609.15   | Sloped Curb Type 1                       | Linear Foot     |
| 609.151  | Sloped Curb Type 1 - Circular            | Linear Foot     |
| 609.161  | Concrete Slipform Curb – Vertical Type 2 | Linear Foot     |
| 609.21   | Concrete Slipform Curb Type 2            | Linear Foot     |
| 609.219  | Concrete Slipform Terminal End Type 2    | Linear Foot     |
| 609.23   | Terminal Curb Type 1                     | Each            |
| 609.234  | Terminal Curb Type 1 - 4 foot            | Each            |
| 609.237  | Terminal Curb Type 1 - 7 foot            | Each            |
| 609.2371 | Terminal Curb Type 1 - 7 foot – Circular | Each            |
| 609.238  | Terminal Curb Type 1 - 8 foot            | Each            |
| 609.26   | Curb Transition Section B Type 1         | Each            |
| 609.31   | Curb Type 3                              | Linear Foot     |
| 609.34   | Curb Type 5                              | Linear Foot     |
| 609.35   | Curb-Type 5 - Circular                   | Linear Foot     |
| 609.38   | Reset Curb Type 1                        | Linear Foot     |
| 609.39   | Reset Curb Type 2                        | Linear Foot     |
| 609.40   | Reset Curb Type 5                        | Linear Foot     |

## SECTION 610

### STONE FILL, RIPRAP, STONE BLANKET, AND STONE DITCH PROTECTION

610.02 Materials Amend this subsection by adding the following to the end of the material list:  
**“Stone Ditch Protection 703.29”**

## SECTION 618

### SEEDING

618.08 Mulching Revise this Section so that the third sentence reads: “Mulch for Seeding Method Number 1 shall only be cellulous fiber mulch Section 619.04 **(b)** or straw mulch Section 619.04 **(a)**.”

## SECTION 619 MULCH

619.03 General Amend this Section by adding the following sentence to the end: **“Straw mulch shall be used in all wetland areas.”**

## SECTION 626 FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY SIGNING, LIGHTING, AND SIGNALS

Section 626.021 Miscellaneous Materials Revise this section by removing the fourth paragraph beginning with “ All Concrete for concrete encasement...” and replace it with **“All concrete for concrete encasement of conduit shall be Class S or Class Fill concrete in accordance with the applicable requirements of Section 502 – Structural Concrete, or a Prepackaged Concrete Mix from the Department’s Qualified Products List (QPL).”**

Section 626.031 Conduit Revise the fifth paragraph beginning with “After the trench has been...” by removing the last sentence beginning with “Where concrete encasement...” and replacing it with **“Where concrete encasement is required around the conduit, the concrete shall meet Class S, Class Fill in accordance with the applicable requirements of Section 502 – Structural Concrete, or a Prepackaged Concrete Mix from the Department’s Qualified Products List (QPL).”**

626.034 Concrete Foundations Revise this Section by changing ‘626.037’ to ‘**626.036**’ in the Second Paragraph which begins with “Foundations shall consist of cast-in-place...”.

Revise the 10<sup>th</sup> paragraph beginning with “Before placing concrete, the required elbows...” by removing “...in accordance with **Standard Specification 633.**”

626.036 Precast Foundations Revise the last sentence of paragraph one so that it reads: **“Construction of precast foundations shall conform to the Standard Details and all requirements of 712.061.”**

## SECTION 627 PAVEMENT MARKINGS

627.02 Materials Amend this section by adding the following to the existing Specification:

**“When pavement marking paint must be applied on pavement with an air temperature between 35 °F and 50 °F, a low temperature waterborne paint may be used upon the Department’s approval as noted below.**

**The Contractor shall submit the following information for Department review and approval at least 10 calendar days prior to application:**

**The manufacturer and product name of the low temperature waterborne paint**

**The manufacturer's technical product data sheets**

**The product's SDS sheets**

**All required and recommended application specifications for the product**

**The manufacturer's requirements for temperature, surface preparation, paint thickness and the bead application shall be followed. No additional payment will be made for the use of low temperature waterborne paint. “**

627.06 Application Revise this subsection by replacing the paragraph beginning with “ On other final pavement markings...” with the following:

**“On other final pavement markings and on curb, where the paint is applied by hand painting or spraying, application shall be one uniform covering coat at least 16 mils thick. Before the paint has dried, the glass beads shall be applied by a pressure system that will force the glass beads onto the undried paint as uniformly as possible.**

**Painted lines and markings shall be applied in accordance with the manufacturer's published recommendations. These recommendations will be supplied to the Resident prior to installation.”**

Revise this subsection by replacing the paragraph beginning with “ If the final reflectivity values are less...” with the following:

**“The final reflectivity will be acceptable if 90 percent or more of the painted pavement lines and markings meet the specified minimum value. If less than 90 percent of the painted pavement lines and markings meet the specified minimum final reflectivity values, the Contractor shall repaint those areas not meeting required reflectivity at no cost to the Department.**

**If, after repainting, analysis of the final reflectivity values results in the need for a second repainting, the Contractor will submit in writing a plan of action to meet the reflectivity minimums prior to continuing any work. Once the plan has been reviewed and approved by the Department, the Contractor shall reapply at no cost to the Department.”**

## **SECTION 634** **HIGHWAY LIGHTING**

634.021 Materials Revise this subsection by removing the paragraph beginning with “All bolts for mounting lighting fixtures” and replacing with:

**“All bolts for mounting lighting fixtures under bridge structures shall conform to the requirements of ASTM A307. These bolts and other fastening hardware shall be galvanized in**

accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I.”

## SECTION 637 DUST CONTROL

Revise this section by removing it in its entirety.

## SECTION 643 TRAFFIC SIGNALS

643.021 Materials Amend this subsection by adding the following at the end:

**“MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Temporary Traffic Control Signals will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 4 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.”**

643.023 Traffic Signal Structures Remove the third paragraph and replace it with the following:

**“Traffic signal support structures shall be classified as Fatigue Category III if they are located on roads with a speed limit of 35 mph or less, Fatigue Category II if they are located on roads with a speed limit of greater than 35 mph, and Fatigue Category I if noted on the Contract Plans. Fatigue Importance Factors shall be as specified in Table 11.6-1 (Fatigue Importance Factors). Fatigue analyses are not required for span-wire (strain) pole traffic signal support structures with heights of 55 feet or less unless required by the current edition of AASHTO “LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals”.**

643.09 Service Connection Revise this subsection by removing the paragraph that begins with “Traffic signal services shall have...”.

And by removing the paragraphs beginning with “ A service ground rod shall be installed...” and “A total of 4, 10’ service...” and replace them with **“A total of 4, 10’ service ground rods shall be installed and properly connected together on the outside of the cabinet foundation. One ground rod shall be located at each corner and shall be either flush or slightly below finished grade. The connection between the ground rod and the ground wire shall be an**

exothermic connection such as a Cadweld. The ground wire from the interconnected ground rods shall be routed through a conduit in the foundation and into the base of the cabinet”.

## SECTION 645 HIGHWAY SIGNING

Section 645.023 Sign Support Structures. Under letter “c.”, revise the fifth paragraph beginning with “In addition to the required details...” by removing the words **”and foundation”** from the 5<sup>th</sup> sentence.

Section 645.08 Method of Measurement. Revise the second paragraph beginning with “Bridge-type, cantilever and...” by removing the words **”including the foundation”** .

Section 645.09 Basis of Payment. Revise the third paragraph beginning with “The accepted bridge-type, cantilever and...” by removing the word **”foundation”** from the second sentence. Add the following sentence to the end of the paragraph **“Conduits, Junction Boxes, and Foundations will be paid for under Section 626.”**

## SECTION 652 MAINTENANCE OF TRAFFIC

**652.2.5 Portable Changeable Message Sign** Revise the fifth paragraph so it reads:

**“The control system shall include a display screen upon which messages can be reviewed before being displayed on the message sign. The control system shall be capable of maintaining memory when power is unavailable. Messages must be changeable with either a portable electronic device like a notebook computer or an on-board keypad. The controller shall have the capability to store a minimum of 200 user-defined and 200 pre-programmed messages. Controller and battery compartments shall be enclosed in lockable, weather-tight boxes. The cabinet shall be locked at all times that the Contractor is not actively changing the message. The Contractor shall change the password for the controller prior to stationing the PCMS and shall provide the password to the Resident. The password shall be unique per PCMS and secure and shall not be written anywhere in, on, around, or stored in the PCMS.”**

Amend this Section by adding the following new subsection:

**“652.2.6 Device Crashworthiness** **MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Category 1 (Cones, Drums, Tubular Markers, Flexible Delineators, and similar devices that have little chance if causing windshield penetration, tire damage, or other significant effect on the control or trajectory of a vehicle) – All Category 1 devices will be manufacturer self-certified as MASH2016 by January 1, 2025. Current Category 1 devices in useful serviceable condition that are not self-certified as MASH2016 compliant may be utilized through December 31, 2024.**

**Category 2 (Barricades, Portable Sign Supports, Category 1 devices with attachments, and similar devices that are not expected to produce significant vehicular velocity change but may be otherwise hazardous) – All Category 2 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2025. Current Category 2 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2024.**

**Category 3 (Portable Concrete Barrier, Portable Crash Cushions, Truck Mounted Attenuators, Category 2 devices weighing more than 100 pounds, and similar devices that are expected to produce significant vehicular velocity change or other harmful reactions) – All Category 3 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 3 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029. (See Standard Specification 526 for additional Portable Concrete Barrier information).**

**Category 4 (Trailer Mounted Devices: Arrow Boards, Temporary Traffic Control Signals, Area Lighting, Portable Changeable Message Sign, and other similar devices.) – All Category 4 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 4 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.”**

652.3.3 Submittal of Traffic Control Plan Amend this section by adding:

**“n. A security plan for any PCMS shall be included. The Contractor shall provide a plan for secure access to the PCMS and protection from unauthorized users. The plan shall have details on securing the cabinets via a lock and password from unauthorized users, password changing protocols, and where the access information will be kept so it can be used in the event of emergency. The Contractor shall not Identify or store passwords in the TCP.”**

652.4 Flaggers Revise the first paragraph of this section so that it reads:

**“The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer.”**

## SECTION 681

### **PRECAST AGGREGATE-FILLED, CONCRETE BLOCK GRAVITY WALL**

681.08 Basis of Payment Amend this section by adding the Item Number **“681.10”** in front of the item **“Precast Aggregate-Filled Concrete Block Gravity Wall”** at the end of the section.

## SECTION 701 STRUCTURAL CONCRETE RELATED MATERIAL

701.01 Portland Cement and Portland Pozzolan Cement Amend the first sentence of Paragraph 3 by adding “**or Type 1L Portland Limestone cement**” so that it reads:

**“A Type IP (MS) Portland-pozzolan cement (blended hydraulic cement with moderate sulfate resistance) or Type 1L Portland Limestone cement meeting the requirements of AASHTO M 240, may be used instead of Type II or where Type I Portland cement, meeting the requirements of AASHTO M 85, is allowed.”**

## SECTION 703 AGGREGATES

Add the following to Section 703 - Aggregates

703.01 Fine Aggregate for Concrete Fine aggregate for concrete shall consist of natural sand or, when approved by the Resident, other inert materials with similar characteristics or combinations thereof, having strong, durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of construction or mix without permission of the Resident.

All fine aggregate shall be free from injurious amounts of organic impurities. Should the fine aggregate, when subjected to the colorimetric test for organic impurities, AASHTO T 21, produce a color darker than the reference standard color solution (laboratory designation Plate III), the fine aggregate shall be rejected.

Fine aggregate shall have a sand equivalent value of not less than 75 when tested in accordance with AASHTO T 176.

Fine aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

The fineness modulus shall not be less than 2.26 or more than 3.14. If this value is exceeded, the fine aggregate will be rejected unless suitable adjustments are made in proportions of coarse and fine aggregate. The fineness modulus of fine aggregate shall be determined by adding the cumulative percentages of material by weight retained on the following sieves: Nos. 4, 8, 16, 30, 50, 100 and dividing by 100.

Fine aggregate, from an individual source when tested for absorption as specified in AASHTO T 84, shall show an absorption of not more than 2.3 percent.

| Sieve Designation  | Percentage by Weight Passing Square Mesh Sieves |
|--------------------|-------------------------------------------------|
| $\frac{3}{8}$ inch | 100                                             |
| No. 4              | 95-100                                          |
| No. 8              | 80-100                                          |
| No. 16             | 50-85                                           |
| No. 30             | 25-60                                           |
| No. 50             | 10-30                                           |
| No. 100            | 2-10                                            |
| No. 200            | 0-5.0                                           |

703.02 Coarse Aggregate for Concrete Coarse aggregate for concrete shall consist of crushed stone or gravel having hard, strong, durable pieces, free from adherent coatings and of which the composite blend retained on the  $\frac{3}{8}$  inch sieve shall contain no more than 15 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

The coarse aggregate from an individual source shall have an absorption no greater than 2.0 percent by weight determined in accordance with AASHTO T 85 modified for weight of sample.

The composite blend shall have a Micro-Deval value of 18.0 percent or less as determined by AASHTO T 327 or not exceed 40 percent loss as determined by AASHTO T 96.

Coarse aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

Coarse aggregate shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

| Sieve Designation | Percentage by Weight<br>Passing Square Mesh Sieves |        |        |        |         |        |         |
|-------------------|----------------------------------------------------|--------|--------|--------|---------|--------|---------|
| Grading           | S                                                  | A      | AA     | SP-1-7 | SP-1-78 | SP-2-8 | SP-2-89 |
| Aggregate Size    | 1 ½ inch                                           | 1 inch | ¾ inch | ½ inch | ½ inch  | ⅜ inch | ⅜ inch  |
| 2 inch            | 100                                                |        |        |        |         |        |         |
| 1 ½ inch          | 95-100                                             | 100    |        |        |         |        |         |
| 1 inch            | -                                                  | 95-100 | 100    |        |         |        |         |
| ¾ inch            | 35-70                                              | -      | 90-100 | 100    | 100     |        |         |
| ½ inch            | -                                                  | 25-60  | -      | 90-100 | 90-100  | 100    | 100     |
| ⅜ inch            | 10-30                                              | -      | 20-55  | 40-70  | 40-75   | 85-100 | 90-100  |
| No. 4             | 0-5                                                | 0-10   | 0-10   | 0-15   | 5-25    | 10-30  | 20-55   |
| No. 8             | -                                                  | 0-5    | 0-5    | 0-5    | 0-10    | 0-10   | 5-30    |
| No. 16            | -                                                  | -      | -      | -      | 0-5     | 0-5    | 0-10    |
| No. 50            | -                                                  | -      | -      | -      | -       | -      | 0-5     |
| No. 200*          | 0-1.5                                              | 0-1.5  | 0-1.5  | 0-1.5  | 0-1.5   | 0-1.5  | 0-1.5   |

\*This limit will be 0-2.0 for Department production samples. Yearly quality samples will be held to 0-1.5.

**703.0201 Alkali Silica Reactive Aggregates** All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by an accredited independent lab submitted to the Department. Aggregate submittals will be required on a 5-year cycle, unless the source or character of the aggregate in question has changed within 5 years from the last test date.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting as tested under ASTM C 1567.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include, but are not limited to the following:

- Class F Coal Fly Ash meeting the requirements of AASHTO M 295
- Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302
- Densified Silica Fume meeting the requirements of AASHTO M 307
- Lithium-based admixtures
- Metakaolin

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

Amend this section by adding the new sub section:

**“703.03 Combined Aggregate Grading for Concrete** The combined gradation of the fine and coarse aggregates when mathematically blended using the mix design percentages shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

| Sieve Designation | Percentage by Weight<br>Passing Square Mesh Sieves |        |        |        |         |        |         |
|-------------------|----------------------------------------------------|--------|--------|--------|---------|--------|---------|
| Grading           | S                                                  | A      | AA     | SP-1-7 | SP-1-78 | SP-2-8 | SP-2-89 |
| Aggregate Size    | 1½ inch                                            | 1 inch | ¾ inch | ½ inch | ½ inch  | ⅜ inch | ⅜ inch  |
| 2 inch            | 100                                                |        |        |        |         |        |         |
| 1½ inch           | 95–100                                             | 100    |        |        |         |        |         |
| 1 inch            | 80–100                                             | 95–100 | 100    |        |         |        |         |
| ¾ inch            | 55–90                                              | 90–100 | 93–100 | 100    | 100     |        |         |
| ½ inch            | 45–80                                              | 55–80  | 60–90  | 90–100 | 90–100  | 100    | 100     |
| ⅜ inch            | 40–65                                              | 40–65  | 50–80  | 55–85  | 65–90   | 90–100 | 90–100  |
| No. 4             | 35–55                                              | 35–55  | 35–60  | 30–60  | 40–70   | 45–75  | 50–80   |
| No. 8             | 25–53                                              | 28–50  | 30–55  | 25–55  | 30–65   | 35–65  | 35–75   |
| No. 16            | 15–40                                              | 18–45  | 19–45  | 18–50  | 20–55   | 20–55  | 20–55   |
| No. 30            | 7–30                                               | 9–30   | 10–33  | 8–32   | 10–38   | 10–38  | 10–40   |
| No. 50            | 3–14                                               | 4–14   | 4–16   | 3–16   | 4–20    | 4–20   | 4–20    |
| No. 100           | 0–6                                                | 0–6    | 0–6    | 0–6    | 0–7     | 0–8    | 0–8     |
| No. 200           | 0–3.5*                                             | 0–3.5* | 0–3.5* | 0–3.5* | 0–3.5*  | 0–3.5* | 0–3.5*  |

**\*The percent passing the No. 200 sieve shall not exceed 6.0 percent for any fine aggregate. The percent passing the No. 200 sieve shall not exceed 2.0 percent for any single coarse aggregate. The percent passing the No. 200 sieve shall not exceed 4.0 percent for the combined gradation of self-consolidating concrete (SCC) mix designs.”**

**703.05 Aggregate for Sand Leveling** Aggregate for sand leveling shall be sand of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The aggregate shall meet the grading requirements of the following table.

| Sieve Designation | Percentage by Weight<br>Passing Square Mesh Sieves |
|-------------------|----------------------------------------------------|
| ⅜ inch            | 85-100                                             |
| No. 200           | 0-5.0                                              |

**703.06 Aggregate for Base and Subbase** The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed, except that the test shall be performed on the portion of the sample that passes the ½ in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected. The material used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

Recycled Asphalt Pavement (RAP) shall not be used for or blended with aggregate base or subbase.

- a. Aggregate for base, Type A and B shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

| Sieve Designation | Percentage by Weight Passing Square Mesh Sieves |        |
|-------------------|-------------------------------------------------|--------|
|                   | Type A                                          | Type B |
| ½ inch            | 45-70                                           | 35-75  |
| ¼ inch            | 30-55                                           | 25-60  |
| No. 40            | 0-20                                            | 0-25   |
| No. 200           | 0-6.0                                           | 0-6.0  |

At least 50 percent by weight of the material retained on the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

Type A aggregate for base shall only contain particles of rock that will pass the 2 inch square mesh sieve.

Type B aggregate for base shall only contain particles of rock that will pass the 4 inch square mesh sieve.

- b. Aggregate for base, Type C shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The material shall meet the grading requirements of the following table:

| Sieve Designation | Percentage by Weight<br>Passing Square Mesh Sieves |
|-------------------|----------------------------------------------------|
|                   | Type C                                             |
| 4 inches          | 100                                                |
| 3 inches          | 90-100                                             |
| 2 inches          | 75-100                                             |
| 1 inch            | 50-80                                              |
| ½ inch            | 30-60                                              |
| No. 4             | 15-40                                              |
| No. 200           | 0-6.0                                              |

At least 50 percent by weight of the material coarser than the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

c. Aggregate for subbase shall be sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

| Sieve Designation | Percentage by Weight<br>Passing Square Mesh Sieves |        |
|-------------------|----------------------------------------------------|--------|
|                   | Type D                                             | Type E |
| ½ in              | 35-80                                              |        |
| ¼ inch            | 25-65                                              | 25-100 |
| No. 40            | 0-30                                               | 0-50   |
| No. 200           | 0-7.0                                              | 0-7.0  |

Type D aggregate for subbase gravel may contain up to 50 percent by weight Recycled Concrete Aggregate (RCA). When RCA is used, the portion of the resulting blend of gravel and RCA retained on a ½" square mesh sieve shall contain a total of no more than 5 percent by weight of other recycled materials such as brick, concrete masonry block, or asphalt pavement as determined by visual inspection.

RCA shall be substantially free of wood, metal, plaster, and gypsum board as defined in Note 9 in Section 7.4 of AASHTO M 319. RCA shall also be free of all substances that fall under the category of solid waste or hazardous materials.

Aggregate for subbase shall not contain particles of rock which will not pass the 6 inch square mesh sieve.

**703.08 Recycled Asphalt Pavement** Recycled asphalt pavement shall consist of salvaged asphalt materials from milled pavements or production waste that has been processed before use to meet the requirements of the job mix formula. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

703.081 RAP for Asphalt Pavement Recycled Asphalt Pavement (RAP) may be introduced into hot-mix asphalt pavement at percentages approved by the Department according to the MaineDOT Policies and Procedures for HMA Sampling and Testing.

If approved by the Department, the Contractor shall provide documentation stating the source, test results for average residual asphalt content, and stockpile gradations showing RAP materials have been sized to meet the maximum aggregate size requirements of each mix designation. The Department will obtain samples for verification and approval prior to its use.

The maximum allowable percent of RAP shall be determined by the asphalt content, the percent passing the 0.075 mm sieve, the ratio between the percent passing the 0.075 mm sieve and the asphalt content, and Coarse Micro-Deval loss values as tested by the Department.

The maximum percentage of RAP allowable shall be the lowest percentage as determined according to Table 4 below:

| <b>Classification</b> | <b>Maximum RAP Percentage Allowed</b> | <b>Asphalt content standard deviation</b> | <b>Percent passing 0.075 mm sieve standard deviation</b> | <b>Percent passing 0.075 mm sieve / asphalt content ratio</b> | <b>Residual aggregate M-D loss value</b> |
|-----------------------|---------------------------------------|-------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------|------------------------------------------|
| <b>Class III</b>      | <b>10%</b>                            | <b><math>\leq 1.0</math></b>              | <b>N/A</b>                                               | <b><math>\leq 4.0</math></b>                                  | <b><math>\leq 18</math></b>              |
| <b>Class II</b>       | <b>20%</b>                            | <b><math>\leq 0.5</math></b>              | <b><math>\leq 1.0</math></b>                             | <b><math>\leq 2.8</math></b>                                  |                                          |
| <b>Class I</b>        | <b>30%</b>                            | <b><math>\leq 0.3</math></b>              | <b><math>\leq 0.5</math></b>                             | <b><math>\leq 1.8</math></b>                                  |                                          |

Table 4: Maximum Percent RAP According to Test Results

The Department will monitor RAP asphalt content and gradation during production by testing samples from the stockpile at approximately 15,000 T intervals (in terms of mix production). The allowable variance limits (from the numerical average values used for mix designs) for this testing are determined based upon the maximum allowable RAP percentage and are shown below in Table 5.

Table 5: RAP Verification Limits

| Classification | Asphalt content<br>(compared to<br>aim) | Percent passing<br>0.075 mm sieve<br>(compared to aim) |
|----------------|-----------------------------------------|--------------------------------------------------------|
| Class III      | ± 1.5                                   | ± 2.0                                                  |
| Class II       | ± 1.0                                   | ± 1.5                                                  |
| Class I        | ± 0.5                                   | ± 0.7                                                  |

For specification purposes, RAP will be categorized as follows:

Class III – A maximum of 10.0 percent of Class III RAP may be used in any base, intermediate base, surface, or shim mixture. A maximum of 20.0 percent of Class III RAP may be used in hand-placed mixes for item 403.209.

Class II – A maximum of 20.0 percent Class II RAP in any base, binder, surface, or shim course.

Class I – A maximum of 20.0 percent Class I RAP may be used in any base, intermediate base, surface, or shim mixture without requiring a change to the specified asphalt binder. A maximum of 30.0 percent Class I RAP may be used in in any base or intermediate base mixture provided that a PG 58-28 or PG 58-34 asphalt binder is used. A maximum of 30.0 percent Class I RAP may be used in any surface or shim mixture provided that PG 58-34 asphalt binder is used. Mixtures exceeding 20.0 percent Class I RAP must be evaluated and approved by the Department.

The Contractor may use up to two different RAP sources in any one mix design. The total RAP percentage of the mix shall not exceed the maximum allowed for the highest classification RAP source used (i.e. if a Class I & Class III used, total RAP must not exceed 30.0%). The blended RAP material must meet all the requirements of the classification for which the RAP is entered (i.e. 10% Class III with 20% Class I, blend must meet Class I criteria). The Department may take belt cuts of the blended RAP to verify the material meets these requirements. If the Contractor elects to use more than one RAP source in a design, the Contractor shall provide an acceptable point of sampling blended RAP material from the feed belt.

In the event that RAP source or properties change, the Contractor shall notify the Department of the change and submit new documentation stating the new source or properties a minimum of 72 hours prior to the change to allow for obtaining new samples and approval.

Revise this Section by removing 703.7 and 703.9 in its entirety and replace with the following:

**703.07 Aggregates for HMA Pavements** Coarse and fine aggregate for hot mix asphalt pavements shall be of such gradation that when combined in the proper proportions, including filler, if required, the resultant blend will meet the composition of mixture for the type of pavement specified.

Coarse aggregate, that material retained on the No. 4 sieve, shall be crushed stone or crushed gravel and, unless otherwise stipulated, shall consist of clean, tough, durable fragments free from an excess of soft or disintegrated pieces and free from stone coated with dirt or other objectionable matter. Coarse aggregate shall not exceed an absorption of 2.0 percent by weight as determined by AASHTO T 85.

Fine aggregate, material that passes the No. 4 sieve, shall consist of natural sand, manufactured sand, or a combination of these. It shall consist of hard, tough grains, free from injurious amounts of clay, loam, or other deleterious substances. Fine aggregate shall not exceed an absorption of 2.3 percent by weight as determined by AASHTO T 84.

All individual aggregates for hot mix asphalt pavements shall meet Table 3 requirements (excluding LCP) unless otherwise noted. The Department reserves the right to sample and test the aggregate for any of the following properties at any time:

**TABLE 3: Aggregate Consensus Properties Criteria**

| Estimated Traffic, Million 18 kip ESALs | AASHTO T 335 (minimum %) | AASHTO T 304 Method A ** | ASTM D 4791 Method B | AASHTO T 176 | Aggregate shall meet at least one of these: |             |              |
|-----------------------------------------|--------------------------|--------------------------|----------------------|--------------|---------------------------------------------|-------------|--------------|
|                                         |                          |                          |                      |              | AASHTO T 327                                | AASHTO T 96 | WSDOT T 113* |
| < 3.0                                   | 75/60                    | ≥ 40%                    | ≤ 10%                | ≥ 45         | ≤ 18.0%                                     | ≤ 40%       | ≥ 30         |
| 3.0 to < 10                             | 90/80                    | ≥ 45%                    |                      | ≥ 50         |                                             | ≤ 35%       |              |
| ≥ 10                                    | 95/90                    |                          |                      |              |                                             | ≤ 30%       | N/A          |

\* As determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the ½ inch sieve and is retained on the No. 10 sieve.

\*\* Property will be evaluated on a mix design basis by calculating a weighted average based upon individual aggregate values (weighted average by the percentage proportion of the aggregate within the design).

**AASHTO T 335** - “90/80” denotes that 90 percent of the coarse aggregate has one fractured face and 80 percent has two fractured faces.

**AASHTO T 304** - Criteria are presented as percent air voids in loosely compacted fine aggregate, (U).

**ASTM D4791** - Criteria are presented as maximum percent by weight of flat and elongated particles (5:1 ratio).

The entire HMA wearing course shall come from the same source of material and the same job mix formula, except when permission is obtained from the Department to change sources.

**703.09 HMA Mixture Composition** The coarse and fine aggregate shall meet the requirements of Section 703.07. The several aggregate fractions for mixtures shall be sized, graded, and combined in such proportions that the resulting composite blends, including RAP aggregate will meet the grading requirements of the following table:

| Aggregate Gradation Control Points                                |            |            |              |             |                                     |              |
|-------------------------------------------------------------------|------------|------------|--------------|-------------|-------------------------------------|--------------|
| Nominal Maximum Aggregate Size---Control Points (Percent Passing) |            |            |              |             |                                     |              |
| Sieve Designation                                                 | Type 25 mm | Type 19 mm | Type 12.5 mm | Type 9.5 mm | Type 9.5 mm Thin Lift Mixture (TLM) | Type 4.75 mm |
| Percent By Weight Passing - Combined Aggregate                    |            |            |              |             |                                     |              |
| 37.5 mm                                                           | 100        |            |              |             |                                     |              |
| 25 mm                                                             | 90-100     | 100        |              |             |                                     |              |
| 19 mm                                                             | -90        | 90-100     | 100          |             |                                     |              |
| 12.5 mm                                                           | -          | -90        | 90-100       | 100         | 100                                 | 100          |
| 9.5 mm                                                            | -          | -          | -90          | 90-100      | 95-100                              | 95-100       |
| 4.75 mm                                                           | -          | -          | -            | -90         | 60-95                               | 80-100       |
| 2.36 mm                                                           | 19-45      | 23-49      | 28-58        | 32-67       | 47-65                               | 40 - 80      |
| 1.18 mm                                                           | -          | -          | -            | -           | -                                   | -            |
| 0.60 mm                                                           | -          | -          | -            | -           | -                                   | -            |
| 0.30 mm                                                           | -          | -          | -            | -           | -                                   | -            |
| 0.075 mm                                                          | 2.0-6.0    | 2.0-6.0    | 2.0-6.0      | 2.0-7.0*    | 2.0-7.0*                            | 2.0-7.0      |

\* For 9.5 mm nominal maximum aggregate size mixtures, the maximum design aim for the percent passing the 75 µm sieve is 6.5%.

## SECTION 709 REINFORCING STEEL AND WELDED STEEL WIRE FABRIC

**709.01 Reinforcing Steel** Remove the second paragraph of Section 709.01 of the standard specification beginning with “Low-Carbon, Chromium,...” and replace with the following:

**“ Low-carbon, chromium, reinforcing steel shall be deformed bars conforming to the requirements of ASTM A1035. Bars shall be Grade 100 and alloy Type CS unless otherwise specified on the Plans. “**

## SECTION 710 FENCE AND GUARDRAIL

710.06 Fence Posts and Braces Revise the first Paragraph so that it reads:

“Wood posts shall be of cedar, white oak, or tamarack or other AWP approved species, of the diameter or section and length shown on the plans.”

Remove the fourth paragraph which starts “ That portion of wood posts...”.

Revise the paragraph beginning with “Braces shall be of spruce, eastern hemlock ... so that it now reads:

“Braces shall be of spruce, eastern hemlock, Norway pine, pitch pine, or tamarack timbers or other AWP approved species, or spruce, cedar, tamarack or other AWP approved species round posts of sufficient length to make a diagonal brace between adjacent posts. All wood posts and braces shall be pressure-treated in accordance with AASHTO M 133 and AWP U1, UC4A Commodity Specification B: Posts. “

710.07 Guardrail Posts Revise this section so that the first sentence of section a. reads:

“a. Wood posts shall be of Norway pine, southern yellow pine, pitch pine, Douglas fir, red pine, white pine, or eastern hemlock or other AWP approved species.”

Revise the next paragraph so that it reads:

Wood posts and offset brackets shall be preservative treated in accordance with the requirements of AASHTO M 133 and AWP U1, UC4A Commodity Specification B: Posts.

710.08 Guardrail Hardware Revise this subsection by replacing “AASHTO M 298” with “ASTM B695”

## SECTION 711 MISCELLANEOUS BRIDGE MATERIAL

711.06 Stud Shear Connector Anchors and Fasteners Amend this section by deleting it in its entirety and replacing it with:

**“Shear connectors shall meet the dimensional tolerances of Figure 9.1 of the ANSI/AASHTO/AWS D1.5 Bridge Welding Code (D1.5 Code). Shear connectors, anchors and fasteners shall meet the material requirements of Section 9 of the D1.5 Code. Shear connectors shall meet the mechanical property requirements of Table 9.1, Type B of the D1.5 Code. Anchors and fasteners shall meet the mechanical property requirements of Table 9.1 of the D1.5 Code, Type A.”**

## SECTION 712 MISCELLANEOUS HIGHWAY MATERIAL

712.061 Structural Precast Units Amend this section by adding the following sentence to the end of the first paragraph of the Construction subsection:

**“Facilities certified by NPCA or PCI shall provide to the Fabrication Engineer a copy of their annual audit to include deficiency reports and corrective actions.”**

Revise this section by changing the letter “b” of ASTM C1611 of the Concrete Testing subsection so that it reads:

**“b. Air content shall be 5.0% to 8.0%.”**

## SECTION 713 STRUCTURAL STEEL AND RELATED MATERIAL

Section 713.01 Structural Steel Replace paragraph two in its entirety with the following:

**“Main load-carrying components subject to tensile stresses or stress reversal shall meet the notch toughness requirements in AASHTO M 270M, Table 11, Zone 2, for non-fracture critical steel or Table 12, Zone 2 for fracture critical steel. Frequency of tension tests shall comply with the requirements of S1.”**

Section 713.02 High Strength Bolts Revise this subsection by removing the portion from the beginning up to and including TABLE 1 – Test Schedule\*, and replace it with:

**“Bolts shall conform to the requirements of ASTM F3125, Grade A325, Type 1 or Type 3. Type 3 bolts shall be supplied for all structures utilizing unpainted AASHTO M 270M weathering steel. Type 1 galvanized bolts shall be used for all structures utilizing metallized or galvanized steel.**

**Nuts shall meet the requirements of ASTM A563.**

**Circular and beveled washers shall conform to the requirements of ASTM F436.**

**Direct Tension Indicators (DTI’S) shall conform to the requirements of ASTM F959. DTI’s for use with painted steel shall have a plain “as fabricated” finish. DTI’s for use with unpainted steel shall be galvanized to the requirements of ASTM B695 Class 50, Type I and have a fusion-bonded epoxy coating. DTI’s used with galvanized steel, metallized steel and steel coated with a zinc-rich primer shall be galvanized to the requirements of ASTM B695 Class 50, Type I.**

**“Twist Off” Type Tension Control Structural Bolt/Nut/Washer Assemblies shall meet the requirements of ASTM F3125, Grade F1852.**

**Bolts, nuts and washers specified to be galvanized, shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695 Class 50, Type I.**

**All fastener (bolts and nuts), whether black or galvanized, shall be coated with a suitable lubricant. Galvanized nuts shall be lubricated with a lubricant containing a visible dye.**

**Each lot of bolts, nuts, washers and DTI's shall be tested by the manufacturer in accordance with the tests tabulated in Table 1 - Test Schedule. The testing frequency for bolts, nuts and washers from each shipping lot of fasteners shall be as specified in the applicable AASHTO/ASTM Standard Specifications. The testing frequency for each production lot of DTI's shall be as specified in ASTM F959.**

TABLE 1 - Test Schedule\*

|         |                               |           |
|---------|-------------------------------|-----------|
| Bolts   | Tensile Strength (Wedge Test) | ASTM F606 |
|         | Proof Load                    | ASTM F606 |
|         | Hardness                      | ASTM F606 |
|         | Coating Thickness             | ASTM B695 |
| Nuts    | Proof Load                    | ASTM F606 |
|         | Hardness                      | ASTM F606 |
|         | Coating Thickness             | ASTM B695 |
| Washers | Hardness                      | ASTM F606 |
|         | Coating Thickness             | ASTM B695 |
| DTI's   | Coating Thickness             | ASTM B695 |
|         | Compression Load              | ASTM F959 |

## Section 716

### STRUCTURAL ALUMINUM AND RELATED MATERIAL

716.01 Aluminum Railings: Revise this subsection by removing section d. and replacing with:

**d. Steel Anchor Assembly Steel spacers for post anchors shall conform to the requirements of ASTM A36. Nuts embedded in concrete shall conform to the requirements of ASTM A307.**

**Anchor bolts, exposed nuts and washers shall conform to the requirements of ASTM A449 or ASTM F1554, Grade 55 and shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I.**

## SECTION 718

### TRAFFIC SIGNALS MATERIAL

718.03 Signal Mounting Amend the paragraph beginning with "All trunions, brackets and..." by adding **"For polycarbonate signal heads with more than 3 sections or requiring mounting extensions greater than 12 inches in length, reinforcing plates shall be used to reinforce the housings at the point of attachment."** to the end of the paragraph.

718.08 Controller Cabinet Revise this subsection by replacing the paragraph beginning with “The cabinet shall be supplied with LED light panels...” on or about page 7-66 with **“The cabinet shall be supplied with white LED light panels which shall automatically illuminate via a door open switch whenever one of the four main cabinet doors are opened for the ground mount cabinet or two main doors for the side of pole cabinet. The ground mounted cabinet shall contain four LED light panels per side totaling eight panels for the cabinet; one panel each at the top and bottom portion of the front side and back side on the Control side and Power/Auxiliary side of the cabinet. Each light panel shall produce a minimum of 250 lumens for a total minimum lumen output of 2000 lumens with all eight panels illuminated. The minimum output per side would be 1000 lumens. The LED panels shall be protected by a clear shatterproof shield. The side of pole mounted cabinet shall contain four light panels; one at the top of the rack assembly and one at the bottom rack assembly on each side of the cabinet.**

**A second door open status switch per door shall activate a controller input to log a report event that one of the doors was opened. All door open status switches shall be connected to the same controller input. For the ground mount cabinet, there shall be two switches on each of the four main doors. For the side-of-pole mount cabinet, there shall be two switches on each of the two main doors.”**

Revise this subsection by replacing the paragraph beginning with “The cabinet shall be supplied with a generator panel ...” on or about page 7-68 with:

**“The cabinet shall be supplied with a generator panel. The generator panel shall consist of a manual transfer switch and a twist-lock connector for generator hookup. The transfer switch knob and twist-lock connector shall be located inside a stainless steel enclosure with a separate lockable door accessed with a Corbin #2 key. The unit shall be mounted on the left, exterior of the control side wall of the ground mount cabinet a minimum of 36” above the surrounding grade and on the lower left side of the pole mounted cabinet. The generator transfer switch shall be a Reliance C30A1N Signa Series or approved equal. “**

Revise this subsection by removing the following from the paragraph beginning with “The ground mounted cabinet shall be supplied and installed with an electric service meter socket trim and electrical service disconnect switch ...” on or about page 7-69: **“(removed: thus preventing that space from being used either by equipment supplied as part of the project, or future equipment that would be installed in the rack system. Joe indicated that he would add this language to the detail so it is covered.)”**.

Revise this subsection by replacing the following in the paragraph beginning with “The Contractor shall reconfigure the default user name...” on or around page 7-70; “MaineDOT IT” with **“MaineDOT Traffic Division”**.

In the paragraph beginning with “Tests shall be conducted by the contractor...” on or around page 7-73, amend this subsection by removing **“in the state of Maine and”** after “The facility shall be”.

Amend this Section by adding the following subsection:

**718.13 Field Monitoring Unit (FMU)** This item of work shall conform to this specification. This item shall consist of furnishing and installing a Field Monitoring Unit (FMU) and software, as well as all needed accessories required for a full and complete installation, including but not limited to power adapters, Ethernet cables, and interface cables, as described herein.

Where applicable, communications from MaineDOT's cloud-based Central Management System (CMS) to the on-street traffic signal controllers shall be made through fiber optic interconnect cable connected back to existing internet connections and/or the Field Monitoring Unit (FMU). The Contractor shall furnish and install all materials necessary for a complete and operational fiber optic interconnection to all project intersections as shown on the plans. All connections to the CMS cloud-based system shall be via a secure VPN network.

The FMU shall be the only remote connection device used by isolated intersections to connect to the cloud-based system. All connections shall be encrypted VPN tunnels. The Contractor shall coordinate all configuration settings with MaineDOT IT and the Engineer.

The FMU central web based interface shall be a separate element from the CMS.

**MATERIALS:** The materials for this work shall conform to the following requirements:

1. The work under this item specifies the requirements for the FMU. The FMU shall operate independent of the brand/type of intersection controller deployed in the ATC traffic cabinet.
2. The FMU shall conform to the following requirements:
  - 2.1 The FMU shall function correctly between -34 degrees C and +74 degrees C.
  - 2.2 The FMU shall be provided with appropriately rated connectors that allows the FMU to be exchanged by unplugging connectors, without tools.
  - 2.3 The FMU shall monitor and log all ATC Controller and ATC cabinet faults and or alarms.
  - 2.4 The FMU shall be wired directly to the ATC cabinet.
  - 2.5 The FMU shall have an internal cellular modem running at 4G LTE.
    - 2.5.1 The Cellular modem shall be designed to be replaced / upgraded to 5G service when available.
  - 2.6 The FMU shall incorporate an integrated GPS and cell modem.
  - 2.7 The configuration of the FMU shall be accomplished by accessing the internal web server with a browser. It shall be possible to configure the FMU without any special software.
  - 2.8 The FMU shall be powered via a standard 120V input power.

- 2.9 The FMU shall allow for the routing of the controller configuration packets to and from the controller (either by Ethernet or serial communications) for any type of controller utilized by the MaineDOT. In this way it shall be possible to configure the controller and utilize the controller specific software to interrogate the controller, and the FMU shall provide the communications pipe which allows this to be accomplished.
- 2.10 The FMU shall, within the size limitations above, include a battery and battery charging/monitoring circuit, to allow the FMU to function correctly even when all power to the intersection has failed. The battery shall continue to power the FMU for a minimum of 5 hours after all power has failed to the intersection.
- 2.11 The FMU shall incorporate an integrated GPS which will allow the FMU to geo-locate itself on the FMU management software map, without configuration.
- 2.12 The FMU shall operate without requiring a static IP address. The only configuration required at the FMU is to enter the URL of where the FMU management software is hosted.
- 2.13 In the event that the cell service is interrupted or is not available, the FMU shall store any events that occur in internal memory and forward these events automatically to the FMU management software when the cell service is restored. In this way, a complete record of events at the device can be maintained even if cell service is interrupted for a period. The system will store 5000 events.
- 2.14 The FMU shall utilize HTTP and HTTPS protocols, and XML data structures, for communication with the FMU management software. In this way the data will be open for future expansion and competition. The use of secret proprietary protocols is not permitted.
- 2.15 The FMU shall include Ethernet communications via an Ethernet Port with RJ45 connector.
- 2.16 The FMU shall include weather proof antennas.

### **3. Map Display FMU Management Software**

- 3.1 The FMU shall include a scrollable, zoomable map display, with the intersections and other monitored devices shown as representative icons on the map. The map shall include the ability to see the intersections using Google Streetview.
- 3.2 The alarm status of the intersection shall be clearly indicated on the icon on the map, so that the user can see at a glance which intersections are in alarm.
- 3.3 The map display shall also include a list of intersections, with the number and priority of alarms indicated on the list. Intersections in high priority alarm shall be moved to the top

of the list, followed by medium priority, low priority and then finally by intersections not in alarm.

- 3.4 The icons shall change to be able to clearly indicate if an intersection is offline.
- 3.5 Clicking on the icon on the map shall expose a box with the current parameters of the intersection shown.
- 3.6 The default map display position and zoom shall be configurable by user, so that the user's view will default to show the intersections that the user is responsible for managing.
- 3.7 The map view shall have the ability to show Google traffic overlays on the map.

#### **4. Intersection Detail Display FMU Management Software**

- 4.1 It shall be possible to drill down, either from the map icon or from the list, to a device level detail for the intersection, which as a minimum shall display the following parameters:
  - 4.1.1 The alarm status, with priority indicated, and a text description of the alarm (if an alarm is present for this device).
  - 4.1.2 The time since the last communication with the device
  - 4.1.3 The following parameters (real time now values, minimum for the day values, maximum for the day values, and average for the day values)
    - 4.1.3.1 The AC mains voltage (value)
    - 4.1.3.2 The battery back-up voltage (value)
    - 4.1.3.3 The cabinet temperature (value)
    - 4.1.3.4 The cabinet humidity (value)
    - 4.1.3.5 The presence of AC power (OK or Fail)
    - 4.1.3.6 The flashing status of the intersection (OK or Flashing)
    - 4.1.3.7 Stop Time status (OK or Stop Time Active)
    - 4.1.3.8 The cabinet door status (Open or Closed)
    - 4.1.3.9 The intersection fan status (Fan On or Fan off)

4.1.4 It shall be possible to view graphs of each of the value parameters in graphical form, over the recent two-week period. This includes real time graphs of:

4.1.4.1 The AC mains voltage

4.1.4.2 The battery back-up voltage

4.1.4.3 The cabinet temperature

4.1.4.4 The cabinet humidity

## **5. Diagnostics and Log Display FMU Management Software**

5.1 From the device level detail within the FMU management software, it shall be possible to drill down to get the raw data; the error logs; and the communications logs to allow a technician to fault-find problems.

5.2 It shall be possible to filter the logs by Device; by Device Type and/or by Group as well as between dates.

5.3 It shall be possible to print these selected logs to a local printer or a PDF file.

5.4 It shall be possible to export these logs to Excel on the local computer for further analysis.

## **6. Alarms FMU Management Software**

6.1 The FMU management software shall have a comprehensive alarm generation capability

6.2 It shall be possible to configure alarms to be generated on any parameter becoming out of tolerance, including analog values, digital values and enumerated values.

6.3 Alarms shall be configurable to be of Low, High or Critical Priority.

6.4 The alarm priority shall be displayed throughout the FMU management software, on all displays, using color codes such as red-critical; yellow – high; and amber-low to indicate the priority of the alarm.

6.5 The current active alarms shall be accessible for view via an expandable window, to see which alarms are active and when the alarm occurred. The highest priority alarms shall rise to the top of the list.

## **7. Alerts FMU Management Software**

7.1 The FMU management software shall have comprehensive alerting capability, to enable the response personnel to be notified when an abnormal situation has occurred.

- 7.2 It shall be possible to configure alerts to one or more personnel for each alarm. This will cause, as selected, an SMS and/or an email to be sent to the person when an alarm occurs.
- 7.3 The alert shall be configurable to optionally send via email and/or via SMS a message when an alarm clears.
- 7.4 The intention is that the FMU management software provides the alerts to the user in near real time. The SMS and email shall be issued within 30 seconds of the occurrence of event which results in an alert being issued.

## **8. Hosting and Connectivity and Service FMU / FMU Management Software**

- 8.1 The contractor shall supply the FMU with the FMU manufacturers 10 year options for Connectivity and Service, as part of the purchase price. The Connectivity and Service agreement shall include at a minimum:

- 8.1.1 Cellular Connectivity
- 8.1.2 No cellular overage charges
- 8.1.3 Extended warranty on the hardware for the period of the Connectivity and Service Agreement
- 8.1.4 Over-the-air software updates
- 8.1.5 Over-the-air security updates
- 8.1.6 Future Connected Vehicles Service

## Section 719 **SIGNING MATERIAL**

719.072 Overhead Signing: Revise this subsection by replacing it in entirety with:

**“Sign panels mounted to independent sign support structures and support structure components mounted to bridges passing over the highway are considered to be overhead signing. Overhead signing shall be mounted on W6 by 9 steel beams conforming to the requirements of ASTM A992/A992M, galvanized in accordance with AASHTO M 111 (ASTM A123), or the same size aluminum beams conforming to ASTM B221M, alloys and tempers of 6061-T6, 6063-T6 or 6005-T5. These components shall be horizontally spaced a maximum of 5¼ feet on center, extending from the bottom of sign panel to the top. If supplemental signs are included in the contract, these beams will extend from the bottom of the main sign panel to the top of the supplemental sign panel. The maximum distance from the edge of the sign to the center of the W6 by 9 shall not exceed approximately 3¼ feet.**

**On independent sign support structures, these W6 by 9 beam components shall be fastened to chords with a pair of appropriately sized U-bolts on each side of the web at each fastening**

location. A similar pair of U-bolt assemblies shall be used in attaching each chord of an overhead component to upright supports. U-bolts for steel support structures shall conform to ASTM A449, Type 1. U-bolt hardware, which includes nuts, flat washers, and helical lock washers, shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I. Washers shall conform to the requirements of ASTM F436. The U-bolt material for aluminum support structures, or a combination of steel and aluminum structural components, shall be stainless steel conforming to the requirements of ASTM F593, alloy group 1, with a minimum yield strength of 45 ksi. Steel support structures may also utilize stainless steel hardware assemblies as an alternative to galvanized steel. Nuts shall be of the locking type with nylon inserts. Washers shall conform to the requirements of ASTM A276, Type 302. Flat washers, without helical lock washers, will be acceptable in this stainless steel assembly.

On bridge mounted structures, the fastener configurations shall be depicted in the contract documents. “

## SECTION 720 STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS

720.03 Steel Supports: Revise this subsection by removing the paragraph beginning with “Chord flange splice fastener” and replacing with:

“Chord flange splice fastener assemblies shall conform to ASTM A325, Type 1, and galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I. Other fastener assemblies shall be as specified in Section 719.07, or as approved by the Fabrication Engineer.”

720.06 Steel H-beam: Revise this subsection by replacing it in its entirety with:

“Steel H-beam Post shall conform to the requirements of ASTM A992. All work shall conform to the applicable provisions of Section 504 – Structural Steel. Steel shall be hot-dip galvanized in accordance with AASHTO M 111 (ASTM A123). All steel hardware for use with H-beam poles shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I.”

720.07 Anchor Bolts: Revise this subsection by replacing it in its entirety with:

“Anchor bolts and nuts supplied for aluminum and/or steel supports shall conform to ASTM A449, Type 1, or ASTM F1554, Grade 55, both with a minimum yield strength of 55 ksi. Anchor bolts shall be supplied with 2 heavy hex nuts and 2 hardened washers and unless otherwise specified the anchor bolts shall have a 90° bend with a 6 inch minimum leg length at the lower end. The anchor bolts, nuts and hardened washers shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I. The bolt

**shall be zinc-coated 12 inches from the exposed end, unless otherwise specified. If the anchor bolts are to be used with breakaway devices incorporating the function of a nut, for example, longitudinally grooved breakaway couplings, nuts or washers will not be required.**

**Alternate materials, grades, and designs may be used for anchor bolts subject to approval of the Fabrication Engineer.”**

720.09 Wood Ornamental Light Standard: Revise this subsection by removing the paragraph beginning with “All bolts shall be” and replacing it with:

**“All bolts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), ASTM F2329, or ASTM B695, Class 50, Type I.”**

720.12 Wood Sign Posts Revise the first sentence so that it reads:

**“Wood sign posts shall be rectangular, straight and sound timber, cut from live growing native spruce, red pine, hemlock, cedar trees or other AWWA approved species, free from loose knots or other structurally weakening defects of importance, such as shake or holes or heart rot.”**

Revise the third paragraph that starts with “When pressure treated...” so that it reads:

**“All sign posts shall be pressure-treated in accordance with AASHTO M 133 and AWWA Standard U1, UC4A, Commodity Specification A: Sawn Products.”**

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

### II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### **6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

#### **8. Reasonable Accommodation for Applicants /**

**Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

#### **9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:**

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

### 3. Records and certified payrolls (29 CFR 5.5)

*a. Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

*(2) Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

*(3) Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

*(4) Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

*b. Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

*(2) Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

*(3) Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

*(4) Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.** a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## **V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and  
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

## **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant 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 first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant 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 or agency may terminate this transaction for cause or default. 2 CFR 180.325.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) 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, 2 CFR 180.800;

(3) 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 offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

\*\*\*\*\*

## **3. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant 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 or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

\* \* \* \* \*

#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

\* \* \* \* \*

#### **XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**The United States Department of Transportation (USDOT)**

**Standard Title VI/Non-Discrimination Assurances**

**DOT Order No. 1050.2A**

The **Maine Department of Transportation** (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through **Federal Highway Administration** (herein referred to as "FHWA" is subject to and will comply with the following:

**Statutory/Regulatory 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);
- 49 C.F.R. Part 21 (entitled *Non-discrimination In Federally-Assisted Programs Of The Department Of Transportation-Effectuation Of Title VI Of The Civil Rights Act Of 1964*);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

**General Assurances**

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

*"No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, for which the Recipient receives Federal financial assistance from DOT, including the FHWA.*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

### **Specific Assurances**

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted **FHWA Program**.

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23(b) and 21.2(e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all **FHWA Programs** and, in adapted form, in all proposals for negotiated agreements regardless of funding source:  
  

*"The **Maine Department of Transportation**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."*
3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds,

leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:

- a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
  - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
  - A. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
  - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, **Maine Department of Transportation** also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the **FHWA's** access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by the **FHWA**. You must keep records, reports, and submit the material for review upon request to **FHWA** or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

**Maine Department of Transportation** gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the **FHWA Programs**. This ASSURANCE is binding on the State of Maine, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors, transferees, successors in interest, and any other participants in the **FHWA Programs**. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

**Maine Department of Transportation**  
**Dale F. Doughty, Commissioner**  
(Name of Recipient)

By:   
(Signature of Authorized Official)

Dated: 2-13-26

## APPENDIX A

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 Aviation Administration (FHWA)**, 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 **FHWA** 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 **FHWA** 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 **FHWA** 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 FHWA 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.

## APPENDIX B

### CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

**NOW, THEREFORE**, the U.S. Department of Transportation as authorized by law and upon the condition that the **Maine Department of Transportation** will accept title to the lands and maintain the project constructed thereon in accordance with all requirements imposed by Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, part 21, Non-discrimination in Federally-assisted Programs of the Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), the Regulations for the Administration of **Federal Aviation Administration (FHWA) Program**, and the policies and procedures prescribed by the **FHWA** of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the **Maine Department of Transportation** all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

#### (HABENDUM CLAUSE)

**TO HAVE AND TO HOLD** said lands and interests therein unto **Maine Department of Transportation** and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the **Maine Department of Transportation**, its successors and assigns.

The **Maine Department of Transportation**, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]\* (2) that the **Maine Department of Transportation** will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non- discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation

and its assigns as such interest existed prior to this instruction].\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

## APPENDIX C

### CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the **Maine Department of Transportation** pursuant to the provisions of Assurance 7(a):

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
  - 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, **Maine Department of Transportation** will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.\*
- C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the **Maine Department of Transportation** will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the **Maine Department of Transportation** and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

## APPENDIX D

### CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by **Maine Department of Transportation** pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non- discrimination covenants, **Maine Department of Transportation** will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.\*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, **Maine Department of Transportation** will there upon revert to and vest in and become the absolute property of **Maine Department of Transportation** and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

## APPENDIX E

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 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).



## Environmental Summary Sheet

WIN: 29424.00

Date Submitted: 1/21/2026

Town: Rockwood – Greenville, Route 6

CPD Team Leader: Joshua Brown

ENV Field Contact (Regional Coordinator): Paulo Ribeiro

NEPA Complete: Categorical Exclusion (CE) 23 CFR 771.117.c.26, 1/21/2026

### Section 106

Review Complete: PA-A, No Effect 1/2/2026

Section 106 Resources: none

### Section 4(f) and 6(f)

Section 4(f)

No ROW/no use

Section 6(f)

No ROW/no takes

### Maine Department of Inland Fisheries and Wildlife Essential Habitat

Essential Habitat not mapped within the project area.

### Section 7

**Species of Concern:** No Effect based on scope

### Essential Fish Habitat

NA, based on scope

### Maine Department of Agriculture, Conservation, and Forestry

Public Lands, Submerged Land Lease: NA

Maine Land Use Planning Commission: NA

### Maine Department of Environmental Protection

NA, exempt activity

### Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.

NA, not within jurisdiction

### Stormwater Review

NA, based on scope

### Hazardous Materials Review

NA, based on scope

### Special Provisions Required

Special Provision 105-Environmental Requirements

N/A ☒ Applicable ☐

Standard Specification 656-Erosion Control Plan

N/A ☐ Applicable ☒

Special Provision 656-Minor Soil Disturbance

N/A ☒ Applicable ☐

Special Provision 203-Dredge Spec

N/A ☒ Applicable ☐