

**Updated 05/15/2020**

# **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.*

# 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 Rebecca Snowden at [rebecca.snowden@maine.gov](mailto:rebecca.snowden@maine.gov) or Diane Barnes at [diane.barnes@maine.gov](mailto:diane.barnes@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:** (\_\_\_\_) \_\_\_\_\_

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# NOTICE

## Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder shall submit the Disadvantaged Business Enterprise Proposed Utilization form with their bid. This is a curable bid defect.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form should be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact The Office of Civil Rights at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at <https://www.maine.gov/mdot/civilrights/dbe/>

## INSTRUCTIONS FOR PREPARING THE MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION 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.

### SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone, fax number and e-mail address.

Calculate and provide percentage of your bid that will be allocated to DBE firms, Federal Project Identification Number, and location of the Project work.

In the columns, name each subcontractor, DBE and non-DBE firm to be used, provide the Unit/Item cost of the work/product to be provided by the subcontractor, give a brief description and the dollar value of the work.

Revised 1/12

**DBE GOAL NOTICE FFY 2019-2021**  
**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.

For FFY 2019-21 (October 1, 2018 through September 30, 2021) MaineDOT has established an annual DBE participation goal of **2.4%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration and remains in effect through September 30, 2021. Maine DOT 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 placing 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 2.4% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

<https://www.maine.gov/mdot/civilrights/docs/dbe/WeeklyDBEVendorList.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)

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**MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR  
PROPOSED UTILIZATION FORM**

**All Bidders must furnish this form with their bid on Bid Opening day**

Contractor: \_\_\_\_\_ Telephone: \_\_\_\_\_ Ext \_\_\_\_\_

Contact Person: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

BID DATE: \_\_\_\_\_

FEDERAL PROJECT PIN # \_\_\_\_\_ PROJECT LOCATION: \_\_\_\_\_

TOTAL ANTICIPATED DBE \_\_\_\_\_% PARTICIPATION FOR THIS CONTRACT

| W<br>B<br>E                         | D<br>B<br>E | Non<br>DBE | Firm Name | Item Number &<br>Description of Work | Quantity | Cost Per<br>Unit/Item | Anticipated<br>\$ Value |
|-------------------------------------|-------------|------------|-----------|--------------------------------------|----------|-----------------------|-------------------------|
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
|                                     |             |            |           |                                      |          |                       |                         |
| <b>Subcontractor<br/>Total &gt;</b> |             |            |           |                                      |          |                       |                         |
| <b>DBE Total &gt;</b>               |             |            |           |                                      |          |                       |                         |

**NOTE: THIS INFORMATION IS USED TO TRACK AND REPORT ANTICIPATED DBE PARTICIPATION IN ALL  
FEDERALLY FUNDED MAINE DOT CONTRACTS. THE ANTICIPATED DBE AMOUNT IS VOLUNTARY AND WILL  
NOT BECOME A PART OF THE CONTRACTUAL TERMS.**

Equal Opportunity Use:

Form received: \_\_\_\_/\_\_\_\_/\_\_\_\_ Verified by: \_\_\_\_\_

FHWA ☐

FTA ☐

FAA ☐

**For a complete list of certified firms and company designation (WBE/DBE) go to  
<http://www.maine.gov/mdot/civilrights/>**

Rev. 01/15

**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) 624-3066**

***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 "Bids for **Bridge Work, Pavement Milling, Ultra-Thin Bonded Wearing Course, Hot Mix Asphalt Overlay with Safety Improvements in the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, and Veazie and the Cities of Bangor and Old Town,**" will be received from contractors at the Reception Desk, MaineDOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on July 15, 2020 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 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: Maine Federal Aid Project Nos. 2361750, WIN 23617.50, 2361760, WIN 23617.60, 2411900, WIN 24119.00, & 2417300, WIN 23173.00.

Location: In Penobscot County:

Project No. 2361750 is located on Interstate 95 Northbound in Bangor and includes bridge #5972, #5791, & #5800.

Project No. 2361760 is located on Interstate 95 Southbound in Old Town and Bangor and includes bridge #1425, #1427, & #1429.

Project No. 2411900 is on Interstate 95 Northbound and is divided into 3 segments. Segment 1 begins in Carmel at mile marker 170.44 cross over and extends north 5.67 miles to Hampden. Segment 2 begins in Hampden 0.02 miles north of the Coldbrook Road overpass and extending north 4.41 miles. Segment #3: begins 0.39 miles north of the Union Street Overpass in Bangor and extends north 2.75 miles north to Hogan Road in Bangor.

Project No. 2417300 is located on Interstate 95 Southbound and is divided into 3 segments. Segment #1 begins at the Kirkland Road Bridge on Interstate 95 in Old Town and extends south 9.45 miles to the southern bridge joint of the Kenduskeag Stream Bridge. Segment #2 begins 0.39 miles north of the Union Street overpass and extends south 4.41 miles to the Coldbrook Road interchange. Segment #3 begins at Mile Marker 176.27 and extends 5.83 miles to the cross over at Mile Marker 170.44 in Newburgh.

Outline of Work: Bridge Work, Pavement Milling, Ultra-Thin Bonded Wearing Course, Hot Mix Asphalt Overlay with Safety Improvements, and other incidental work.

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 **George MacDougall** 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 (or if that Monday is a state holiday, Friday) 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.

Specifications and bid forms may be seen at the MaineDOT Building in Augusta, Maine, and at the Department of Transportation's Regional Office in Bangor. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Bid Book \$10 (\$13 by mail), payment in advance, all non-refundable.

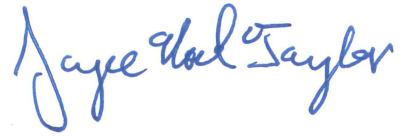
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of **\$250,000** payable to Treasurer, 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.

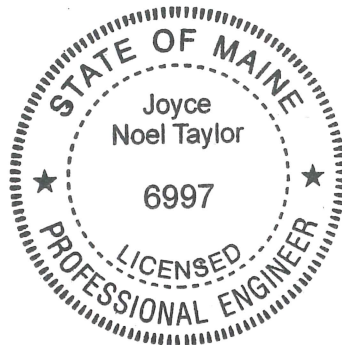
All work shall be governed by *State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition*, price \$10 [\$15 by mail], and *Standard Details, March 2020 Edition*, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 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 MaineDOT to reject any or all bids.

Augusta, Maine  
June 24, 2020



JOYCE NOEL TAYLOR 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.

BANGOR, CARMEL, HAMPDEN, HERMON,  
NEWBURGH, OLD TOWN, ORONO, & VEAZIE  
23617.50, 23617.60, 24119.00, & 241763.00  
April 14, 2011  
Supersedes August 3, 2004

**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)

6/22/2020

## Maine Department of Transportation

## Proposal Schedule of Items

Page 1 of 6

Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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                       | 202.2023<br>REMOVING PAVEMENT SURFACE -<br>MEDIUM CUT DRUM            | 680,510.000<br>SY                    | _____      | _____ | _____      | _____ |
| 0020                       | 202.203<br>PAVEMENT BUTT JOINTS                                       | 970.000<br>SY                        | _____      | _____ | _____      | _____ |
| 0030                       | 202.205<br>RUMBLE STRIPS - SHOULDER                                   | 203,500.000<br>LF                    | _____      | _____ | _____      | _____ |
| 0040                       | 202.31<br>PROFILE MILLING CONCRETE<br>WEARING SURFACE                 | 1,640.000<br>SY                      | _____      | _____ | _____      | _____ |
| 0050                       | 403.2081<br>12.5 MM POLYMER MODIFIED HOT<br>MIX ASPHALT               | 9,700.000<br>T                       | _____      | _____ | _____      | _____ |
| 0060                       | 403.209<br>HOT MIX ASPHALT 9.5 MM<br>(SIDEWALKS, DRIVES, INCIDENTALS) | 50.000<br>T                          | _____      | _____ | _____      | _____ |
| 0070                       | 403.211<br>HOT MIX ASPHALT (SHIMMING)                                 | 8,520.000<br>T                       | _____      | _____ | _____      | _____ |
| 0080                       | 403.2131<br>12.5 MM POLYMER MODIFIED HMA<br>BASE                      | 200.000<br>T                         | _____      | _____ | _____      | _____ |
| 0090                       | 409.15<br>BITUMINOUS TACK COAT - APPLIED                              | 18,500.000<br>G                      | _____      | _____ | _____      | _____ |
| 0100                       | 410.151<br>EMULSIFIED ASPHALT SEALCOAT,<br>APPLIED                    | 201,300.000<br>SY                    | _____      | _____ | _____      | _____ |
| 0110                       | 424.22<br>ASPHALT RUBBER CRACK SEALER<br>TYPE 2, APPLIED              | 106,500.000<br>LB                    | _____      | _____ | _____      | _____ |

6/22/2020

## Maine Department of Transportation

## Proposal Schedule of Items

Page 2 of 6

Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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     |
| 0120                       | 424.38<br>CRACK REPAIR - HOT POUR MASTIC                                           | 62,500.000<br>LB                     | _____      | <br>_____ | _____      | <br>_____ |
| 0130                       | 462.301<br>POLYMER MODIFIED ULTRATHIN<br>BONDED WEARING COURSE                     | 583,400.000<br>SY                    | _____      | <br>_____ | _____      | <br>_____ |
| 0140                       | 508.14<br>HIGH PERFORMANCE<br>WATERPROOFING MEMBRANE                               | LUMP SUM                             | LUMP       | <br>SUM   | _____      | <br>_____ |
| 0150                       | 515.21<br>PROTECTIVE COATING FOR<br>CONCRETE SURFACES                              | LUMP SUM                             | LUMP       | <br>SUM   | _____      | <br>_____ |
| 0160                       | 518.51<br>REPAIR OF UPWARD FACING<br>SURFACES - BELOW REINFORCING<br>STEEL < 8 IN. | 10.000<br>SF                         | _____      | <br>_____ | _____      | <br>_____ |
| 0170                       | 520.243<br>BRIDGE JOINT MODIFICATION TYPE 3<br>A (BR 5791)                         | 4.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0180                       | 520.243<br>BRIDGE JOINT MODIFICATION TYPE 3<br>B (BR 5792)                         | 3.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0190                       | 520.243<br>BRIDGE JOINT MODIFICATION TYPE 3<br>B (BR1429)                          | 3.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0200                       | 520.244<br>BRIDGE JOINT MODIFICATION TYPE 4<br>(BR 1427)                           | 2.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0210                       | 520.244<br>BRIDGE JOINT MODIFICATION TYPE 4<br>(BR 5800)                           | 2.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |

6/22/2020

## Maine Department of Transportation

## Proposal Schedule of Items

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Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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     |
| 0220                       | 524.50<br>TEMPORARY ROADWAY MAT (BR<br>1427)                | 2.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0230                       | 524.50<br>TEMPORARY ROADWAY MAT (BR<br>5800)                | 2.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0240                       | 527.301<br>ENERGY ABSORBING SYSTEM (C-A-<br>T)              | 6.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0250                       | 606.1305<br>31" W-BM GR, MID-WAY SPLICE<br>FLARED TERMINAL  | 90.000<br>EA                         | _____      | <br>_____ | _____      | <br>_____ |
| 0260                       | 606.178<br>GUARDRAIL BEAM                                   | 450.000<br>LF                        | _____      | <br>_____ | _____      | <br>_____ |
| 0270                       | 606.265<br>TERMINAL END - SINGLE RAIL -<br>GALVANIZED STEEL | 29.000<br>EA                         | _____      | <br>_____ | _____      | <br>_____ |
| 0280                       | 606.3521<br>LINEAR DELINEATION SYSTEM<br>PANEL              | 400.000<br>EA                        | _____      | <br>_____ | _____      | <br>_____ |
| 0290                       | 606.353<br>REFLECTORIZED FLEXIBLE<br>GUARDRAIL MARKER       | 200.000<br>EA                        | _____      | <br>_____ | _____      | <br>_____ |
| 0300                       | 606.362<br>GUARDRAIL ADJUSTED                               | 5,000.000<br>LF                      | _____      | <br>_____ | _____      | <br>_____ |
| 0310                       | 606.367<br>REPLACE UNUSABLE EXISTING<br>GUARDRAIL POSTS     | 27.000<br>EA                         | _____      | <br>_____ | _____      | <br>_____ |
| 0320                       | 618.14<br>SEEDING METHOD NUMBER 2                           | 390.000<br>UN                        | _____      | <br>_____ | _____      | <br>_____ |

## Maine Department of Transportation

## Proposal Schedule of Items

Page 4 of 6

Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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     |
| 0330                       | 619.12<br>MULCH                                                                  | 390.000<br>UN                        | _____      | <br>_____ | _____      | <br>_____ |
| 0340                       | 627.18<br>12 " SOLID WHITE PAVEMENT<br>MARKING                                   | 40,000.000<br>LF                     | _____      | <br>_____ | _____      | <br>_____ |
| 0350                       | 627.30<br>GROOVING FOR PAVEMENT<br>MARKING                                       | 220,000.000<br>SF                    | _____      | <br>_____ | _____      | <br>_____ |
| 0360                       | 627.733<br>4" WHITE OR YELLOW PAINTED<br>PAVEMENT MARKING LINE                   | 10,000.000<br>LF                     | _____      | <br>_____ | _____      | <br>_____ |
| 0370                       | 627.744<br>6" WHITE OR YELLOW PAINTED<br>PAVEMENT MARKING LINE                   | 322,000.000<br>LF                    | _____      | <br>_____ | _____      | <br>_____ |
| 0380                       | 627.745<br>6" WHITE OR YELLOW POLYUREA<br>PAVEMENT MARKING LINE<br>(RECESSED)    | 365,000.000<br>LF                    | _____      | <br>_____ | _____      | <br>_____ |
| 0390                       | 627.75<br>WHITE OR YELLOW PAVEMENT &<br>CURB MARKING                             | 4,250.000<br>SF                      | _____      | <br>_____ | _____      | <br>_____ |
| 0400                       | 627.78<br>TEMPORARY 4 INCH PAINTED<br>PAVEMENT MARKING LINE, WHITE<br>OR YELLOW  | 540,000.000<br>LF                    | _____      | <br>_____ | _____      | <br>_____ |
| 0410                       | 627.781<br>TEMPORARY 6 INCH PAINTED<br>PAVEMENT MARKING LINE, WHITE<br>OR YELLOW | 860,000.000<br>LF                    | _____      | <br>_____ | _____      | <br>_____ |
| 0420                       | 629.05<br>HAND LABOR, STRAIGHT TIME                                              | 90.000<br>HR                         | _____      | <br>_____ | _____      | <br>_____ |

6/22/2020

## Maine Department of Transportation

## Proposal Schedule of Items

Page 5 of 6

Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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     |
| 0430                       | 631.12<br>ALL PURPOSE EXCAVATOR<br>(INCLUDING OPERATOR)     | 210.000<br>HR                        | _____      | <br>_____ | _____      | <br>_____ |
| 0440                       | 631.133<br>SKID STEER (INCLUDING OPERATOR)                  | 81.000<br>HR                         | _____      | <br>_____ | _____      | <br>_____ |
| 0450                       | 631.172<br>TRUCK - LARGE (INCLUDING<br>OPERATOR)            | 480.000<br>HR                        | _____      | <br>_____ | _____      | <br>_____ |
| 0460                       | 639.18<br>FIELD OFFICE TYPE A                               | 1.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0470                       | 643.87<br>WEIGH-IN-MOTION SYSTEM                            | 2.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0480                       | 652.30<br>FLASHING ARROW BOARD                              | 8.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0490                       | 652.33<br>DRUM                                              | 240.000<br>EA                        | _____      | <br>_____ | _____      | <br>_____ |
| 0500                       | 652.34<br>CONE                                              | 1,300.000<br>EA                      | _____      | <br>_____ | _____      | <br>_____ |
| 0510                       | 652.35<br>CONSTRUCTION SIGNS                                | 6,924.000<br>SF                      | _____      | <br>_____ | _____      | <br>_____ |
| 0520                       | 652.36<br>MAINTENANCE OF TRAFFIC<br>CONTROL DEVICES         | 138.000<br>CD                        | _____      | <br>_____ | _____      | <br>_____ |
| 0530                       | 652.36<br>MAINTENANCE OF TRAFFIC<br>CONTROL DEVICES (36 CD) | 36.000<br>CD                         | _____      | <br>_____ | _____      | <br>_____ |
| 0540                       | 652.36<br>MAINTENANCE OF TRAFFIC<br>CONTROL DEVICES (40 CD) | 40.000<br>CD                         | _____      | <br>_____ | _____      | <br>_____ |

6/22/2020

## Maine Department of Transportation

## Proposal Schedule of Items

Page 6 of 6

Proposal ID: 023617.50

Project(s): 023617.50, 023617.60, 024119.00,  
024173.00

SECTION: 1 HIGHWAY ITEMS

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     |
| 0550                       | 652.38<br>FLAGGER                                               | 270.000<br>HR                        | _____      | <br>_____ | _____      | <br>_____ |
| 0560                       | 652.41<br>PORTABLE CHANGEABLE MESSAGE<br>SIGN                   | 10.000<br>EA                         | _____      | <br>_____ | _____      | <br>_____ |
| 0570                       | 652.45<br>AUTOMATED TRAILER MOUNTED<br>SPEED LIMIT SIGN         | 8.000<br>EA                          | _____      | <br>_____ | _____      | <br>_____ |
| 0580                       | 652.46<br>SEQUENTIAL FLASHING WARNING<br>LIGHTS                 | 80.000<br>EA                         | _____      | <br>_____ | _____      | <br>_____ |
| 0590                       | 652.47<br>TEMPORARY PORTABLE RUMBLE<br>STRIP                    | 12.000<br>GP                         | _____      | <br>_____ | _____      | <br>_____ |
| 0600                       | 656.75<br>TEMPORARY SOIL EROSION AND<br>WATER POLLUTION CONTROL | LUMP SUM                             | LUMP       | <br>SUM   | _____      | <br>_____ |
| 0610                       | 659.10<br>MOBILIZATION                                          | LUMP SUM                             | LUMP       | <br>SUM   | _____      | <br>_____ |
| 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, **WINS 23617.50, 23617.60, 24119.00, & 24173.00 for Bridge Work, Pavement Milling, Ultra-Thin Bonded Wearing Course, Hot Mix Asphalt Overlay with Safety Improvements in the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, and Veazie and the Cities of Bangor and Old Town, County of Penobscot, 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, within **132** Working Days. 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: **WINs 23617.50, 23617.60, 24119.00, & 24173.00 for Bridge Work, Pavement Milling, Ultra-Thin Bonded Wearing Course, Hot Mix Asphalt Overlay with Safety Improvements in the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, and Veazie and the Cities of Bangor and Old Town, County of Penobscot**, 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: Bruce A. Van Note, Commissioner

\_\_\_\_\_  
Witness

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

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\_\_\_\_\_ 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.**

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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, within **132** Working Days. 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: **WINs 23617.50, 23617.60, 24119.00, & 24173.00 for Bridge Work, Pavement Milling, Ultra-Thin Bonded Wearing Course, Hot Mix Asphalt Overlay with Safety Improvements in the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, and Veazie and the Cities of Bangor and Old Town, County of Penobscot**, 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: Bruce A. Van Note, 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. **1224.00**, 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, November 2014 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, November 2014 Edition, Standard Details November 2014 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 November 2014 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, November 2014 Edition, Standard Details November 2014 Edition, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**PIN 1234.00 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, November 2014 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 November 2014 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. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: David Bernhardt, Commissioner

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

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



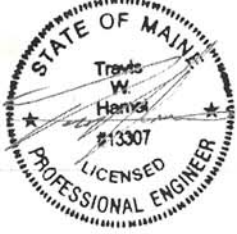
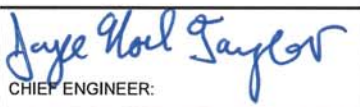
## STATE WIDE INTERSTATE BRIDGE JOINTS

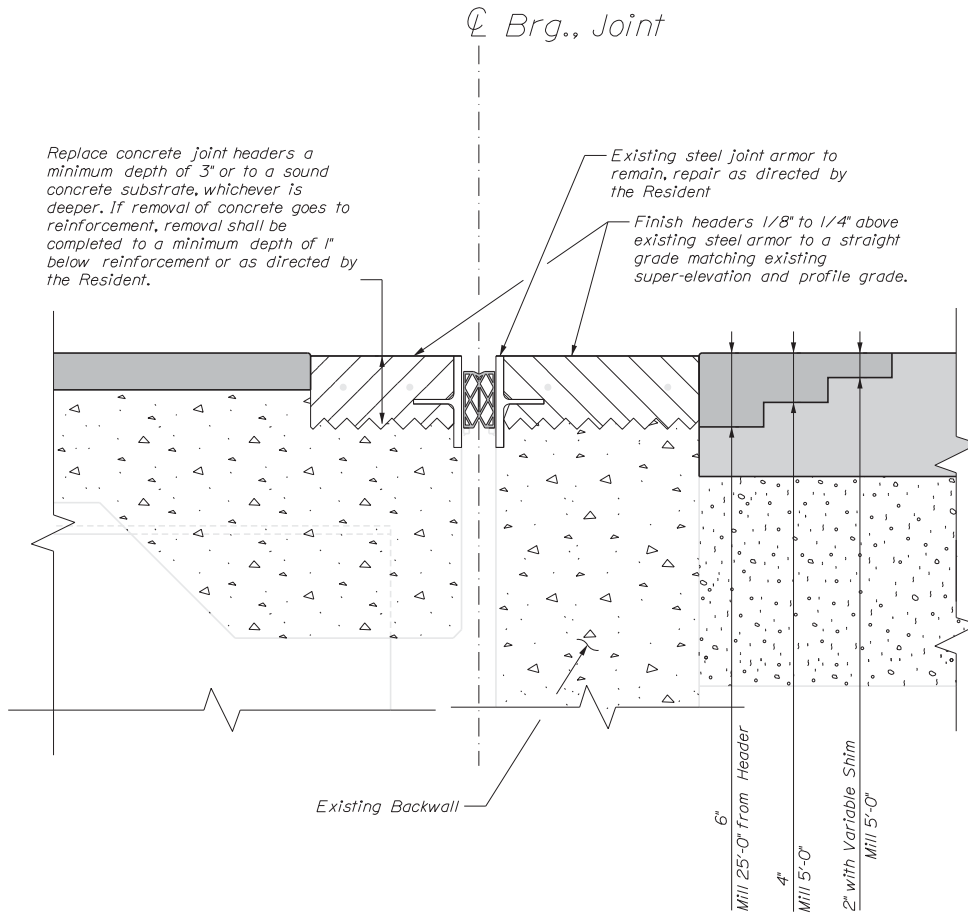
INTERSTATE 95 NORTHBOUND

PROJECT NO. 23617.50

JOINT REPLACEMENT

BRIDGE NO. 5972, 5791, 5795, 5800

|                                                                                                                                                            |                                                                                                                                                        |                                                                                                         |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------|
| PROJECT LOCATION:                                                                                                                                          | Bridge No. 5972, 5791, 5795, 5800<br>44°47'01.3"N, 68°48'39.6"W; 44°48'52.7"N, 68°47'18.6"W;<br>44°47'13.1"N, 68°48'29.3"W; 44°49'24.7"N, 68°45'33.6"W |                                                                                                         |              |
| PROGRAM AREA:                                                                                                                                              | Highway-Bridges                                                                                                                                        |                                                                                                         |              |
| OUTLINE OF WORK:                                                                                                                                           | Joint Replacement                                                                                                                                      |                                                                                                         |              |
| <br>SIGNATURE<br><br>No. 13307<br>P.E. NUMBER<br><br>06/15/2020<br>DATE |                                                                                                                                                        |                      |              |
|                                                                                                                                                            |                                                                                                                                                        | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION                                                          |              |
|                                                                                                                                                            |                                                                                                                                                        | APPROVED                                                                                                | DATE         |
|                                                                                                                                                            |                                                                                                                                                        | <br>COMMISSIONER:   | 6-23-2020    |
|                                                                                                                                                            |                                                                                                                                                        | <br>CHIEF ENGINEER: | 6-23-2020    |
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION                                                                                                             | INTERSTATE 95 NORTHBOUND<br>CARMEL-BANGOR PENOBSCOT COUNTY                                                                                             |                                                                                                         | SHEET NUMBER |
| 23617.50                                                                                                                                                   | TITLE SHEET                                                                                                                                            |                                                                                                         | 1            |
|                                                                                                                                                            |                                                                                                                                                        |                                                                                                         | OF 7         |

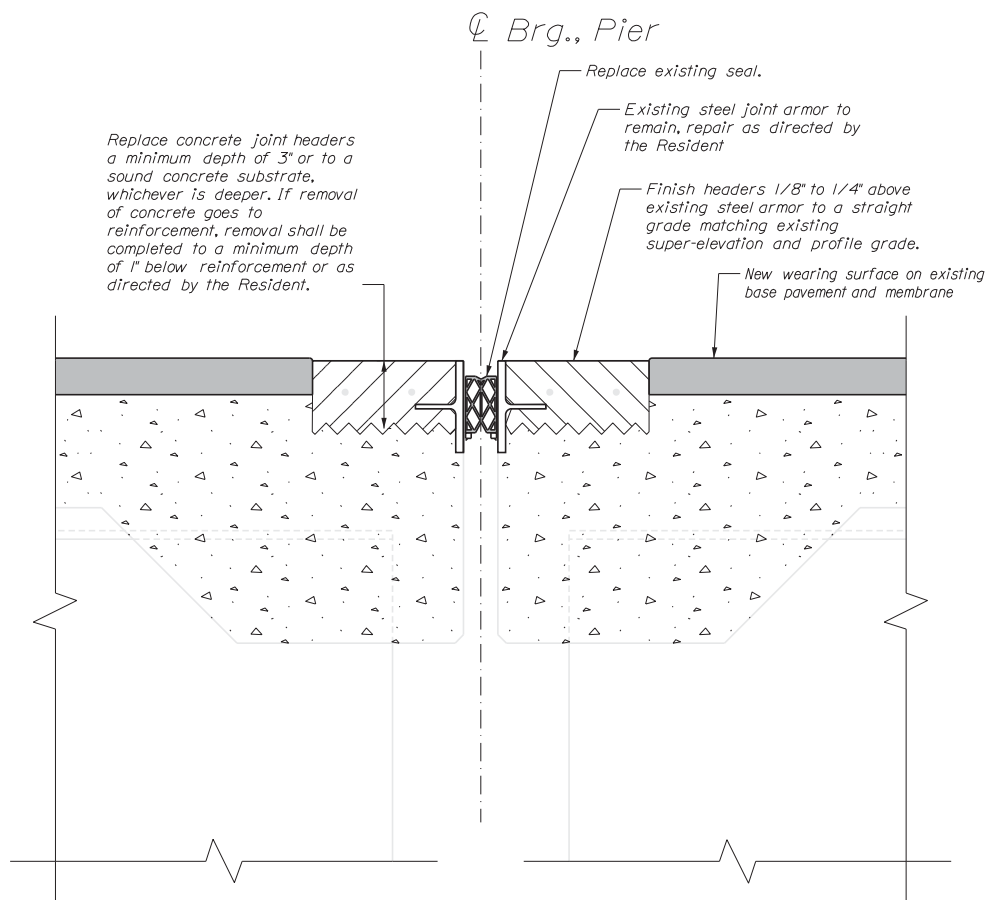


**BRIDGE JOINT MODIFICATION TYPE 3a**

**BRIDGE JOINT MODIFICATION TYPE 3a NOTES**

1. Bridge Joint Modification Type 3a, includes replacing the concrete header(s). Any damage to the existing joint armor, reinforcement, or membrane caused by the Contractor will not be paid separately but will be considered incidental. Replacement of surface and base HMA to complete this work will be paid for under appropriate contract items.
2. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.
3. Concrete headers shall be replaced from face of curb to face of barrier or as directed by the Resident.
4. Concrete headers shall be replaced to match existing or to a minimum width of 8" in the longitudinal direction, whichever is greater.

|                          |          |                              |          |
|--------------------------|----------|------------------------------|----------|
| STATE OF MAINE           |          | DEPARTMENT OF TRANSPORTATION |          |
| 2361750                  |          | WIN                          |          |
| BRIDGE NO. 5971          |          | BRIDGE PLANS                 |          |
| 2361750                  |          | 2361750                      |          |
| SIGNATURE                |          | P.E. NUMBER                  |          |
| DATE                     |          | DATE                         |          |
| PROJ. MANAGER            | T. HAMEL | BY                           | DATE     |
| DESIGN-DETAILED          | T. HAMEL | W. ROHMAN                    | JUN 2020 |
| CHECKED-REVIEWED         |          | T. HAMEL                     | JUN 2020 |
| DESIGN-DETAILED          |          |                              |          |
| REVISIONS 1              |          |                              |          |
| REVISIONS 2              |          |                              |          |
| REVISIONS 3              |          |                              |          |
| REVISIONS 4              |          |                              |          |
| FIELD CHANGES            |          |                              |          |
| INTERSTATE 95 NORTHBOUND |          | PENOBSCOT COUNTY             |          |
| CARMEL-BANGOR            |          | BRIDGE JOINT MODIFICATION    |          |
|                          |          | TYPE 3a DETAIL               |          |
| SHEET NUMBER             |          | 2                            |          |
| OF 7                     |          |                              |          |



BRIDGE JOINT MODIFICATION TYPE 3b

BRIDGE JOINT MODIFICATION TYPE 3b NOTES

1. Bridge Joint Modification Type 3b, includes replacing the seal and concrete header(s). Any damage to the existing joint armor, reinforcement, or membrane caused by the Contractor will not be paid, separately but will be considered incidental. Replacement of surface and base HMA to complete this work will be paid for under appropriate contract items.

2. The Contractor shall be fully responsible for selecting the appropriately sized seal based on the Movement Rating provided, Contractor's field measured opening widths, and the Manufacturer's recommendations.

3. Seals indicated to be replaced shall extend the full width of the bridge plus a distance of 4' beyond the outside face of the curb on each side of the bridge.

4. Existing joint armor shall be prepared in accordance with the seal manufacturer's recommendations. Existing damage shall be repaired and rough edges shall be ground smooth prior to installation of the seal. Preparation and repair of the existing joint armor will be considered incidental to the related joint modification items.

5. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.

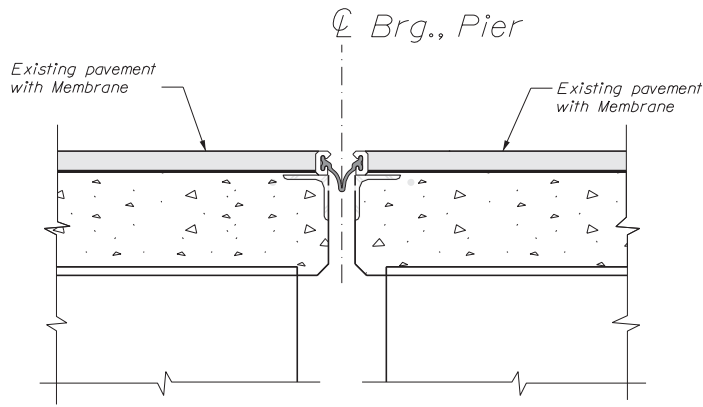
6. Concrete headers shall be replaced from face of curb to face of curb or as directed by the Resident.

7. Concrete headers shall be replaced to match existing or to a minimum width of 8' in the longitudinal direction, whichever is greater.

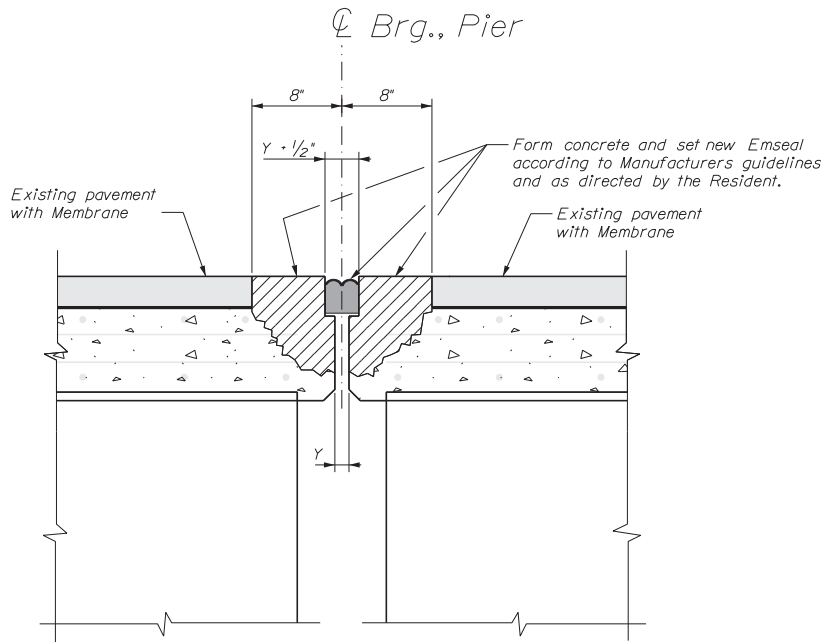
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| STATE OF MAINE           |  | DEPARTMENT OF TRANSPORTATION |  | 2361750          |  | WIN                       |  | 23617.50 |  | BRIDGE NO. 5972 |  | BRIDGE PLANS |  |
| INTERSTATE 95 NORTHBOUND |  | CARMEL-BANGOR                |  | PENOBSCOT COUNTY |  | BRIDGE JOINT MODIFICATION |  | TYPE 3b  |  | DETAIL          |  | SHEET NUMBER |  |
| 3                        |  | OF 7                         |  |                  |  |                           |  |          |  |                 |  |              |  |

|                  |          |           |          |
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| PROJ. MANAGER    | T. HAMEL | BY        | DATE     |
| DESIGN-DETAILED  | T. HAMEL | W. ROHMAN | JUN 2020 |
| CHECKED-REVIEWED | T. HAMEL | T. HAMEL  | JUN 2020 |
| DESIGN-DETAILED  |          |           |          |
| REVISIONS 1      |          |           |          |
| REVISIONS 2      |          |           |          |
| REVISIONS 3      |          |           |          |
| REVISIONS 4      |          |           |          |
| FIELD CHANGES    |          |           |          |

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**EXISTING GLAND SEAL BRIDGE JOINT**

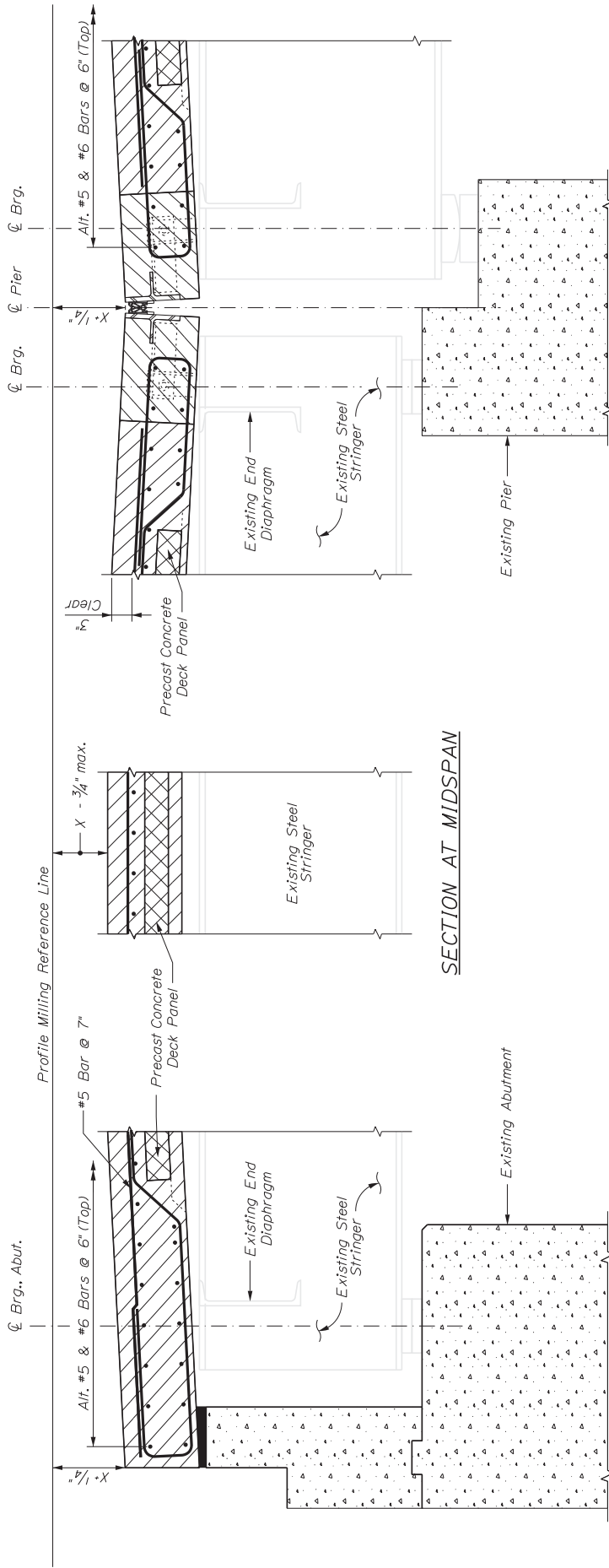


**BRIDGE JOINT MODIFICATION TYPE 4**

**BRIDGE JOINT MODIFICATION TYPE 4 NOTES**

1. Bridge Joint Modification Type 4, includes removal of the existing joint seal, armor, pavement, and deck concrete to below the top mat of deck reinforcement to provide adhesion of the new concrete headers, along with the installation of new concrete headers and Emseals as required to complete the work shown. Any damage caused by the Contractor to the existing reinforcement, wearing surface, or membrane to remain will not be paid separately. Any existing joint armor reinforcement or attachment points shall be cut off at the elevation of the top mat of reinforcement or as Directed by the Resident.
2. The Contractor shall be fully responsible for selecting the appropriately sized seal based on the Movement Rating provided, Contractor's field measured opening widths, and the Manufacturer's recommendations.
3. Seals indicated to be replaced shall extend the full width of the bridge plus a distance of 4' beyond the outside face of the curb on each side of the bridge. Concrete work at curblines shall be completed so that the seal maintains a contentions grade through the curb matching the adjacent shoulder.
4. Concrete headers shall be cast with a minimum  $\frac{1}{4}$ " shelf to seat the new joint seal. The shelf shall be located so that the new seal will be recessed  $\frac{1}{2}$ " to  $\frac{3}{4}$ " below the top of concrete.
5. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.
6. Distance "Y" shall be determined by the Contractor and approved by the Resident, and shall be sized to allow the full Movement Rating of the joint plus  $\frac{1}{4}$ ".

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| INTERSTATE 95 NORTHBOUND  |  |  |  |  |  |  |  |  |  | PROJ. MANAGER     |  | T. HAMEL |  | BY       |  | DATE     |  | STATE OF MAINE               |  |
| CARMEL-BANGOR             |  |  |  |  |  |  |  |  |  | DESIGN-DETAILED   |  | T. HAMEL |  | R. MAYER |  | JUN 2020 |  | DEPARTMENT OF TRANSPORTATION |  |
| PENOBSCOT COUNTY          |  |  |  |  |  |  |  |  |  | CHECKED-REVIEWED  |  |          |  | T. HAMEL |  | JUN 2020 |  |                              |  |
| BRIDGE JOINT MODIFICATION |  |  |  |  |  |  |  |  |  | DESIGN2-DETAILED2 |  |          |  |          |  |          |  | SIGNATURE                    |  |
| TYPE 4 DETAIL             |  |  |  |  |  |  |  |  |  | DESIGN3-DETAILED3 |  |          |  |          |  |          |  | P.E. NUMBER                  |  |
|                           |  |  |  |  |  |  |  |  |  | REVISIONS 1       |  |          |  |          |  |          |  |                              |  |
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|                           |  |  |  |  |  |  |  |  |  | FIELD CHANGES     |  |          |  |          |  |          |  |                              |  |
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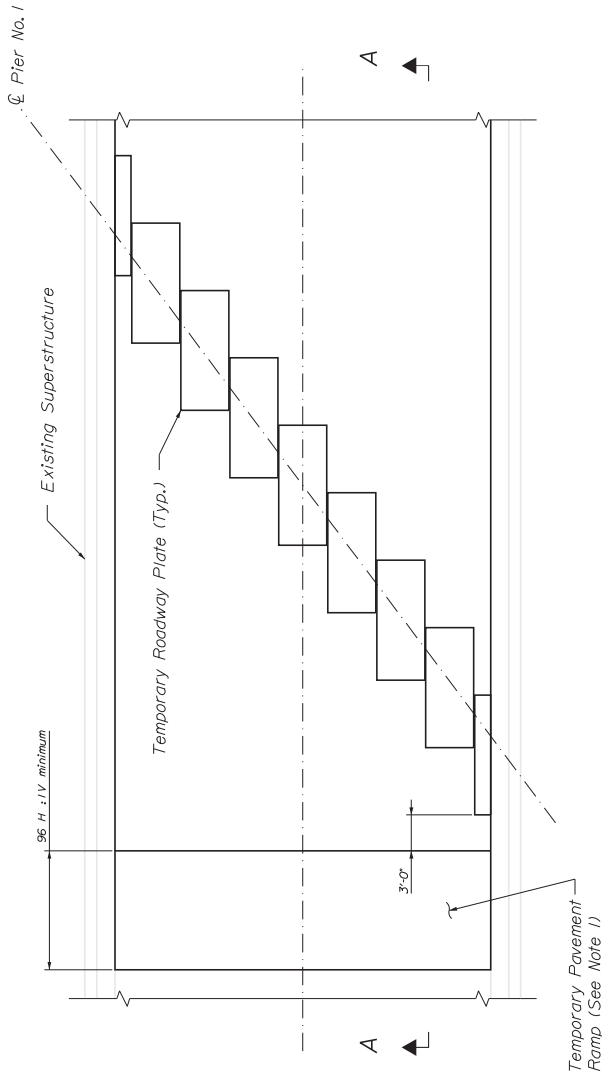
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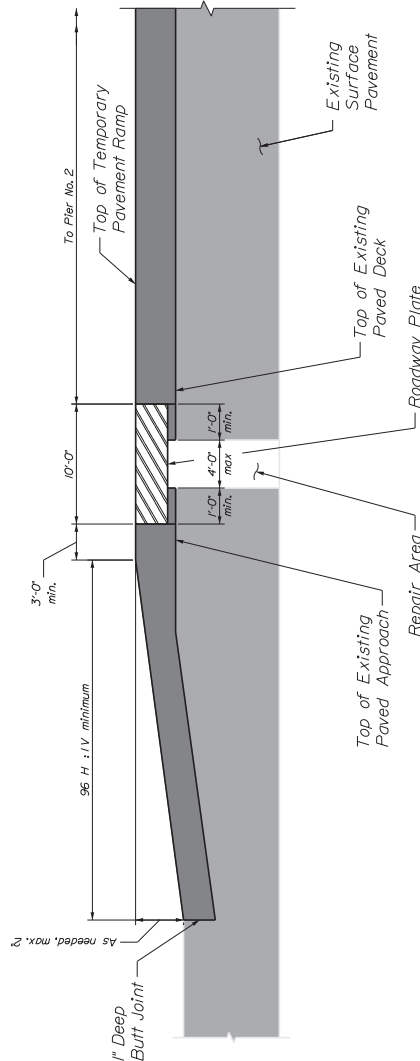
Notes:

1. The Contractor shall provide layout for Profile Milling the existing Concrete Wearing Surface to flatten the longitudinal grade changes to achieve as straight and consistent grade as possible.
2. Distance X from the Profile Milling Reference Line shall remain constant and is the depth from the reference line to the bottom of the grooves created by the milling teeth.
3. Additionally, at no point shall concrete milling be closer than 1/4" from the top of steel joint armor or bridge drains. Additional, no more than 3/4" of concrete in depth may be removed from any portion of the existing wearing surface.
4. Mainline shall be milled to match the existing 2% cross slope. Cross slope of shoulders outside of travel lanes and ramps may be reduced to 1.5% or as approved by the Resident, to maintain adequate drainage. Existing cross slopes shall be field verified by the Contractor.
5. Concrete Protective Coating shall be applied to all exposed concrete surfaces from left station drip notch to right station drip notch including deck fascias, barriers, transition barriers curblines, and concrete wearing surfaces.

|                                |  |                              |  |
|--------------------------------|--|------------------------------|--|
| INTERSTATE 95 NORTHBOUND       |  | STATE OF MAINE               |  |
| CARMEL - BANGOR                |  | DEPARTMENT OF TRANSPORTATION |  |
| PROFILE MILLING CONCRETE       |  | 2361750                      |  |
| I-395 OVERPASS WEARING SURFACE |  | WIN                          |  |
| SHEET NUMBER                   |  | BRIDGE NO. 5795              |  |
| 5                              |  | 23617.50                     |  |
| OF 7                           |  | BRIDGE PLANS                 |  |
| PROJECT MANAGER                |  | DATE                         |  |
| DESIGN-DETAILED                |  | BY                           |  |
| CHECKED-REVIEWED               |  | T. HAMEL                     |  |
| DESIGN-DETAILED                |  | D. SHAW                      |  |
| REVISIONS 1                    |  | T. HAMEL                     |  |
| REVISIONS 2                    |  | SIGNATURE                    |  |
| REVISIONS 3                    |  | P.E. NUMBER                  |  |
| REVISIONS 4                    |  | DATE                         |  |
| FIELD CHANGES                  |  |                              |  |



PLAN VIEW



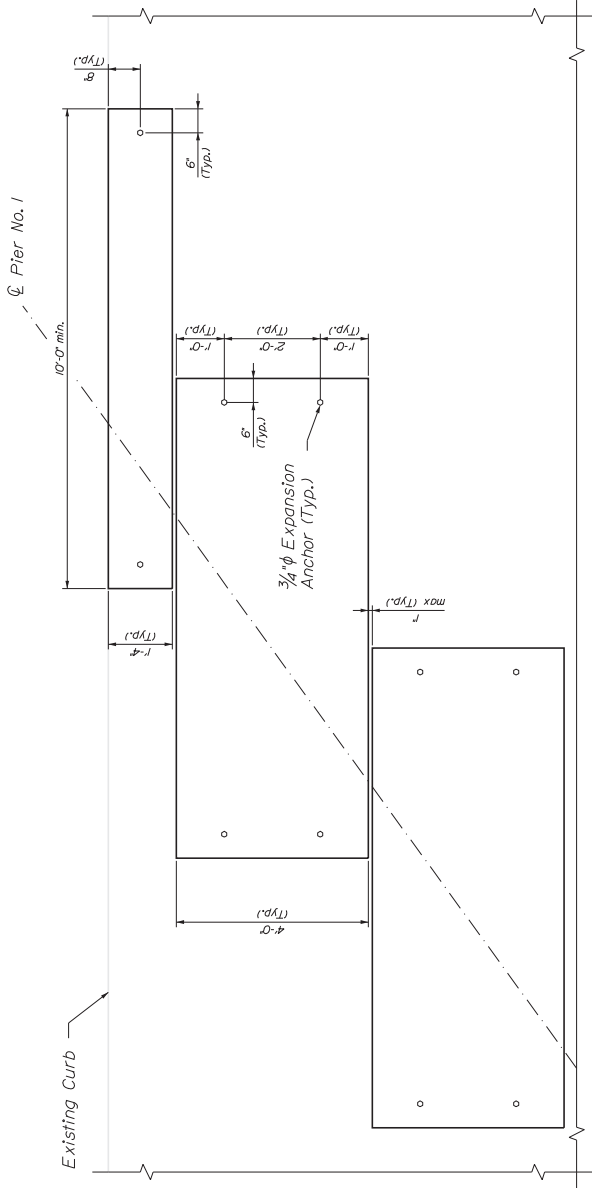
SECTION A-A  
TEMPORARY PLATE DETAIL

(Vertical Scale Exaggerated)  
(Pier No. 1 shown. Pier No. 2 similar but opposite)

NOTES

1. Buff Joints and Temporary Pavement Ramps shall be incidental to Pay Item 524.50, "Temporary Roadway Mat".
2. Contractor may propose alternate roadway plate designs in accordance with Special Provision 524.
3. Expansion Anchors shall be fully removable, heavy duty, vibration resistant self-locking sleeve anchors installed in accordance with manufacturer's requirements. Each Expansion Anchor shall have a minimum embedment into concrete of 4 inches, excluding pavement thickness, and capable of resisting a shear loading of 5.0 kips and a tensile force of 5.0 kips. Following completion of the work all bolt holes shall be filled with a non-shrink grout selected from the Qualified Products List.
4. The Contractor shall design and install the roadway plates to allow ample clearance to avoid contact between the plates and the work area during traffic loading.

|                                                            |  |                              |  |
|------------------------------------------------------------|--|------------------------------|--|
| INTERSTATE 95 NORTHBOUND                                   |  | STATE OF MAINE               |  |
| CARMEL-BANGOR                                              |  | DEPARTMENT OF TRANSPORTATION |  |
| TEMPORARY PLATE DETAIL 1 OF 2,<br>I-95 OVER STILLWATER AVE |  | 2361750                      |  |
| SHEET NUMBER                                               |  | BRIDGE NO. 1429              |  |
| 6                                                          |  | WIN                          |  |
| OF 7                                                       |  | 23617.50                     |  |
|                                                            |  | BRIDGE PLANS                 |  |



TEMPORARY ROADWAY PLATE PLAN

|                                              |                                                            |  |                                                                                                                                                                         |                                                                                                          |                                                                                                                  |                                                                                                                  |                                  |  |                                                                                                                 |  |
|----------------------------------------------|------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|
| SHEET NUMBER<br><div>7</div> <div>OF 7</div> | INTERSTATE 95 NORTHBOUND<br>CARMEL-BANGOR PENOBSCOT COUNTY |  | PROJ. MANAGER<br>DESIGN-DETAILED<br>CHECKED-REVIEWED<br>DESIGN-DETAILED<br>DESIGN-DETAILED<br>REVISIONS 1<br>REVISIONS 2<br>REVISIONS 3<br>REVISIONS 4<br>FIELD CHANGES | T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL | BY<br>A. PARADIS<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL<br>T. HAMEL | DATE<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020<br>JUN 2020 | SIGNATURE<br>P.E. NUMBER<br>DATE |  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br>2361750<br>BRIDGE NO. 1429<br>WIN<br>23617.50<br>BRIDGE PLANS |  |
|                                              | TEMPORARY PLATE DETAIL 2 OF 2,<br>I-95 OVER STILLWATER AVE |  |                                                                                                                                                                         |                                                                                                          |                                                                                                                  |                                                                                                                  |                                  |  |                                                                                                                 |  |
|                                              |                                                            |  |                                                                                                                                                                         |                                                                                                          |                                                                                                                  |                                                                                                                  |                                  |  |                                                                                                                 |  |
|                                              |                                                            |  |                                                                                                                                                                         |                                                                                                          |                                                                                                                  |                                                                                                                  |                                  |  |                                                                                                                 |  |

## Construction Notes

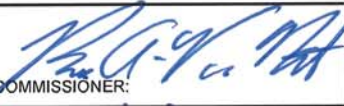
### Bridge Joint Modifications

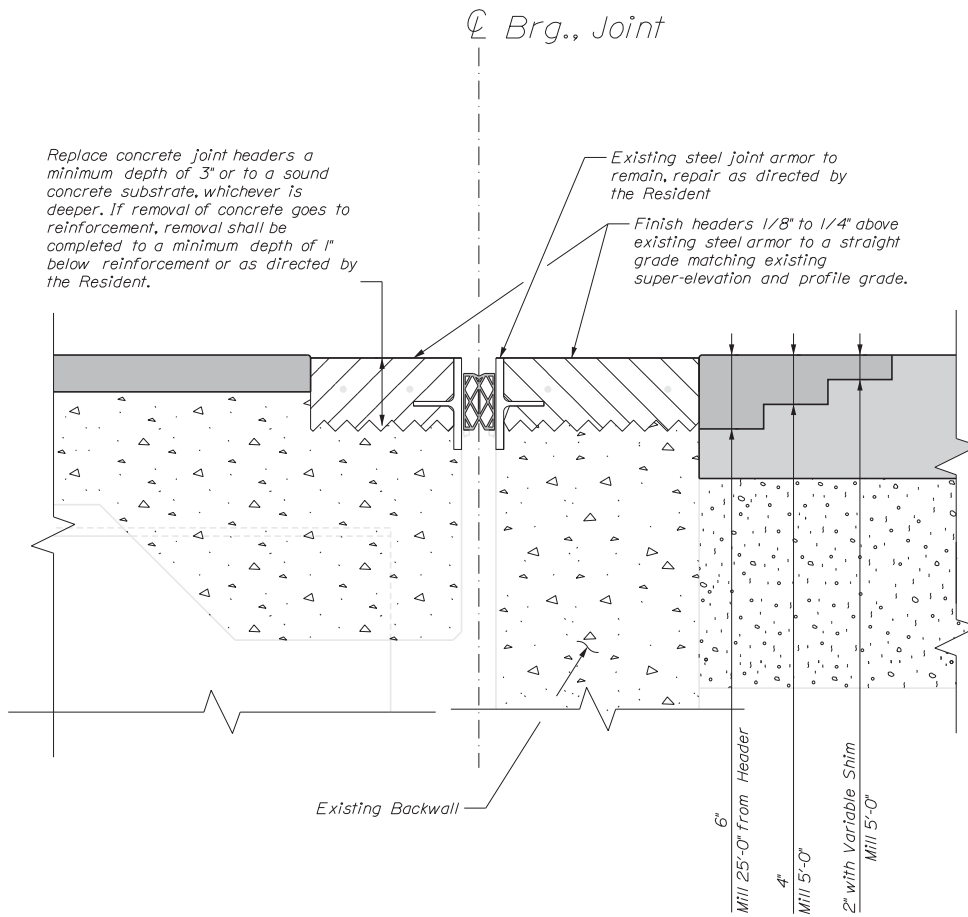
| <u>Bridge No.</u> | <u>Station(s)</u> | <u>Item</u> | <u>Description</u>                                                  |
|-------------------|-------------------|-------------|---------------------------------------------------------------------|
| 5972              | 85+63             | 520.243     | Bridge Joint Modification Type 3b<br>0.60" Movement Rating          |
| 5972              | 86+46             | 520.243     | Bridge Joint Modification Type 3b<br>1.85" Movement Rating          |
| 5972              | 87+10             | 520.243     | Bridge Joint Modification Type 3b<br>0.65" Movement Rating          |
| 5795              | 99+24 – 101+00    | 202.31      | Profile Mill Concrete Wearing Surface.                              |
| 5795              | 99+24 – 101+00    | 515.21      | Concrete Protective Coating                                         |
| 5791              | 214+13            | 520.243     | Bridge Joint Modification Type 3a                                   |
| 5791              | 218+50            | 520.243     | Bridge Joint Modification Type 3a                                   |
| 5800              | 299+92            | 520.244     | Bridge Joint Modification Type 4<br>0.75" Movement Rating           |
| 5800              | 300+84            | 520.244     | Bridge Joint Modification Type 4<br>1.70" Movement Rating           |
| 5800              | 299+92 & 300+84   | 524.50      | Temporary Roadway Plate, one at each joint<br>modification location |

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## STATE WIDE INTERSTATE BRIDGE JOINTS INTERSTATE 95 SOUTHBOUND PROJECT NO. 23617.60 JOINT REPLACEMENT BRIDGE NO. 1427, 5791, 1428, 1429

|                                                                                                                                                    |                                                                                                                                                  |                                                                                                         |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------|
| PROJECT LOCATION:                                                                                                                                  | Bridge No. 1425, 1427, 1429<br>44°49'26.9"N, 68°45'31.7"W; 44°48'52.8"N, 68°47'18.4"W;<br>44°47'13.1"N, 68°48'30.4"W; 44°47'01.9"N, 68°48'40.3"W |                                                                                                         |              |
| PROGRAM AREA:                                                                                                                                      | Highway-Bridges                                                                                                                                  |                                                                                                         |              |
| OUTLINE OF WORK:                                                                                                                                   | Joint Replacement                                                                                                                                |                                                                                                         |              |
| <br>SIGNATURE<br>No. 13307<br>P.E. NUMBER<br>06/15/2020<br>DATE |                                                                                                                                                  |                      |              |
|                                                                                                                                                    |                                                                                                                                                  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION                                                          |              |
|                                                                                                                                                    |                                                                                                                                                  | APPROVED                                                                                                | DATE         |
|                                                                                                                                                    |                                                                                                                                                  | <br>COMMISSIONER:   | 6-23-2020    |
|                                                                                                                                                    |                                                                                                                                                  | <br>CHIEF ENGINEER: | 6-23-2020    |
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION                                                                                                     | INTERSTATE 95 SOUTHBOUND<br>OLD TOWN-CARMEL PENOBSCOT COUNTY                                                                                     |                                                                                                         | SHEET NUMBER |
| 23617.60                                                                                                                                           | TITLE SHEET                                                                                                                                      |                                                                                                         | 1<br>OF 8    |

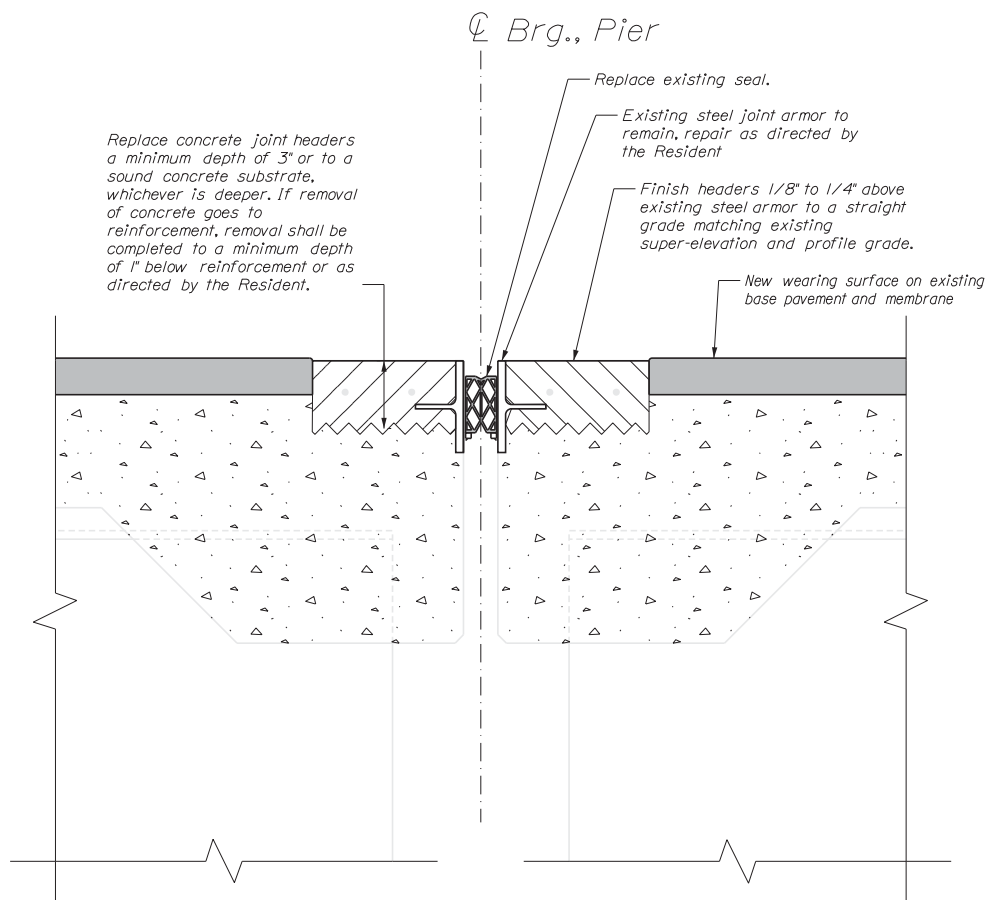


**BRIDGE JOINT MODIFICATION TYPE 3a**

**BRIDGE JOINT MODIFICATION TYPE 3a NOTES**

1. Bridge Joint Modification Type 3a, includes replacing the concrete header(s). Any damage to the existing joint armor, reinforcement, or membrane caused by the Contractor will not be paid separately but will be considered incidental. Replacement of surface and base HMA to complete this work will be paid for under appropriate contract items.
2. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.
3. Concrete headers shall be replaced from face of curb to face of barrier or as directed by the Resident.
4. Concrete headers shall be replaced to match existing or to a minimum width of 8" in the longitudinal direction, whichever is greater.

|                           |  |                                  |  |                  |  |                 |  |                 |  |              |  |
|---------------------------|--|----------------------------------|--|------------------|--|-----------------|--|-----------------|--|--------------|--|
| STATE OF MAINE            |  | DEPARTMENT OF TRANSPORTATION     |  | 2361760          |  | WIN             |  | BRIDGE NO. 5971 |  | BRIDGE PLANS |  |
| INTERSTATE 95 SOUTHBOUND  |  | OLD TOWN-CARMEL PENOBSCOT COUNTY |  | SIGNATURE        |  | P.E. NUMBER     |  | DATE            |  |              |  |
| BRIDGE JOINT MODIFICATION |  | TYPE 3a DETAIL                   |  | T. HAMEL         |  | W. RICHMAN      |  | JUN 2020        |  |              |  |
| SHEET NUMBER              |  | 2                                |  | DESIGN-DETAILED  |  | DESIGN-DETAILED |  | DESIGN-DETAILED |  |              |  |
|                           |  |                                  |  | CHECKED-REVIEWED |  | REVISIONS 1     |  | REVISIONS 2     |  | REVISIONS 3  |  |
|                           |  |                                  |  | DESIGN-DETAILED  |  | REVISIONS 4     |  | FIELD CHANGES   |  |              |  |
|                           |  |                                  |  | BY               |  | DATE            |  |                 |  |              |  |
|                           |  |                                  |  | T. HAMEL         |  | JUN 2020        |  |                 |  |              |  |
|                           |  |                                  |  | W. RICHMAN       |  | JUN 2020        |  |                 |  |              |  |



**BRIDGE JOINT MODIFICATION TYPE 3b**

**BRIDGE JOINT MODIFICATION TYPE 3b NOTES**

1. Bridge Joint Modification Type 3b, includes replacing the seal and concrete header(s). Any damage to the existing joint armor, reinforcement, or membrane caused by the Contractor will not be paid, separately but will be considered incidental. Replacement of surface and base HMA to complete this work will be paid for under appropriate contract items.

2. The Contractor shall be fully responsible for selecting the appropriately sized seal based on the Movement Rating provided, Contractor's field measured opening widths, and the Manufacturer's recommendations.

3. Seals indicated to be replaced shall extend the full width of the bridge plus a distance of 4' beyond the outside face of the curb on each side of the bridge.

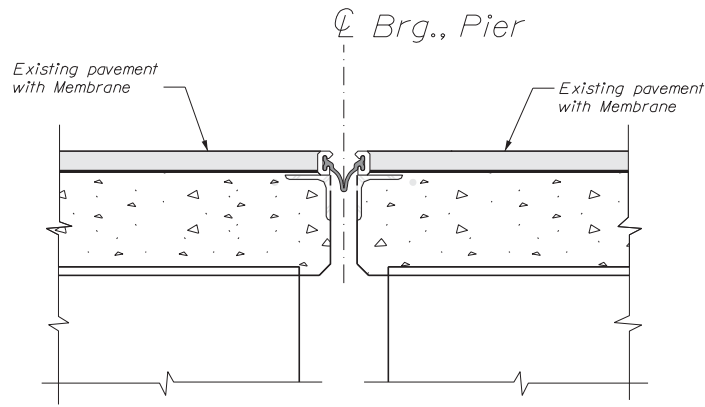
4. Existing joint armor shall be prepared in accordance with the seal manufacturer's recommendations. Existing damage shall be repaired and rough edges shall be ground smooth prior to installation of the seal. Preparation and repair of the existing joint armor will be considered incidental to the related joint modification items.

5. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.

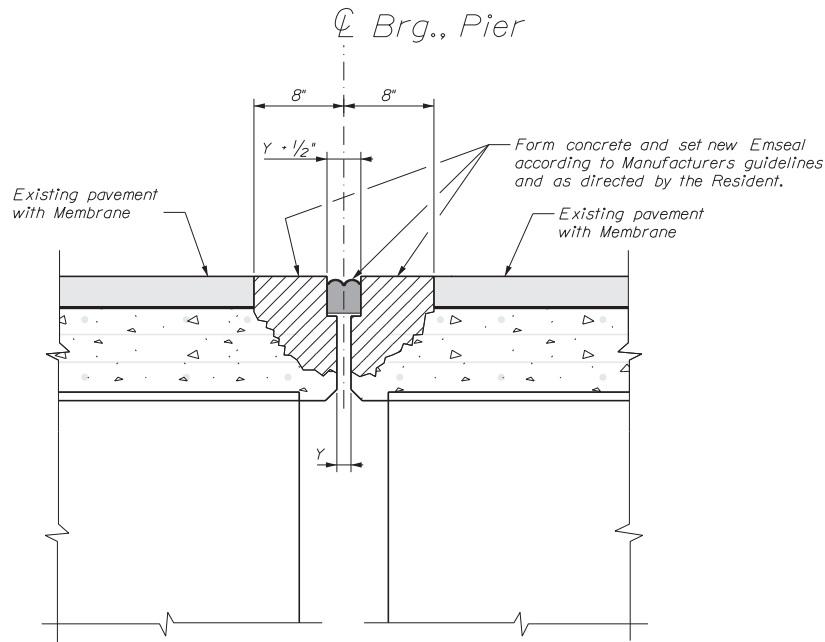
6. Concrete headers shall be replaced from face of curb to face of curb or as directed by the Resident.

7. Concrete headers shall be replaced to match existing or to a minimum width of 8" in the longitudinal direction, whichever is greater.

|                          |  |                                  |  |                           |  |                |  |              |  |                 |  |              |  |
|--------------------------|--|----------------------------------|--|---------------------------|--|----------------|--|--------------|--|-----------------|--|--------------|--|
| STATE OF MAINE           |  | DEPARTMENT OF TRANSPORTATION     |  | 2361760                   |  | WIN            |  | 23617.60     |  | BRIDGE NO. 5972 |  | BRIDGE PLANS |  |
| INTERSTATE 95 SOUTHBOUND |  | OLD TOWN-CARMEL PENOBSCOT COUNTY |  | BRIDGE JOINT MODIFICATION |  | TYPE 3b DETAIL |  | SHEET NUMBER |  | 3               |  | OF 8         |  |
| PROJECT MANAGER          |  | T. HAMEL                         |  | BY                        |  | DATE           |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| DESIGN-DETAILED          |  | T. HAMEL                         |  | W. ROHMAN                 |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| CHECKED-REVIEWED         |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| DESIGN-DETAILED          |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| REVISIONS 1              |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| REVISIONS 2              |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| REVISIONS 3              |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| REVISIONS 4              |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |
| FIELD CHANGES            |  | T. HAMEL                         |  | T. HAMEL                  |  | JUN 2020       |  | SIGNATURE    |  | P.E. NUMBER     |  | DATE         |  |



EXISTING GLAND SEAL BRIDGE JOINT



BRIDGE JOINT MODIFICATION TYPE 4

BRIDGE JOINT MODIFICATION TYPE 4 NOTES

1. Bridge Joint Modification Type 4, includes removal of the existing joint seal, armor, pavement, and deck concrete to below the top mat of deck reinforcement to provide adhesion of the new concrete headers, along with the installation of new concrete headers and Emseals as required to complete the work shown. Any damage caused by the Contractor to the existing reinforcement, wearing surface, or membrane to remain will not be paid separately. Any existing joint armor reinforcement or attachment points shall be cut off at the elevation of the top mat of reinforcement or as Directed by the Resident.
2. The Contractor shall be fully responsible for selecting the appropriately sized seal based on the Movement Rating provided, Contractor's field measured opening widths, and the Manufacturer's recommendations.
3. Seals indicated to be replaced shall extend the full width of the bridge plus a distance of 4' beyond the outside face of the curb on each side of the bridge. Concrete work at curblines shall be completed so that the seal maintains a contentions grade through the curb matching the adjacent shoulder.
4. Concrete headers shall be cast with a minimum  $\frac{1}{4}$ " shelf to seat the new joint seal. The shelf shall be located so that the new seal will be recessed  $\frac{1}{2}$ " to  $\frac{3}{4}$ " below the top of concrete.
5. The joint modifications shall be performed in accordance with these Plans, Section 520 of the Standard Details, and the Special Provisions.
6. Distance "Y" shall be determined by the Contractor and approved by the Resident, and shall be sized to allow the full Movement Rating of the joint plus  $\frac{1}{4}$ ".

|                              |                 |
|------------------------------|-----------------|
| STATE OF MAINE               | BRIDGE PLANS    |
| DEPARTMENT OF TRANSPORTATION | BRIDGE NO. 5800 |
| 2361760                      | WIN             |
| 23617.60                     |                 |

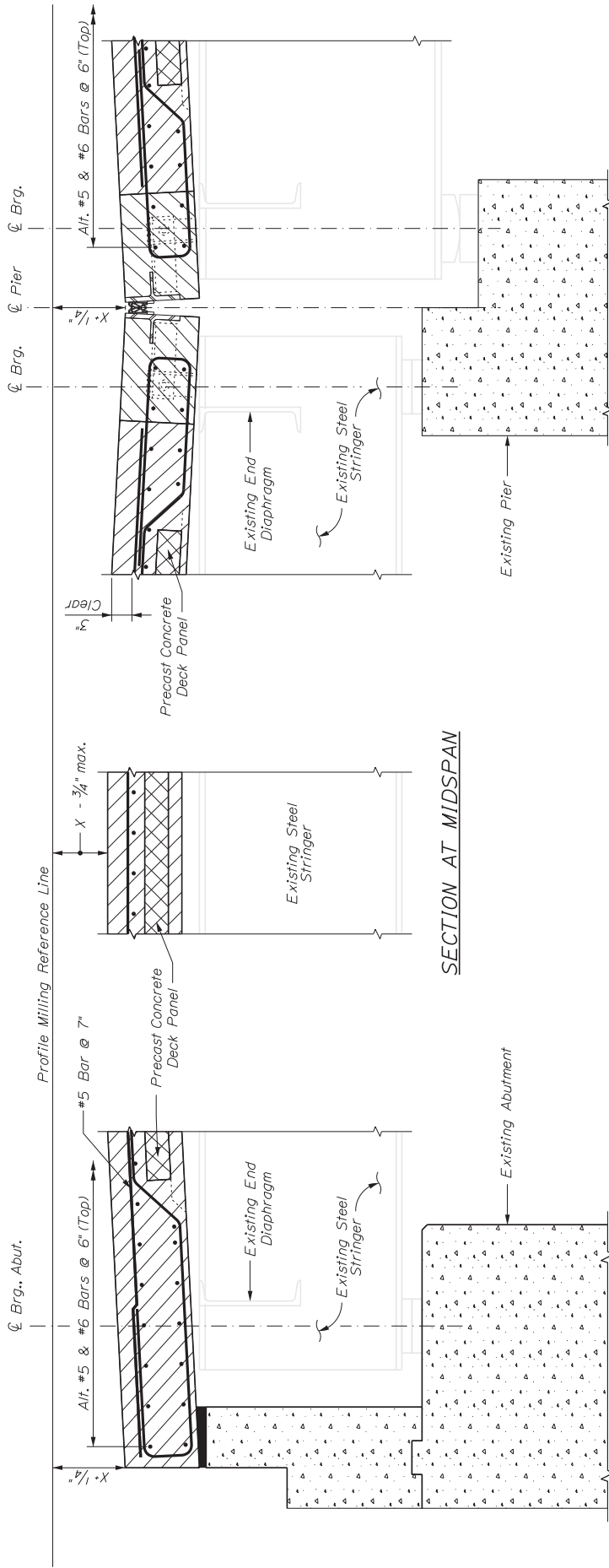
|                 |          |                  |          |             |          |
|-----------------|----------|------------------|----------|-------------|----------|
| PROJ. MANAGER   | T. HAMEL | BY               | R. MAYER | DATE        | JUN 2020 |
| DESIGN-DETAILED | T. HAMEL | CHECKED-REVIEWED | T. HAMEL | SIGNATURE   |          |
| DESIGN-DETAILED |          | DESIGN-DETAILED  |          | P.E. NUMBER |          |
| REVISIONS 1     |          | REVISIONS 1      |          | DATE        |          |
| REVISIONS 2     |          | REVISIONS 2      |          |             |          |
| REVISIONS 3     |          | REVISIONS 3      |          |             |          |
| REVISIONS 4     |          | REVISIONS 4      |          |             |          |
| FIELD CHANGES   |          | FIELD CHANGES    |          |             |          |

|                                  |                           |
|----------------------------------|---------------------------|
| INTERSTATE 95 SOUTHBOUND         | BRIDGE JOINT MODIFICATION |
| OLD TOWN-CARMEL PENOBSCOT COUNTY | TYPE 4 DETAIL             |

SHEET NUMBER

4

OF 8



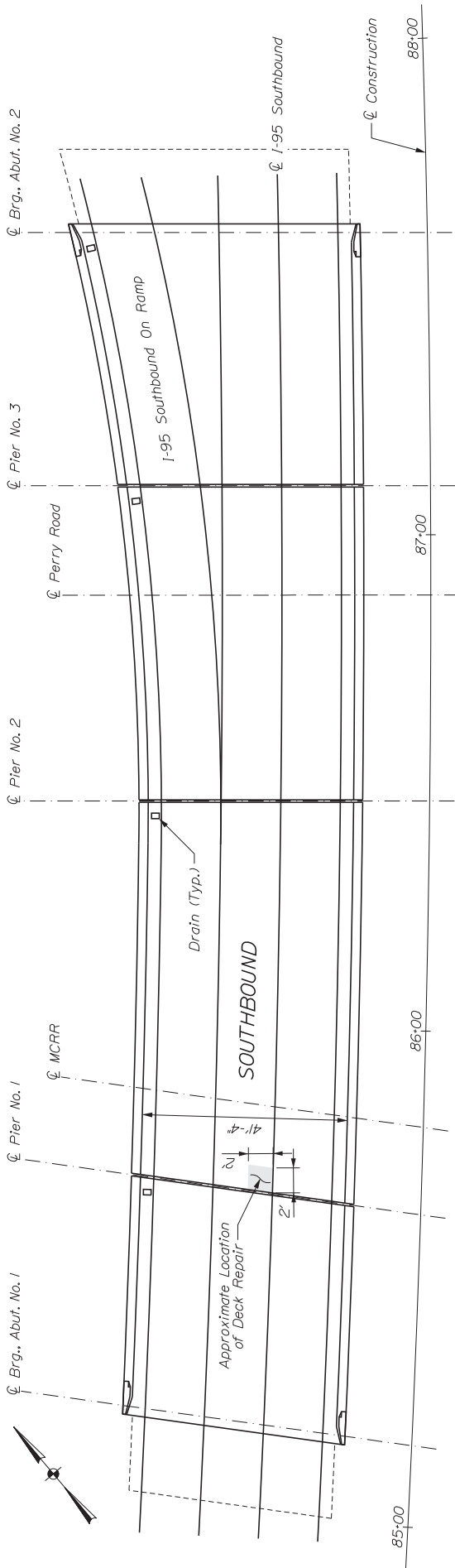
SECTION AT ABUTMENT

SECTION AT PIER

Notes:

1. The Contractor shall provide layout for Profile Milling the existing Concrete Wearing Surface to flatten the longitudinal grade changes to achieve as straight and consistent grade as possible.
2. Distance X from the Profile Milling Reference Line shall remain constant and is the depth from the reference line to the bottom of the grooves created by the milling teeth.
3. Additionally, at no point shall concrete milling be closer than 1/4" from the top of steel joint armor or bridge drains. Additional, no more than 3/4" of concrete in depth may be removed from any portion of the existing wearing surface.
4. Mainline shall be milled to match the existing 2% cross slope. Cross slope of shoulders outside of travel lanes and ramps may be reduced to 1.5% or as approved by the Resident, to maintain adequate drainage. Existing cross slopes shall be field verified by the Contractor.
5. Concrete Protective Coating shall be applied to all exposed concrete surfaces from left station drip notch to right station drip notch including deck fascias, barriers, transition barriers curblines, and concrete wearing surfaces.

|                                    |  |                              |  |
|------------------------------------|--|------------------------------|--|
| INTERSTATE 95 SOUTHBOUND           |  | STATE OF MAINE               |  |
| OLD TOWN - CARMEL PENOBSCOT COUNTY |  | DEPARTMENT OF TRANSPORTATION |  |
| PROFILE MILLING CONCRETE           |  | 2361760                      |  |
| I-395 OVERPASS WEARING SURFACE     |  | WIN                          |  |
| SHEET NUMBER                       |  | BRIDGE NO. 1428              |  |
| 5                                  |  | 23617.60                     |  |
| OF 8                               |  | BRIDGE PLANS                 |  |

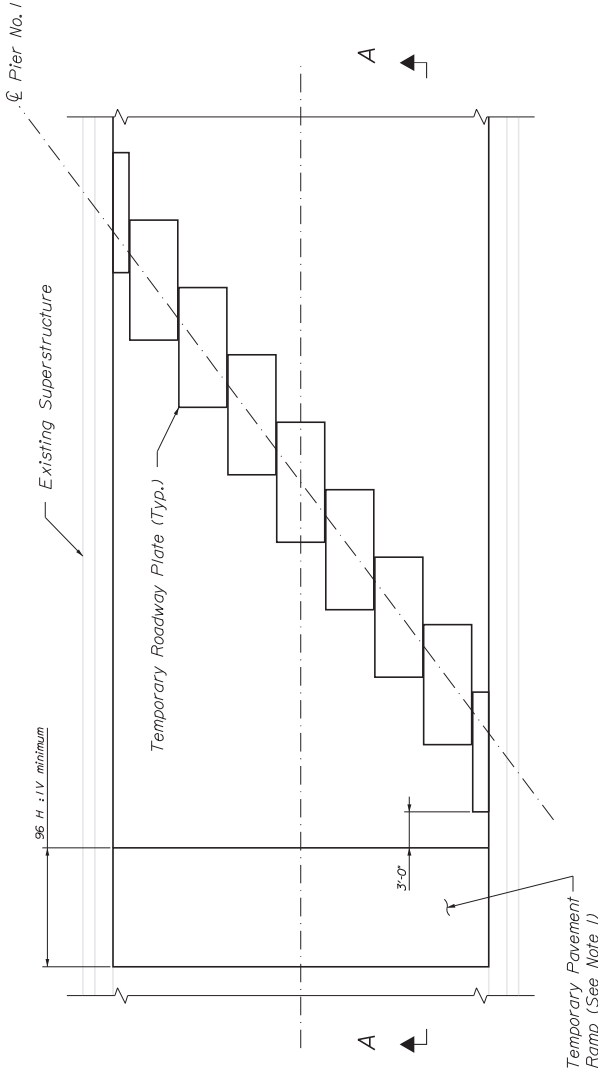


PLAN VIEW ~ I-95 SOUTHBOUND OVER MCRR AND PERRY ROAD

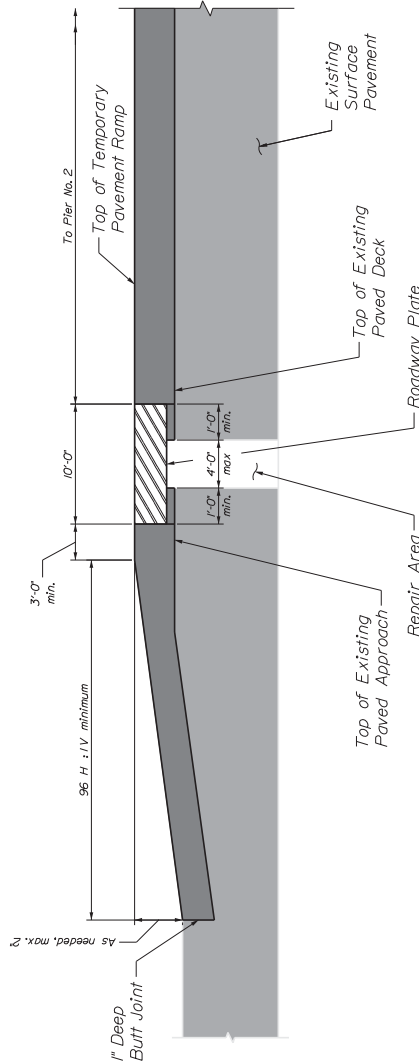
Notes:

- 1. Contractor shall saw cut and remove the existing pavement a minimum of 6 inches beyond the limits of the deck repair area taking care not to damage the waterproofing membrane.
- 2. Concrete shall be removed to 1 inch below the top mat of reinforcement or to a sound substrate, whichever is deeper. The Contractor shall take care not to damage existing reinforcement to remain.
- 3. Deck Repair work to be completed under applicable 518 concrete repair items as directed by the Resident.
- 4. High Performance Waterproofing Membrane shall be installed over the newly repaired and properly cured deck area with a 4 inch minimum overlap onto existing membrane. Preparation of the concrete surface and existing membrane shall be as required by the membrane manufacture and as directed by the Resident.
- 5. A road plate, secured to the existing asphalt wearing surface, or existing concrete header, or both, may be used if repair work cannot be completed in a single allotted lane closure. Road plating shall be considered incidental to Maintenance of Traffic Control and will not be paid for separately.
- 6. Deck repair work shall be completed prior to adjacent joint modifications.

|                                    |  |                              |  |                 |  |
|------------------------------------|--|------------------------------|--|-----------------|--|
| INTERSTATE 95 SOUTHBOUND           |  | STATE OF MAINE               |  |                 |  |
| OLD TOWN - CARMEL PENOBSCOT COUNTY |  | DEPARTMENT OF TRANSPORTATION |  |                 |  |
| DECK REPAIR                        |  | DESIGN-DETAILED              |  | SIGNATURE       |  |
|                                    |  | DESIGN-REVIEWED              |  | P.E. NUMBER     |  |
| SHEET NUMBER                       |  | DESIGN-DETAILED              |  | DATE            |  |
|                                    |  | DESIGN-REVIEWED              |  | BRIDGE NO. 1429 |  |
|                                    |  | DESIGN-DETAILED              |  | WIN             |  |
|                                    |  | DESIGN-REVIEWED              |  | 23617.60        |  |
| 6                                  |  | REVISIONS 1                  |  | BRIDGE PLANS    |  |
| OF 8                               |  | REVISIONS 2                  |  |                 |  |
|                                    |  | REVISIONS 3                  |  |                 |  |
|                                    |  | REVISIONS 4                  |  |                 |  |
|                                    |  | FIELD CHANGES                |  |                 |  |



PLAN VIEW



SECTION A-A  
TEMPORARY PLATE DETAIL

(Vertical Scale Exaggerated)  
(Pier No. 1 shown. Pier No. 2 similar but opposite)

NOTES

1. Butt joints and Temporary Pavement Ramps shall be incidental to Pay Item 524.50, Temporary Roadway Mat.
2. Contractor may propose alternate roadway plate designs in accordance with Special Provision 524.
3. Expansion Anchors shall be fully removable, heavy duty, vibration resistant self-locking sleeve anchors installed in accordance with manufacturer's requirements. Each Expansion Anchor shall have a minimum embedment into concrete of 4 inches, excluding pavement thickness, and capable of resisting a shear loading of 5.0 kips and a tensile force of 5.0 kips. Following completion of the work all bolt holes shall be filled with a non-shrink grout selected from the Qualified Products List.
4. The Contractor shall design and install the roadway plates to allow ample clearance to avoid contact between the plates and the work area during traffic loading.

|                                                            |  |                              |              |
|------------------------------------------------------------|--|------------------------------|--------------|
| INTERSTATE 95 SOUTHBOUND                                   |  | STATE OF MAINE               |              |
| OLD TOWN - CARMEL PENOBSCOT COUNTY                         |  | DEPARTMENT OF TRANSPORTATION |              |
| TEMPORARY PLATE DETAIL 1 OF 2,<br>I-95 OVER STILLWATER AVE |  | 2361760                      |              |
| SHEET NUMBER                                               |  | BRIDGE NO. 1427              | WIN          |
| 7                                                          |  | 23617.60                     | BRIDGE PLANS |
| OF 8                                                       |  |                              |              |



|              |  |                                                            |  |                   |  |          |  |          |  |           |  |                              |  |
|--------------|--|------------------------------------------------------------|--|-------------------|--|----------|--|----------|--|-----------|--|------------------------------|--|
| SHEET NUMBER |  | INTERSTATE 95 SOUTHBOUND                                   |  | PROJ. MANAGER     |  | T. HAMEL |  | BY       |  | DATE      |  | STATE OF MAINE               |  |
|              |  |                                                            |  |                   |  |          |  |          |  |           |  |                              |  |
| OF 8         |  | OLD TOWN - CARMEL PENOBSCOT COUNTY                         |  | DESIGN-DETAILED   |  | T. HAMEL |  | R. MAYER |  | JUN 2020  |  | DEPARTMENT OF TRANSPORTATION |  |
|              |  |                                                            |  | CHECKED-REVIEWED  |  | T. HAMEL |  | JUN 2020 |  | SIGNATURE |  |                              |  |
|              |  | TEMPORARY PLATE DETAIL 2 OF 2,<br>I-95 OVER STILLWATER AVE |  | DESIGN2-DETAILED2 |  |          |  |          |  |           |  | 2361760                      |  |
|              |  |                                                            |  | DESIGN3-DETAILED3 |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  | REVISIONS 1       |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  | REVISIONS 2       |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  | REVISIONS 3       |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  | REVISIONS 4       |  |          |  |          |  |           |  | WIN                          |  |
|              |  |                                                            |  | FIELD CHANGES     |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  |                   |  |          |  |          |  |           |  |                              |  |
|              |  |                                                            |  |                   |  |          |  |          |  |           |  | BRIDGE NO. 1427              |  |
|              |  |                                                            |  |                   |  |          |  |          |  |           |  | 23617.60                     |  |
|              |  |                                                            |  |                   |  |          |  |          |  |           |  | BRIDGE PLANS                 |  |

## Construction Notes

### **Bridge Joint Modifications**

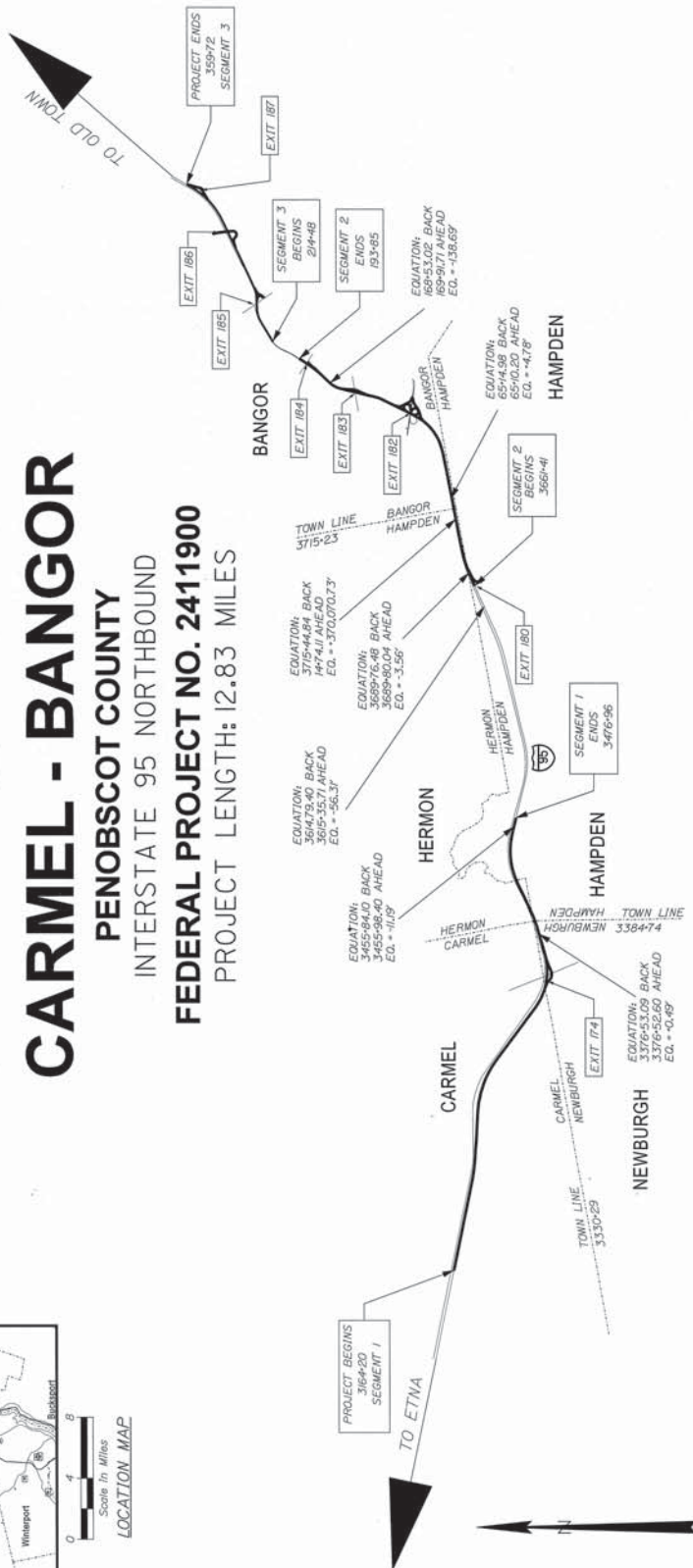
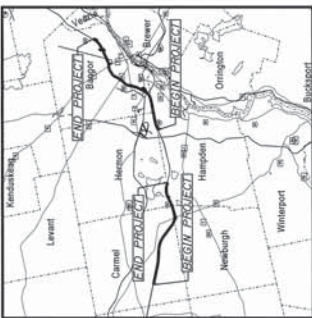
| <b><u>Bridge No.</u></b> | <b><u>Station(s)</u></b> | <b><u>Item</u></b> | <b><u>Description</u></b>                                           |
|--------------------------|--------------------------|--------------------|---------------------------------------------------------------------|
| 1427                     | 303+02                   | 520.244            | Bridge Joint Modification Type 4<br>1.70" Movement Rating           |
| 1427                     | 302+09                   | 520.244            | Bridge Joint Modification Type 4<br>0.75" Movement Rating           |
| 1427                     | 302+09 & 303+02          | 524.50             | Temporary Roadway Plate, one at each joint<br>modification location |
| 5791                     | 218+50                   | 520.243            | Bridge Joint Modification Type 3a                                   |
| 5791                     | 214+13                   | 520.243            | Bridge Joint Modification Type 3a                                   |
| 1428                     | 99+00 – 100+76           | 202.31             | Profile Mill Concrete Wearing Surface                               |
| 1428                     | 99+00 – 100+76           | 515.21             | Concrete Protective Coating                                         |
| 1429                     | 87+10                    | 520.243            | Bridge Joint Modification Type 3b<br>0.65" Movement Rating          |
| 1429                     | 86+46                    | 520.243            | Bridge Joint Modification Type 3b<br>1.85" Movement Rating          |
| 1429                     | 85+65                    | 508.14             | High Performance Waterproofing Membrane                             |
| 1429                     | 85+65                    | 518.51             | Repair of Upward Facing Surfaces Below<br>Reinforcement <8"         |
| 1429                     | 85+63                    | 520.243            | Bridge Joint Modification Type 3b<br>0.60" Movement Rating          |

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



CARMEL - BANGOR

PENOBSCOT COUNTY  
INTERSTATE 95 NORTHBOUND  
FEDERAL PROJECT NO. 2411900  
PROJECT LENGTH: 12.83 MILES



24119.00 FEDERAL PROJECT NO. 2411900

CARMEL - BANGOR  
INTERSTATE 95 NORTHBOUND  
TITLE SHEET

SHEET NUMBER  
1  
OF 1

| TRAFFIC DATA                   |  | SEGMENT 1<br>CARMEL/HARDEN<br>1-5 NB | COLD BROOK RD<br>OVERPASS TO<br>I-95 ON-RAMP | I-95 ON-RAMP<br>TO STILLWATER RD<br>OFF-RAMP | I-95 ON-RAMP<br>TO STILLWATER RD<br>TO ON-RAMP FROM<br>HOGAN RD |
|--------------------------------|--|--------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------------------------------------------|
| Current (2017) AADT            |  | 13130                                | 16240                                        | 24050                                        | 18140                                                           |
| Future (2032) AADT             |  | 15140                                | 18740                                        | 27740                                        | 19510                                                           |
| DHV - % of AADT                |  | 14%                                  | 15%                                          | 10%                                          | 11%                                                             |
| Design Hour Volume             |  | 2271                                 | 3012                                         | 2972                                         | 2228                                                            |
| % Heavy Trucks (AADT)          |  | 7%                                   | 13%                                          | 5%                                           | 8%                                                              |
| Directional Distribution (DHV) |  | 100%                                 | 100%                                         | 100%                                         | 100%                                                            |
| Design Speed (mph)             |  | 70                                   | 70                                           | 60                                           | 60                                                              |
| Functional Class:              |  | 1                                    | 1                                            | 1                                            | 1                                                               |
| Corridor Priority              |  | 1                                    | 1                                            | 1                                            | 1                                                               |

PROJECT LOCATION:

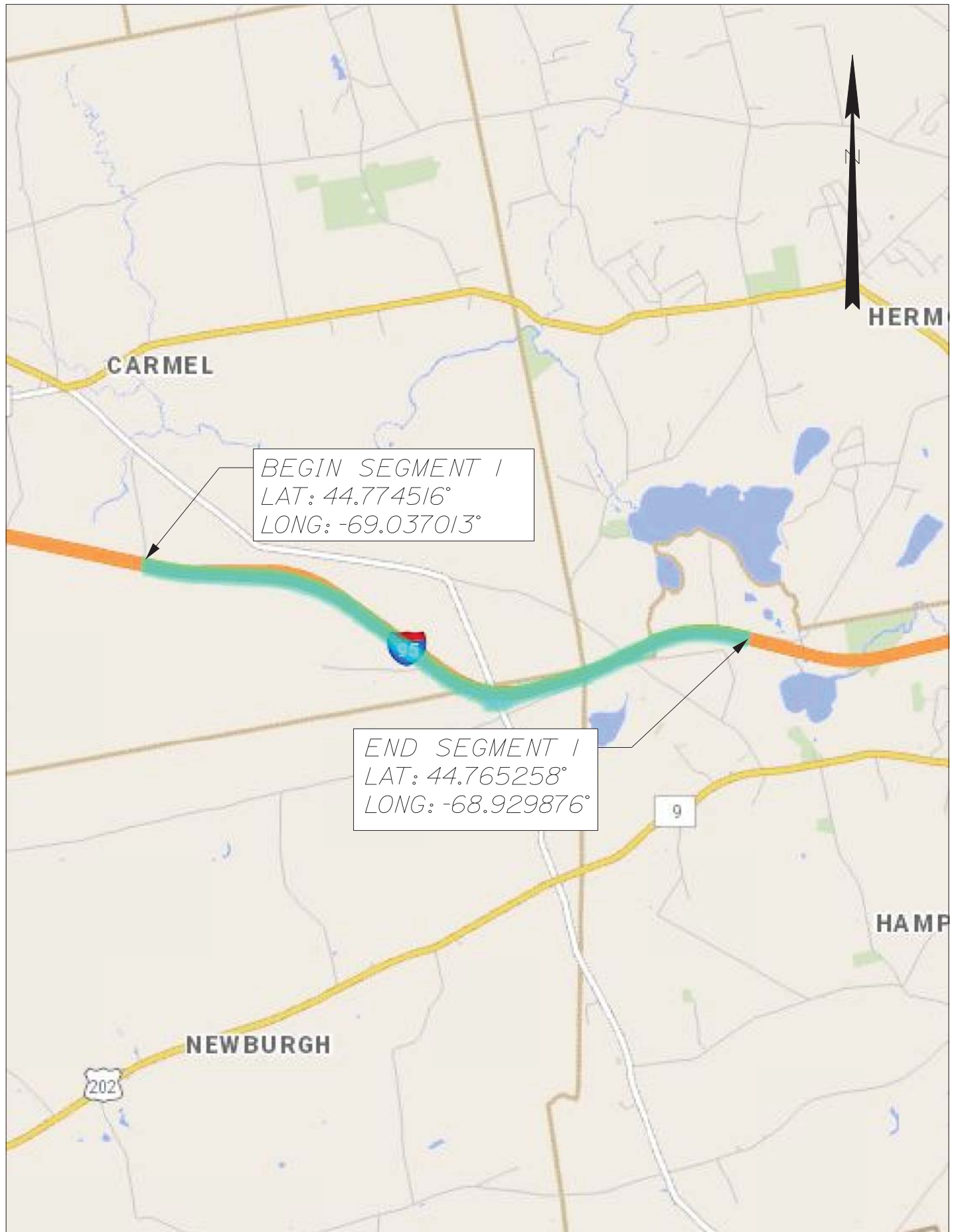
SEGMENT #1: BEGINNING AT MILE MARKER 170.44 CROSS OVER NB AND EXTENDING NORTH 5.67 MILES TO HAMPDEN. SEGMENT #2: BEGINNING 0.02 MILES NORTH OF THE COLD BROOK ROAD OVERPASS AND EXTENDING NORTH 4.41 MILES INTO BANGOR. SEGMENT #3: BEGINNING 0.39 MILES NORTH OF UNION STREET AND EXTENDING NORTH 2.75 MILES NORTH TO HOGAN ROAD IN BANGOR.

PROGRAM AREA:

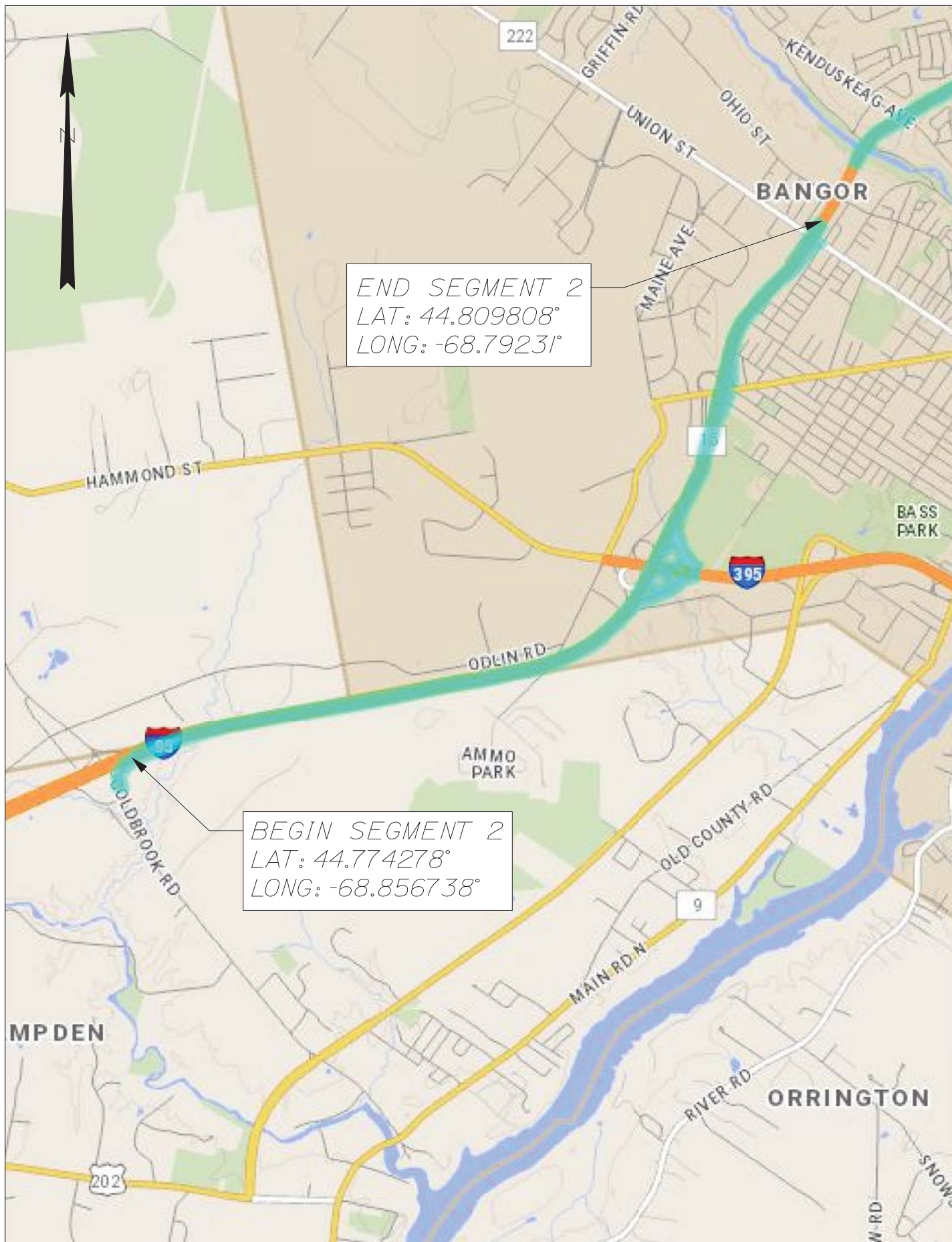
HIGHWAY PROGRAM

SCOPE OF WORK:

ULTRA-THIN BONDED WEARING COURSE



|                                                |                                              |                   |
|------------------------------------------------|----------------------------------------------|-------------------|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | INTERSTATE 95 NORTHBOUND<br>PENOBSCOT COUNTY | SHEET NUMBER<br>1 |
| 24119.00                                       | PLANS                                        | 54<br>OF 3        |



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95 NORTHBOUND  
PENOBSCOT COUNTY

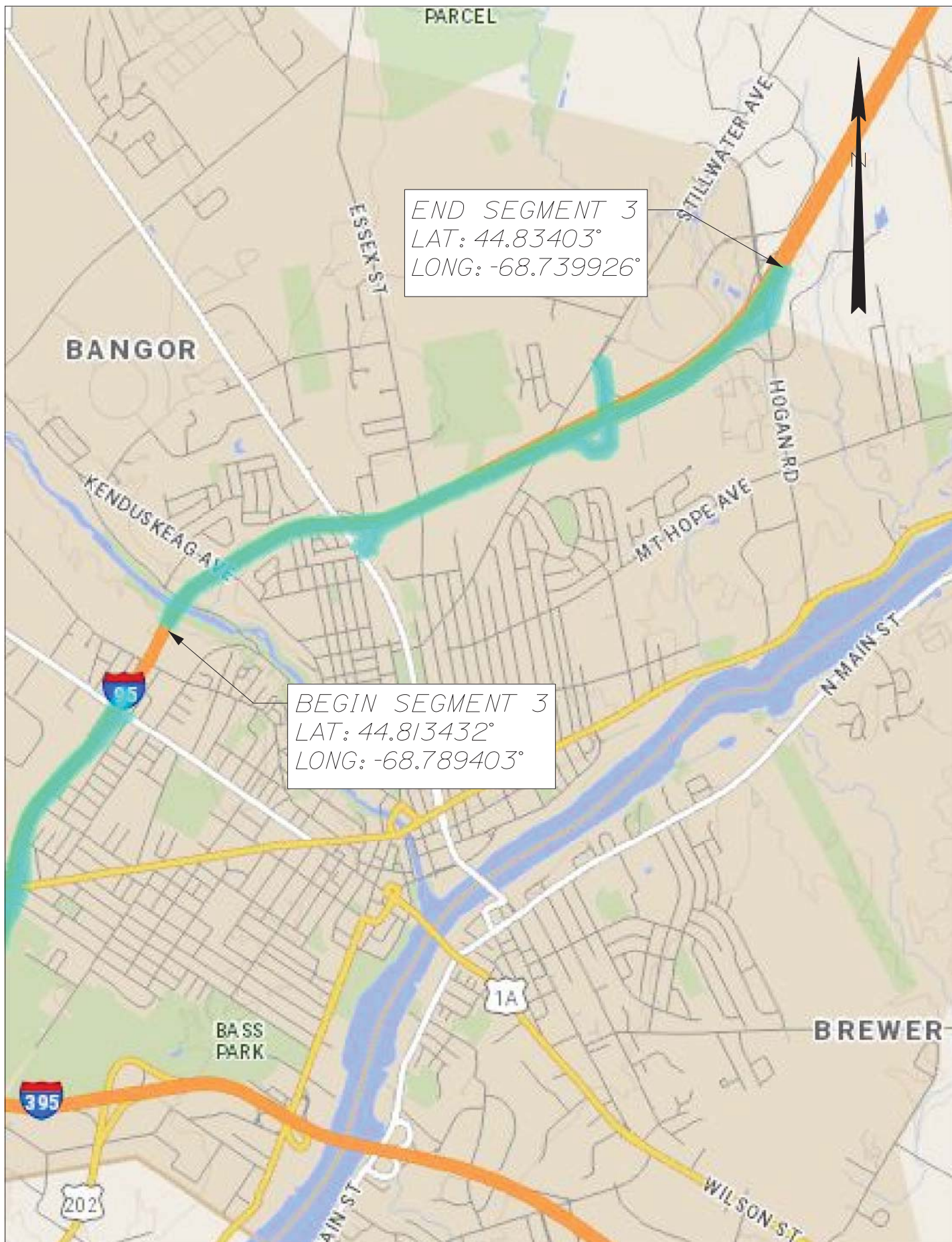
SHEET NUMBER

552

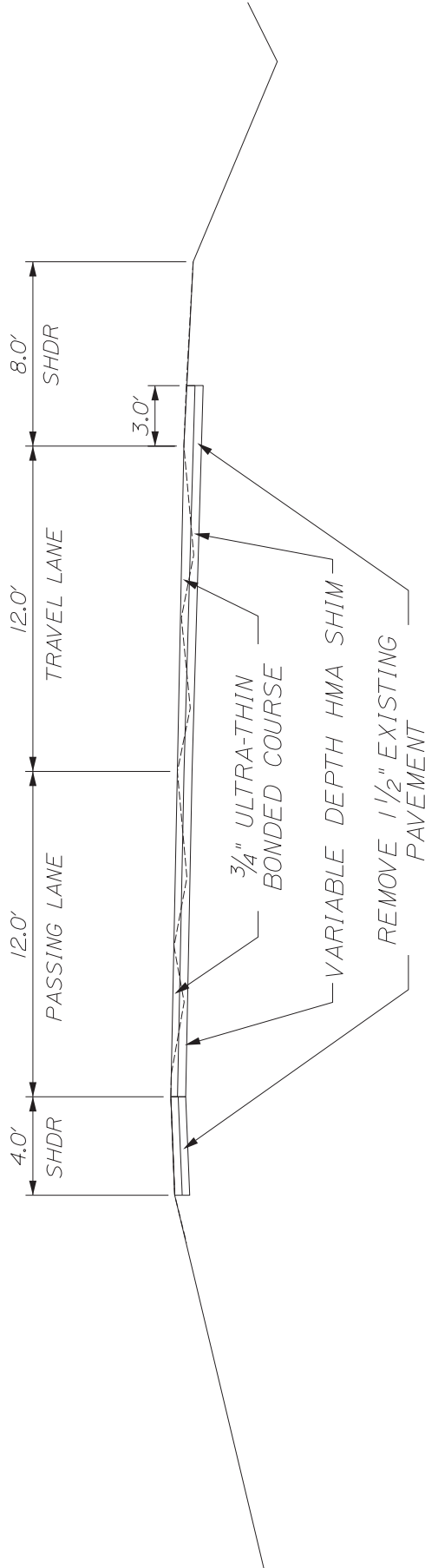
24119.00

PLANS

OF 3



SECTION 1:  
 1 1/2" MILL WITH VARIABLE DEPTH HMA SHIM  
 AND 3/4" ULTRA-THIN BONDED  
 WEARING COURSE



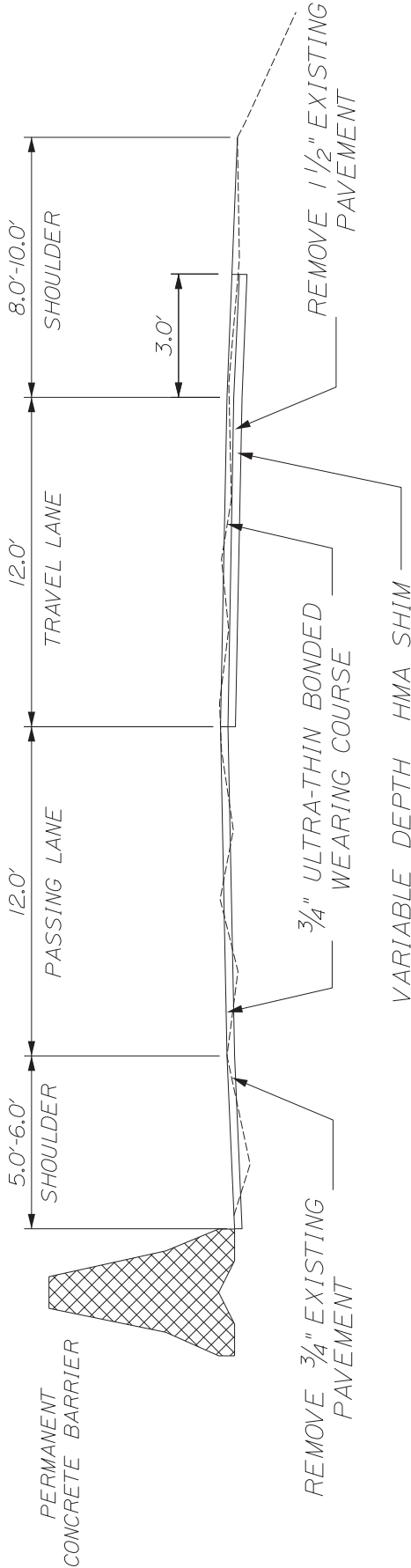
|                                              |              |                              |  |              |
|----------------------------------------------|--------------|------------------------------|--|--------------|
| CARMEL - BANGOR                              |              | STATE OF MAINE               |  | NOT TO SCALE |
| INTERSTATE 95 NORTHBOUND<br>TYPICAL SECTIONS | WIN 24119.00 | DEPARTMENT OF TRANSPORTATION |  | SHEET NUMBER |
|                                              |              | 2411900 HIGHWAY PLANS        |  | 1 OF 6       |

SECTION 2:  
 $\frac{3}{4}$ " MILL AND  $\frac{3}{4}$ " ULTRA-THIN  
 BONDED WEARING COURSE



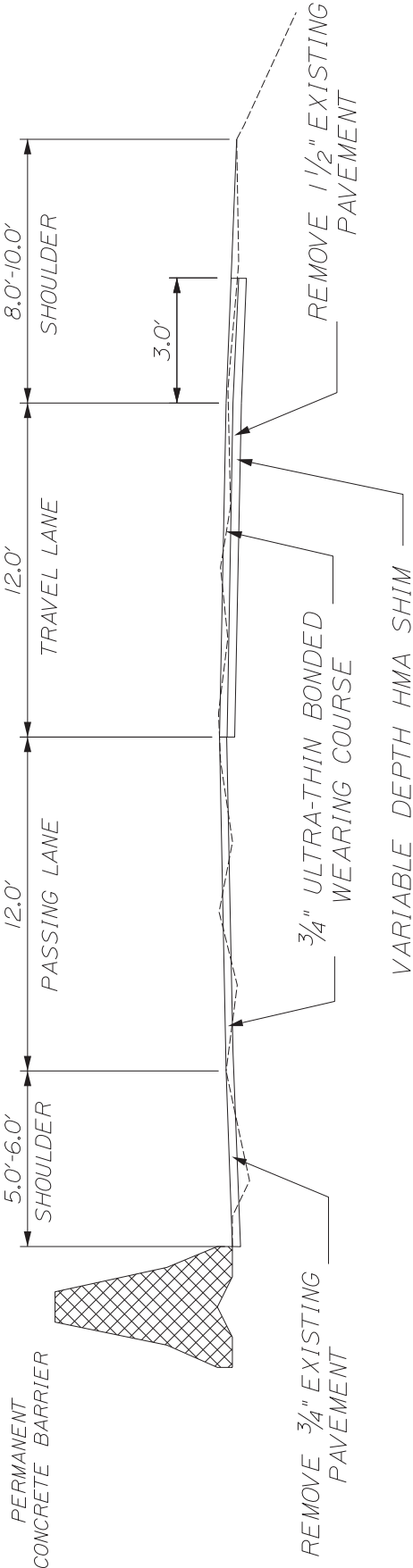
|                                              |              |                              |  |              |
|----------------------------------------------|--------------|------------------------------|--|--------------|
| CARMEL - BANGOR                              |              | STATE OF MAINE               |  | NOT TO SCALE |
| INTERSTATE 95 NORTHBOUND<br>TYPICAL SECTIONS | WIN 24119.00 | DEPARTMENT OF TRANSPORTATION |  | SHEET NUMBER |
|                                              |              | 2411900 HIGHWAY PLANS        |  | 2 OF 6       |

SECTION 2:  
 1 1/2" MILL WITH VARIABLE DEPTH HMA SHIM,  
 3/4" ULTRA-THIN BONDED WEARING COURSE



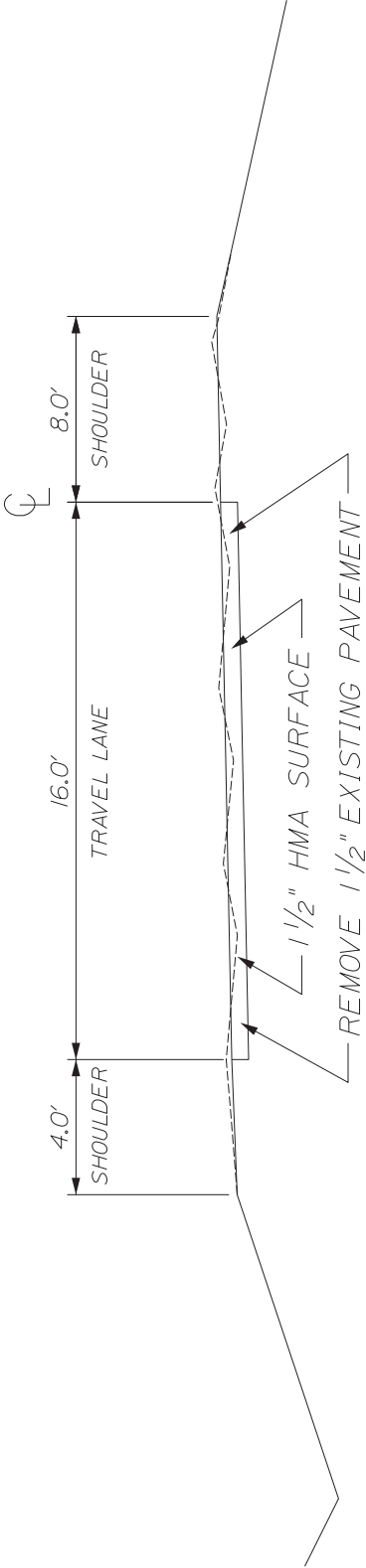
|                                              |              |                              |  |              |
|----------------------------------------------|--------------|------------------------------|--|--------------|
| CARMEL - BANGOR                              |              | STATE OF MAINE               |  | NOT TO SCALE |
| INTERSTATE 95 NORTHBOUND<br>TYPICAL SECTIONS | WIN 24119.00 | DEPARTMENT OF TRANSPORTATION |  | SHEET NUMBER |
|                                              |              | 2411900 HIGHWAY PLANS        |  | 3 OF 6       |

SECTION 3:  
 1 1/2" MILL WITH VARIABLE DEPTH HMA SHIM,  
 3/4" ULTRA-THIN BONDED WEARING COURSE



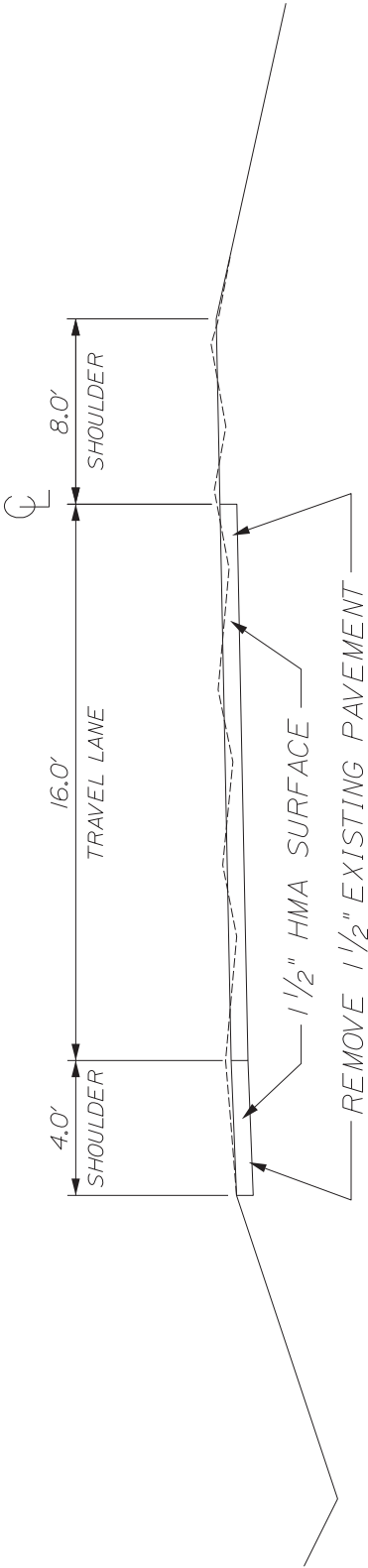
|                          |  |                                                |                        |
|--------------------------|--|------------------------------------------------|------------------------|
| CARMEL - BANGOR          |  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | NOT TO SCALE           |
| INTERSTATE 95 NORTHBOUND |  |                                                |                        |
| TYPICAL SECTIONS         |  | WIN 24119.00                                   | SHEET NUMBER<br>4 OF 6 |
|                          |  | 2411900                                        | HIGHWAY PLANS          |

ON/OFF RAMP  
 1 1/2" MILL AND FILL



|                                                                 |  |                                                                      |                        |
|-----------------------------------------------------------------|--|----------------------------------------------------------------------|------------------------|
| CARMEL - BANGOR<br>INTERSTATE 95 NORTHBOUND<br>TYPICAL SECTIONS |  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br><br><b>2411900</b> | NOT TO SCALE           |
|                                                                 |  | <b>WIN 24119.00</b>                                                  | SHEET NUMBER<br>5 OF 6 |
|                                                                 |  | HIGHWAY PLANS                                                        |                        |

REST STOP RAMPS  
 1 1/2" MILL AND FILL



|                                                                 |  |  |                                                               |              |                        |
|-----------------------------------------------------------------|--|--|---------------------------------------------------------------|--------------|------------------------|
| CARMEL - BANGOR<br>INTERSTATE 95 NORTHBOUND<br>TYPICAL SECTIONS |  |  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br><br>2411900 | WIN 24119.00 | NOT TO SCALE           |
|                                                                 |  |  | HIGHWAY PLANS                                                 |              | SHEET NUMBER<br>6 OF 6 |

## PROJECT STATIONING

| Lt                   | Section 1                       |                        |
|----------------------|---------------------------------|------------------------|
|                      | Station                         | Rt                     |
| Equation             | 3376+52.60 AHD<br>3376+53.09 BK | EQ.=+0.44'             |
| Crossover            | 3364+98                         |                        |
|                      | 3353+86                         | Mile Marker 174        |
| Overpass             | 3341+77                         | Route 69               |
| Town Line            | 3330+29                         | Entering Newburgh      |
| Crossover            | 3308+92                         |                        |
|                      | 3301+15                         | Mile Marker 173        |
|                      | 3248+35                         | Mile Marker 172        |
|                      | 3195+50                         | Mile Marker 171        |
| Crossover            | 3164+44                         |                        |
| <b>Begin Project</b> | 3164+20                         | <b>Begin Section 1</b> |

## PROJECT STATIONING

| Section 1     |                                 |                  |
|---------------|---------------------------------|------------------|
| Lt            | Station                         | Rt               |
| End Section 1 | 3476+96                         | End Section 1    |
|               | 3459+57                         | Mile Marker 176  |
| Equation      | 3455+98.40 AHD<br>3455+84.10 BK | EQ.=-11.19'      |
| Crossover     | 3411+10                         |                  |
|               | 3406+65                         | Mile Marker 175  |
| Overpass      | 3405+67                         | Newburgh Road    |
| Town Line     | 3384+74                         | Entering Hampden |

## PROJECT STATIONING

| Lt                     | Section 2                       |                        |
|------------------------|---------------------------------|------------------------|
|                        | Station                         | Rt                     |
| Overpass               | 146+57                          | Hammond Street         |
| "Gore" area            | 132+53                          | Hammond Sreet          |
|                        | 127+47                          | Mile Marker 183        |
| Overpass               | 65+01                           | Ammo Road              |
| Equation               | 65+10.20 AHD<br>65+14.98 BK     | EQ.=+4.78              |
| Equation               | 14+74.11 AHD<br>3715+44.84 BK   | EQ.=+370,070.73        |
| Town Line              | 3715+23                         | Entering Bangor        |
| Equation               | 3689+80.04 AHD<br>3689+76.48 BK | EQ.=-3.56'             |
| Crossover              | 3674+29                         |                        |
| Town Line              | 3673+49                         | Entering Hermon        |
|                        | 3669+99                         | Mile Marker 180        |
| <b>Begin Section 2</b> | 3661+41                         | <b>Begin Section 2</b> |

## PROJECT STATIONING

| Section 2            |                               |                      |
|----------------------|-------------------------------|----------------------|
| Lt                   | Station                       | Rt                   |
| <b>End Section 2</b> | 193+85                        | <b>End Section 2</b> |
| Overpass             | 191+95                        | Union Street         |
|                      | 181+15                        | Mile Marker 184      |
| Equation             | 169+91.71 AHD<br>168+53.02 BK | EQ.=-138.69'         |

**Project Stationing**

| <b>Lt</b>           | <b>Section 3<br/>Station</b> | <b>Rt</b>              |
|---------------------|------------------------------|------------------------|
| Bridge Joint        | 300+50                       | Bridge #5800           |
| Bridge Joint        | 298+30                       | Bridge #5800           |
|                     | 286+30                       | Mile Marker 186        |
| Overpass            | 272+40                       | Essex Street           |
| Bridge Joint        | 256+59                       | Bridge #5789           |
| Bridge Joint        | 255+02                       | Bridge #5789           |
|                     | 233+92                       | Mile Marker 185        |
| Overpass            | 228+57                       | Kenduskeag Road        |
| Bridge Joint        | 218+79                       | Bridge #5791           |
| <b>Bridge Joint</b> | <b>214+48</b>                | <b>Begin Section 3</b> |

**Project Stationing**

| <b>Lt</b>          | <b>Station</b> | <b>Rt</b>          |
|--------------------|----------------|--------------------|
| <b>End Project</b> | 359+72         | <b>End Project</b> |
| Overpass           | 356+59         | Hogan Road         |
|                    | 337+76         | Mile Marker 187    |
| Crossover          | 335+17         |                    |
| Overpass           | 315+20         | Stillwater Avenue  |

## Construction Notes

Reference to left or right is in the direction of stationing which runs south to north.

### 202.2023 Removing Pavement Surface – Medium Cut Drum

| <u>Station</u>          | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                                    |
|-------------------------|-----------|----------------|--------------|-----------------------------------------------------------------------------------|
| <b><u>Section 1</u></b> |           |                |              |                                                                                   |
| 3164+20                 | -         | 3455+84        | 1 ½"         | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| 3455+98                 | -         | 3476+96        | 1 ½"         | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| <b><u>Section 2</u></b> |           |                |              |                                                                                   |
| 3661+41                 | -         | 3689+76        | ¾"           | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| 3689+80                 | -         | 3715+45        | ¾"           | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| 14+74                   | -         | 65+15          | ¾"           | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 65+10                   | -         | 85+20          | ¾"           | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 85+20                   | -         | 87+18          | ¾"           | 45'0"+/- Bridge #5972 Full Width                                                  |
| 87+18                   | -         | 99+85          | ¾"           | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 99+85                   | -         | 100+99         | ¾"           | 45'0"+/- Bridge #5795 Full Width                                                  |
| 100+99                  | -         | 132+53         | ¾"           | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 132+53                  | -         | 168+53         | ¾", 1 ½"     | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 169+92                  | -         | 193+85         | ¾", 1 ½"     | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |

## Construction Notes

### 202.2023 Removing Pavement Surface – Medium Cut Drum (Continued)

| <u>Station</u>          | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                                    |
|-------------------------|-----------|----------------|--------------|-----------------------------------------------------------------------------------|
| <b><u>Section 3</u></b> |           |                |              |                                                                                   |
| 214+44                  | -         | 218+79-        | ¾"           | 44'0" +/- Bridge #5791 Full Width                                                 |
| 218+79                  | -         | 255+02         | ¾", 1 ½"     | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 255+02                  | -         | 256+59         | ¾"           | 44'0" +/- Bridge #5789 Full Width                                                 |
| 256+59                  | -         | 298+30         | ¾", 1 ½"     | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 298+30                  | -         | 300+50         | ¾"           | 35'0" +/- Bridge #5800 Full Width                                                 |
| 300+50                  | -         | 359+72         | ¾", 1 ½"     | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |

### Ramps

| <u>Station</u>                                  | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                              |
|-------------------------------------------------|-----------|----------------|--------------|-----------------------------------------------------------------------------|
| Rest Area – Deceleration Lane                   |           |                |              |                                                                             |
| 0+00                                            | -         | 24+32+/-       | 1 ½"         | mill mainline, width 16'+/-                                                 |
| Rest Area- Acceleration Lane                    |           |                |              |                                                                             |
| 0+00                                            | -         | 14+15+/-       | 1 ½"         | mill mainline, width 16'+/-                                                 |
| Rest Area car Parking Lot and Truck parking Lot |           |                |              |                                                                             |
| 0+00                                            | -         | 3+76+/-        | 1 ½"         | mill car parking area width 38'+/-                                          |
| 0+00                                            | -         | 5+12+/-        | 1 ½"         | mill Truck parking area width 75'+/-                                        |
| Exit 174 Carmel NB Off Ramp (Left slip Ramp)    |           |                |              |                                                                             |
| 0+00                                            | -         | 0+50/-         | 1 ½"         | mill full width curb to curb 26' +/-<br>Intersection                        |
| Exit 174 Carmel NB Off Ramp                     |           |                |              |                                                                             |
| 0+00                                            | -         | 17+12+/-       | 1 ½"         | mill mainline 17' +/-, widen to full<br>Width 100'+/- prior to intersection |

## Construction Notes

### 202.2023 Removing Pavement Surface- Medium Cut Drum (Continued)

| <u>Station</u>                                                | <u>to</u> | <u>Station</u> | <u>Ramps</u><br><u>Depth</u> | <u>Remarks</u>                                                      |
|---------------------------------------------------------------|-----------|----------------|------------------------------|---------------------------------------------------------------------|
| Exit 174 Carmel NB On Ramp<br>0+00                            | -         | 18+89+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 183 Hampden NB Off Ramp (Left slip Ramp)<br>0+00         | -         | 0+40+/-        | 1 ½"                         | mill mainline full width curb to curb<br>To intersection            |
| Exit 183 Hammond Street NB Off Ramp<br>0+00                   | -         | 15+07+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 183 Hammond Street NB On Ramp<br>0+00                    | -         | 16+48+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 184 Union NB Off Ramp<br>0+00                            | -         | 12+10+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 184 Union Street NB On Ramp<br>0+00                      | -         | 14+35+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 185 Broadway Street NB Off Ramp (Left slip Ramp)<br>0+00 | -         | 0+31+/-        | 1 ½"                         | mill full width curb to curb to<br>intersection                     |
| Exit 185 Broadway Street NB Off Ramp<br>0+00                  | -         | 21+00+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 185 Broadway Street NB On Ramp<br>0+00                   | -         | 19+71+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 186 Stillwater Avenue NB Off Ramp<br>0+00                | -         | 26+91+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 186 Hogan Road NB Off Ramp<br>0+00                       | -         | 14+92+/-       | 1 ½"                         | mill mainline, widen to full width<br>100'+/- prior to intersection |
| Exit 186 Hogan Road NB Off Ramp (Left slip Ramp)<br>0+00      | -         | 4+00+/-        | 1 ½"                         | mill full width curb to curb to<br>intersection                     |

## Construction Notes

### **202.2023 Removing Pavement Surface- Medium Cut Drum (Continued)**

Contractor will remove pavement to maintain existing cross slopes or as directed by the Resident. Mark downs shall be in place on mainline prior to commencing milling operations. Contractor will establish centerline control points prior to removal of existing centerline. See Typical sections for ramps. **The Contractor will retain 100% of the millings/grindings. Above locations are estimates only and may be changed by the Resident.**

### **403.2081 12.5mm Polymer Modified Hot Mix Asphalt**

This item to be used to pave existing cross overs and at the following locations:

| <b><u>Station</u></b> | <b><u>Depth</u></b> |
|-----------------------|---------------------|
| 3164+44 Lt.           | 1 ½"                |
| 3308+92 Lt.           | 1 ½"                |
| 3364+98 Lt.           | 1 ½"                |
| 3411+10 Lt.           | 1 ½"                |
| 3674+96 Lt.           | 1 ½"                |
| 3758+16 Lt.           | 1 ½"                |
| 4034+97 Lt.           | 1 ½"                |

This item will be also be used as surface layer at the Hampden Rest Area, including the On Ramps and Off Ramps.

### **Item 403.209 Hot Mix Asphalt 9.5mm (Incidentals)**

This item has been estimated for use at the NB Rest Area for paving sidewalks and as directed by the Resident.

### **403.211 Hot Mix Asphalt Shim**

| <b><u>Station</u></b>   | <b><u>to</u></b> | <b><u>Station</u></b> | <b><u>Depth</u></b> | <b><u>Remarks</u></b>                             |
|-------------------------|------------------|-----------------------|---------------------|---------------------------------------------------|
| <b><u>Section 1</u></b> |                  |                       |                     |                                                   |
| 3164+20                 | -                | 3455+84               | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |
| 3455+98                 | -                | 3476+96               | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |

## Construction Notes

### **403.211 Hot Mix Asphalt Shim**

| <b><u>Station</u></b>   | <b><u>to</u></b> | <b><u>Station</u></b> | <b><u>Depth</u></b> | <b><u>Remarks</u></b>              |
|-------------------------|------------------|-----------------------|---------------------|------------------------------------|
| <b><u>Section 2</u></b> |                  |                       |                     |                                    |
| 132+53                  | -                | 168+53                | ¾"                  | 12'6"+/- Travel Lane Only 12.5'+/- |
| 169+92                  | -                | 193+85                | ¾"                  | 12'6"+/- Travel Lane Only 12.5'+/- |

### **Section 3**

|        |   |        |    |                                    |
|--------|---|--------|----|------------------------------------|
| 218+79 | - | 255+02 | ¾" | 12'6"+/- Travel Lane Only 12.5'+/- |
| 256+59 | - | 298+30 | ¾" | 12'6"+/- Travel Lane Only 12.5'+/- |
| 300+50 | - | 359+72 | ¾" | 12'6"+/- Travel Lane Only 12.5'+/- |

In addition to the sections listed above this item to be used on some cross overs and for possible delamination areas in the medium cut milling areas, rutting areas, or as directed the Resident. At all bridge deck locations, a shim layer will be placed if needed after milling is complete.

### **410.151 Emulsified Asphalt Sealcoat Applied**

To be applied to the 4' & 10' shoulders the entire length of project and ramp shoulders as directed. Item will be applied after Item 202.205 Rumble Strips – Shoulder has been completed. It is the intent to seal the rumble strip areas.

### **424.22 Asphalt Rubber Crack Sealer Type 2, Applied**

Item will be used to treat mainline cracks after item 202.203 has been completed, centerline, longitudinal cracks on mainline, including other areas, as determined and directed by the Resident. Applications in mainline areas shall have a cure time of 48 hours after application prior to placement of UTBWC. Item shall also be applied to 10' shoulders entire length of project, ramps, and as directed prior to application of Item 410.151.

## Construction Notes

### **424.38 Crack Repair – Hot Pour Mastic**

Item will be used to treat mainline cracks after item 202.2023 has been completed. This item will be used on cracks wider than 1" on centerline, longitudinal cracks on mainline, including other areas, as determined and directed by the Resident. Applications in mainline areas shall have a cure time of 48 hours after application prior to placement of UTBWC

### **462.301 Polymer Modified Ultra-Thin Bonded Wearing Course**

| <b><u>Station</u></b>   | <b><u>to</u></b> | <b><u>Station</u></b> | <b><u>Depth</u></b> | <b><u>Remarks</u></b>                             |
|-------------------------|------------------|-----------------------|---------------------|---------------------------------------------------|
| <b><u>Section 1</u></b> |                  |                       |                     |                                                   |
| 3164+20                 | -                | 3455+84               | ¾"                  | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-   |
| 3455+98                 | -                | 3476+96               | ¾"                  | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-   |
| <b><u>Section 2</u></b> |                  |                       |                     |                                                   |
| 3661+41                 | -                | 3689+76               | ¾"                  | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-   |
| 3689+80                 | -                | 3715+45               | ¾"                  | 31'0"+/- Passing Lane 16'+/- Travel Lane 15'+/-   |
| 14+74                   | -                | 65+15                 | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |
| 65+10                   | -                | 85+20                 | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |
| 85+20                   | -                | 87+18                 | ¾"                  | 45'0"+/- Bridge #5972 Full Width                  |
| 87+18                   | -                | 99+85                 | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |
| 99+85                   | -                | 100+99                | ¾"                  | 45'0"+/- Bridge #5795 Full Width                  |
| 100+99                  | -                | 132+53                | ¾"                  | 28'6"+/- Passing Lane 16'+/- Travel Lane 12.5'+/- |
| 132+53                  | -                | 168+53                | ¾"                  | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/- |
| 169+92                  | -                | 193+85                | ¾"                  | 30'6"+/- Passing Lane 18'+/- Travel Lane 12.5'+/- |

## Construction Notes

### **462.301 Polymer Modified Ultra-Thin Bonded Wearing Course (Continued)**

| <b><u>Station</u></b>   | <b><u>to</u></b> | <b><u>Station</u></b> | <b><u>Depth</u></b> | <b><u>Remarks</u></b>                                |
|-------------------------|------------------|-----------------------|---------------------|------------------------------------------------------|
| <b><u>Section 3</u></b> |                  |                       |                     |                                                      |
| 214+44                  | -                | 218+79-               | ¾"                  | 44'0" +/- Bridge #5791 Full Width                    |
| 218+79                  | -                | 255+02                | ¾"                  | 30'6" +/- Passing Lane 18' +/- Travel Lane 12.5' +/- |
| 255+02                  | -                | 256+59                | ¾"                  | 44'0" +/- Bridge #5789 Full Width                    |
| 256+59                  | -                | 298+30                | ¾"                  | 30'6" +/- Passing Lane 18' +/- Travel Lane 12.5' +/- |
| 298+30                  | -                | 300+50                | ¾"                  | 35'0" +/- Bridge #5800 Full Width                    |
| 300+50                  | -                | 359+72                | ¾"                  | 28'6" +/- Passing Lane 16' +/- Travel Lane 12.5' +/- |

### **627.30 Grooving for Pavement Marking**

Item shall include yellow edge line, white edge line, and white skips. Skip lines shall be ground 15 feet in length.

### **Item 627.733 4" White or Yellow Painted Pavement Marking Line**

Item to be used at the Hampden Rest Area.

### **627.745 6" White or Yellow Polyurea Pavement Marking Line**

Item shall include yellow edge line, white edge line, and white skips. Skip lines shall be 15 feet in length.

### **627.78 Temporary 4" Painted Pavement Marking Line, White or Yellow**

All areas that have received the surface course shall be painted prior to being opened to traffic or immediately after the lane closure is removed. Any striping procedure besides paint, including white and yellow temporary approved raised pavement markers, shall be considered incidental to item 462.301.

## Construction Notes

### **627.781 Temporary 6" Painted Pavement Marking Line, White or Yellow**

Item is to be used once lanes have been milled, prior to being opened to traffic or immediately after the lane closure is removed. Any striping procedure besides paint, including white and yellow temporary approved raised pavement markers, shall be incidental to item 202.2023.

### **629 and 631 Items**

These items to be used for cleaning winter sand from guardrail areas and paved areas under overpasses, and removing excess material from in-slopes, in-slopes behind guardrail areas, ditching, and other work as directed. All equipment used for certain tasks and operations will be as directed by the Resident.

### **643.87 Weigh In Motion**

3410+80 Travel and Passing Lane. See Special Provision.

### **652.35 Construction Signs**

Two "Road Work Next 25 Miles" signs will be required as part of this project.  
Two "End Road Work" signs will be required at the end of the project.

GUARDRAIL

| Item 606.1305 MID-WAY<br>SPLICE<br>FLARED TERMINAL<br>Station |  |  |  | REMARKS                                          |
|---------------------------------------------------------------|--|--|--|--------------------------------------------------|
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
| 3212+19 to 3212+57 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3212+19 to 3212+57 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3244+09 to 3244+47 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3244+90 to 3245+28 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3265+44 to 3265+82 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3266+05 to 3266+43 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3277+94 to 3278+32 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3278+56 to 3278+94 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3300+97 to 3301+35 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3321+54 to 3321+92 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3321+67 to 3322+05 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3338+00 to 3338+38 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3338+77 to 3339+15 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3348+87 to 3349+25 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3402+65 to 3403+03 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3403+76 to 3404+14 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3414+20 to 3414+58 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3414+20 to 3414+58 Right                                      |  |  |  | Replace existing end / utilize existing widening |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |

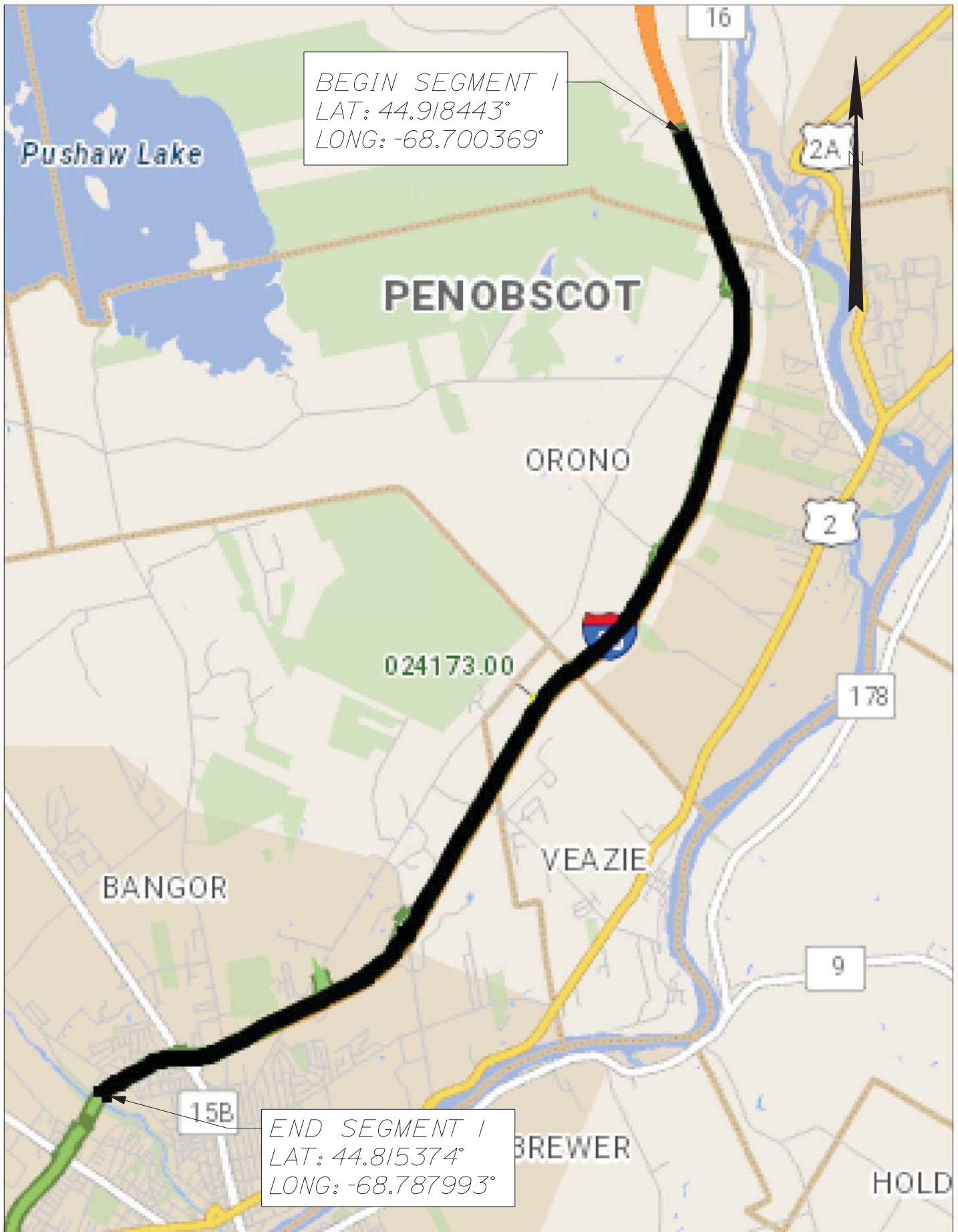
GUARDRAIL

| Item 606.1305 MID-WAY<br>SPLICE |  |  |  |              | REMARKS                                          |
|---------------------------------|--|--|--|--------------|--------------------------------------------------|
| <b>Station</b>                  |  |  |  |              |                                                  |
| 3676+04 to 3676+42 Right        |  |  |  |              | Replace existing end / utilize existing widening |
| 3714+81 to 3715+19 Right        |  |  |  |              | Replace existing end / utilize existing widening |
| ***61+22 to 61+60 Left***       |  |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 63+08 to 63+46 Right            |  |  |  |              | Replace existing end / utilize existing widening |
| 76+02 to 76+40 Right            |  |  |  |              | Replace existing end / utilize existing widening |
| ***80+14 to 80+52 Left***       |  |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 91+67 to 92+05 Right            |  |  |  |              | Replace existing end / utilize existing widening |
| 106+16 to 106+54 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| ***121+31 to 121+69 Left***     |  |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| ***143+40 to 143+78 Left***     |  |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 144+41 to 144+79 Right          |  |  |  |              | Replace existing end / utilize existing widening |
|                                 |  |  |  |              |                                                  |
|                                 |  |  |  |              |                                                  |
| 226+67 to 227+05 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| 247+27 to 247+65 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| 264+12 to 264+50 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| 287+75 to 288+13 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| 341+81 to 342+19 Right          |  |  |  |              | Replace existing end / utilize existing widening |
| 348+21 to 348+59 Left           |  |  |  |              | Replace existing end / utilize existing widening |
| 348+69 to 349+07 Right          |  |  |  |              | Replace existing end / utilize existing widening |
|                                 |  |  |  |              |                                                  |
|                                 |  |  |  |              |                                                  |
|                                 |  |  |  |              |                                                  |
|                                 |  |  |  |              |                                                  |

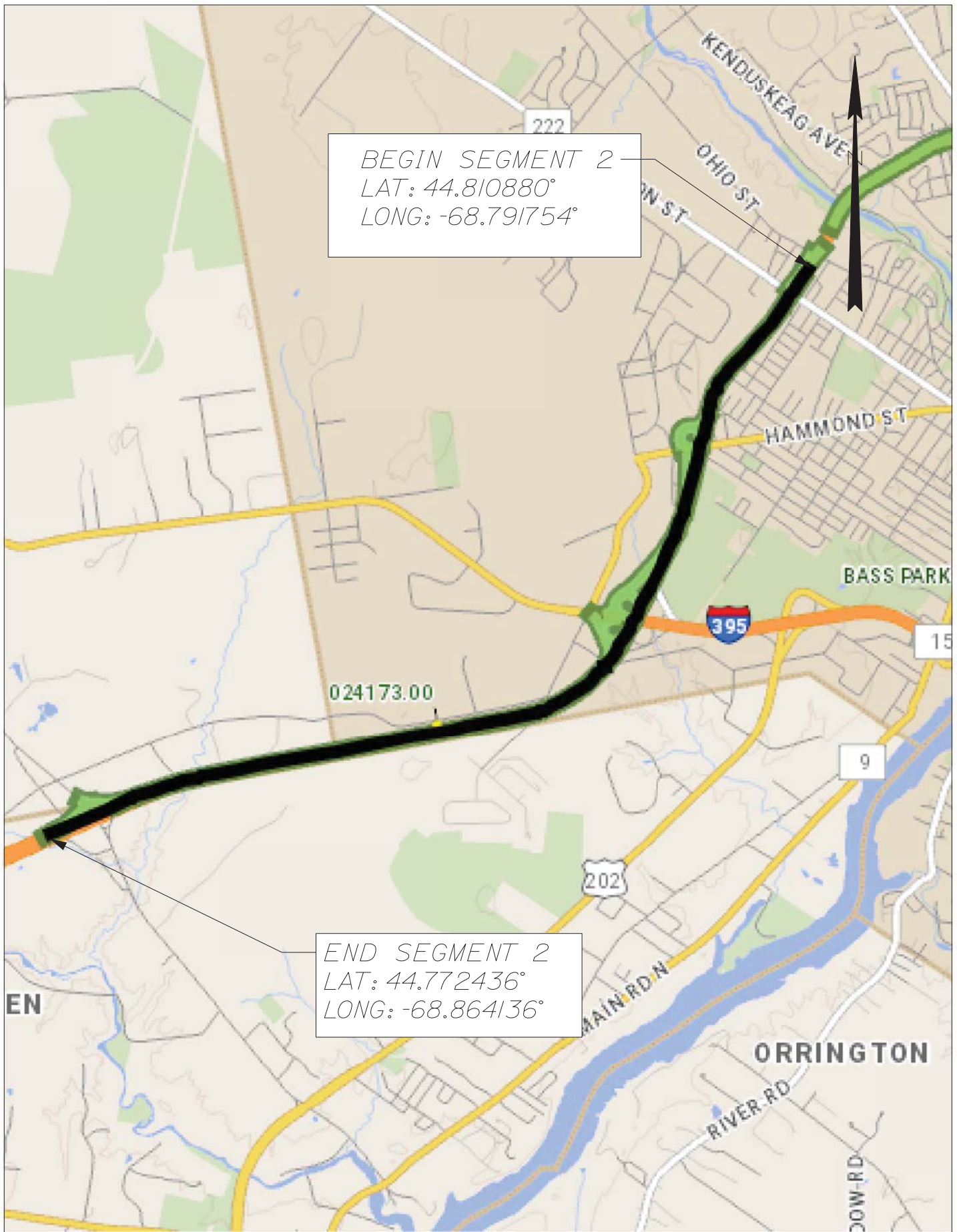
GUARDRAIL

| Item 606.1305 MID-WAY<br>SPLICE<br>FLARED TERMINAL<br>Station |  |  |  | REMARKS                                          |
|---------------------------------------------------------------|--|--|--|--------------------------------------------------|
| 9+55 to 9+93 Left off #174                                    |  |  |  | Replace existing end / utilize existing widening |
| 9+60 to 9+98 Right off #174                                   |  |  |  | Replace existing end / utilize existing widening |
| 6+00 to 6+38 Right on #174                                    |  |  |  | Replace existing end / utilize existing widening |
| 13+85 to 14+23 Right on #180                                  |  |  |  | Replace existing end / utilize existing widening |
| 15+00 to 15+38 Left off #183                                  |  |  |  | Replace existing end / utilize existing widening |
| 3+52 to 3+85 Left on #183                                     |  |  |  | Replace existing end / utilize existing widening |
| 9+95 to 10+33 Left off #184                                   |  |  |  | Replace existing end / utilize existing widening |
| 6+40 to 6+78 Left on #184                                     |  |  |  | Replace existing end / utilize existing widening |
| 8+50 to 8+88 Left off #185                                    |  |  |  | Replace existing end / utilize existing widening |
| 1+85 to 2+23 Right on #185                                    |  |  |  | Replace existing end / utilize existing widening |
| 10+00 to 10+38 Right off #186                                 |  |  |  | Replace existing end / utilize existing widening |
| 10+25 to 10+63 Left off #186                                  |  |  |  | Replace existing end / utilize existing widening |
| 7+40 to 7+78 Left off #187                                    |  |  |  | Replace existing end / utilize existing widening |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |

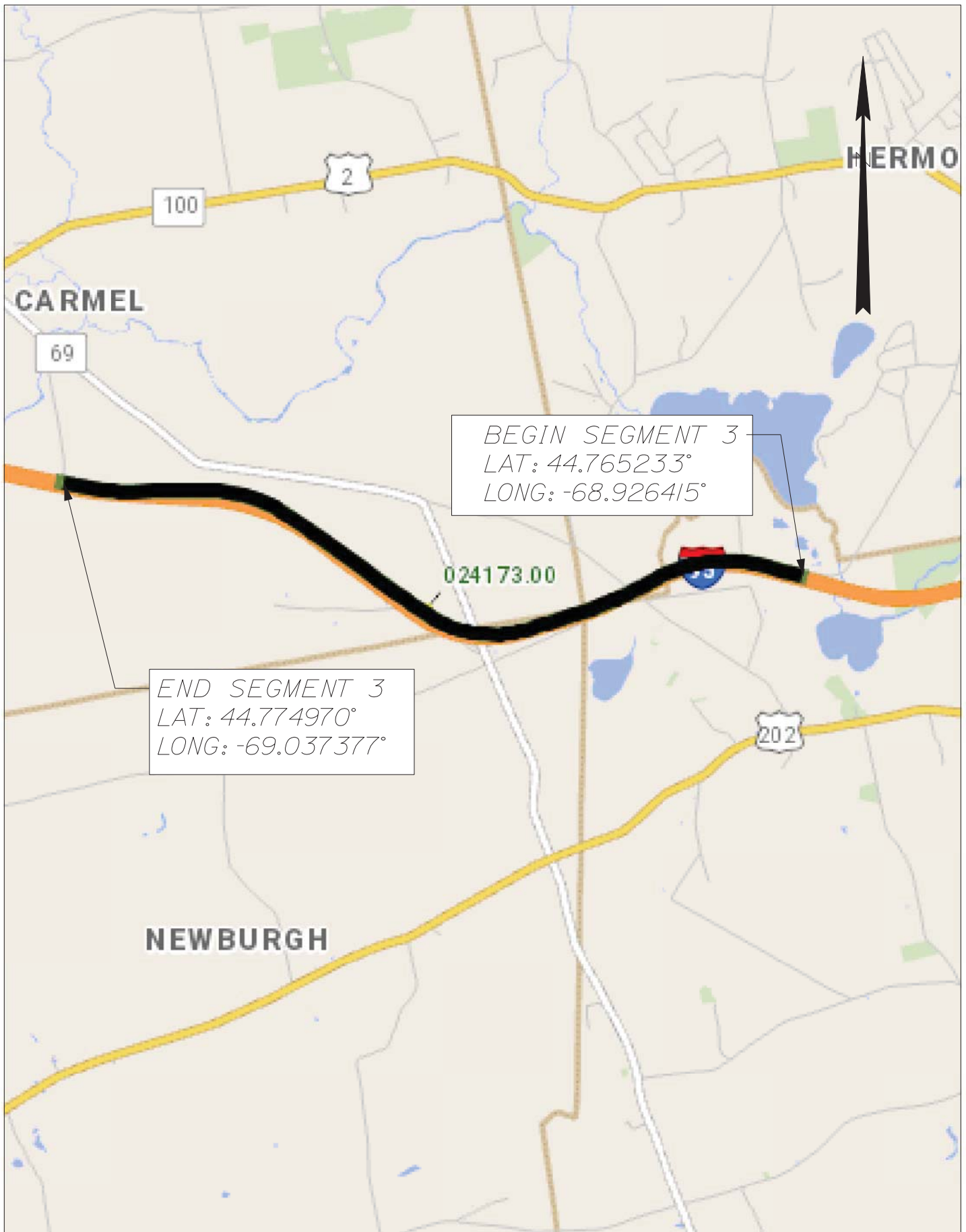




|                                                |                                              |                 |
|------------------------------------------------|----------------------------------------------|-----------------|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | INTERSTATE 95 SOUTHBOUND<br>PENOBSCOT COUNTY | SHEET NUMBER    |
| 24173.00                                       | PLANS                                        | 1<br>81<br>OF 3 |

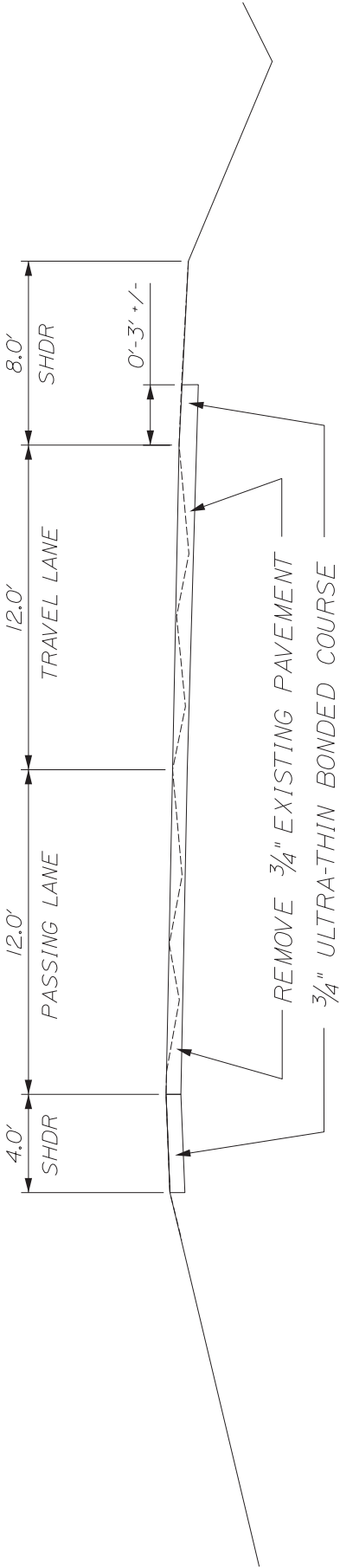


|                                                |                                              |                         |
|------------------------------------------------|----------------------------------------------|-------------------------|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | INTERSTATE 95 SOUTHBOUND<br>PENOBSCOT COUNTY | SHEET NUMBER<br><br>282 |
| 24173.00                                       | PLANS                                        | OF 3                    |



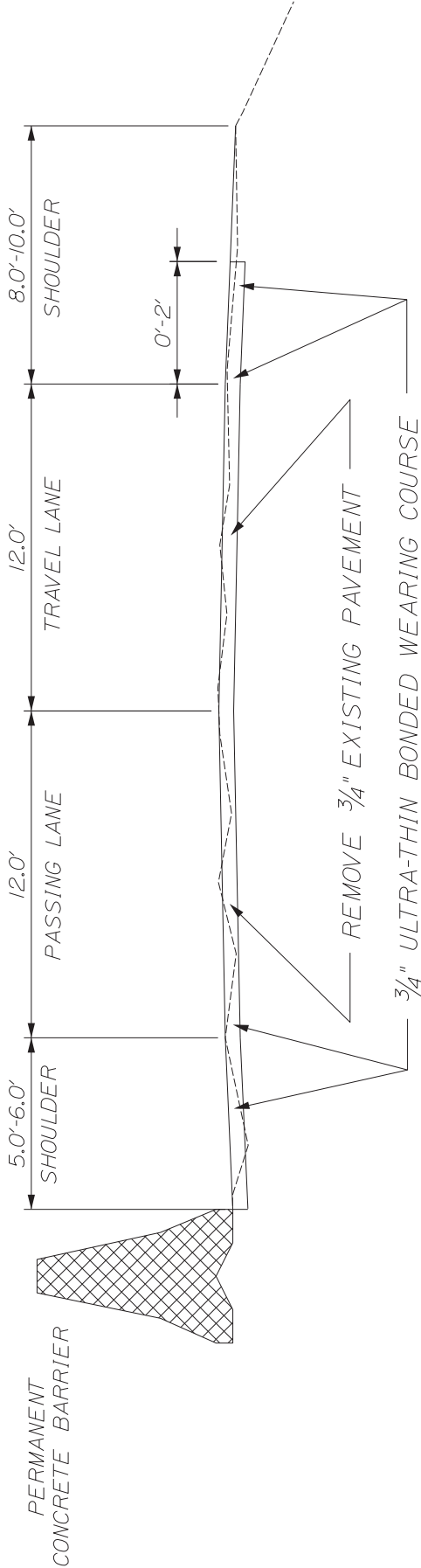
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|------------------------------------------------|----------------------------------------------|-----------------------|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | INTERSTATE 95 SOUTHBOUND<br>PENOBSCOT COUNTY | SHEET NUMBER<br><br>3 |
| 24173.00                                       | PLANS                                        | 83<br>OF 3            |

SEGMENT 1 & 2  
 3/4" MILL AND ULTRA-THIN  
 BONDED WEARING COURSE



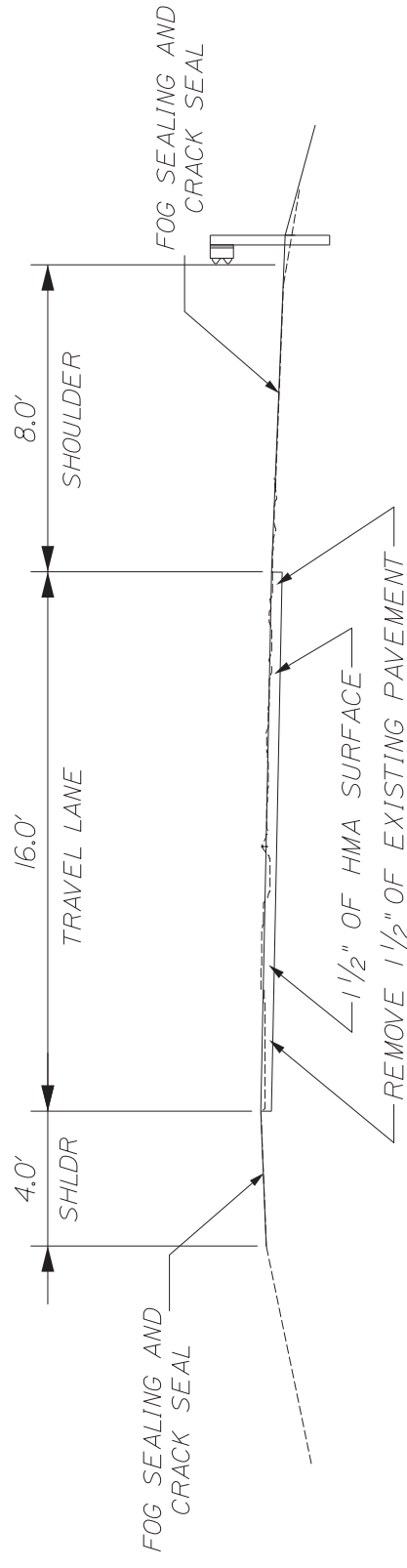
|                          |  |                              |  |
|--------------------------|--|------------------------------|--|
| NOT TO SCALE             |  | STATE OF MAINE               |  |
| OLD TOWN - CARMEL        |  | DEPARTMENT OF TRANSPORTATION |  |
| INTERSTATE 95 SOUTHBOUND |  | 2417300                      |  |
| TYPICAL SECTIONS         |  | WIN 24173.00                 |  |
|                          |  | HIGHWAY PLANS                |  |
|                          |  | SHEET NUMBER                 |  |
|                          |  | 1 OF 3                       |  |

SEGMENT 2  
 3/4" MILL WITH ULTRA-THIN  
 BONDED WEARING COURSE  
 AT PERMANENT CONCRETE BARRIER



|                                                                   |  |                                                               |              |              |
|-------------------------------------------------------------------|--|---------------------------------------------------------------|--------------|--------------|
| OLD TOWN - CARMEL<br>INTERSTATE 95 SOUTHBOUND<br>TYPICAL SECTIONS |  | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br><br>2417300 | WIN 24173.00 | NOT TO SCALE |
|                                                                   |  |                                                               |              |              |
|                                                                   |  | SHEET NUMBER<br>2 OF 3                                        |              |              |

RAMPS  
1 1/2" MILL AND FILL



NOT TO SCALE

OLD TOWN - CARMEL  
INTERSTATE 95 SOUTHBOUND  
TYPICAL SECTIONS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  

---

2417300 HIGHWAY PLANS

SHEET NUMBER  
3 OF 3

### PROJECT STATIONING

|                        |        |                        |                |
|------------------------|--------|------------------------|----------------|
| Townline               | 479+46 | Entering Veazie        |                |
|                        | 497+07 | MM# 190                |                |
| Crossover              | 516+39 | Crossover              |                |
| Overpass               | 538+33 | Kelley Road            |                |
|                        | 549+01 | MM# 191                |                |
| Crossover              | 565+78 | Crossover              |                |
|                        | 601+38 | MM# 192                |                |
| Overpass               | 603+07 | Forest Avenue          |                |
| Crossover              | 632+73 | Crossover              |                |
| Overpass               | 651+74 | Stillwater Avenue      |                |
|                        | 653+56 | MM# 193                |                |
| Crossover              | 677+63 | Crossover              |                |
|                        | 670+97 | Townline               | Entering Orono |
|                        | 706+74 | MM# 194                | Broadway       |
| <b>Begin Section 1</b> | 713+27 | <b>Begin Section 1</b> |                |

### PROJECT STATIONING

|              |        |                   |                   |
|--------------|--------|-------------------|-------------------|
| Bridge Joint | 218+70 | # 5791            | Kenduskeag Stream |
| Overpass     | 228+64 | Kenduskeag Avenue |                   |
|              | 233+60 | MM# 185           |                   |
| Bridge Joint | 254+91 | #5789             | Broadway          |
| Bridge Joint | 256+48 | #5789             |                   |
| Overpass     | 272+76 | Essex Street      |                   |
|              | 285+21 | MM# 186           |                   |
| Bridge Joint | 301+50 | #1427             |                   |
| Bridge Joint | 303+89 | #1427             |                   |
| Overpass     | 316+07 | I-95 Stillwater   | Ramp              |
| Crossover    | 334+57 | Crossover         |                   |
| Overpass     | 357+48 | Hogan Road        |                   |
| Crossover    | 376+58 | Crossover         |                   |
|              | 391+18 | MM# 188           |                   |
| Overpass     | 414+46 | Chase Road        |                   |
| Townline     | 425+42 | Entering Bangor   |                   |
|              | 443+31 | MM# 189           |                   |

## PROJECT STATIONING

|                      |                        |                          |                        |                   |
|----------------------|------------------------|--------------------------|------------------------|-------------------|
| Eq.                  | = +111.95'             | 3690+91.99<br>3689+80.04 | BK<br>AHD              |                   |
| Eq.                  | = +370070.73'          | 3715+44.84<br>14+74.11   | BK<br>AHD              |                   |
|                      |                        | 21+28                    | MM# 181                |                   |
|                      | Crossover              | 51+95                    | Crossover              |                   |
|                      | Overpass               | 65+10                    | Ammo Road              |                   |
|                      |                        | 77+89                    | MM# 182                |                   |
|                      | Bridge Joint           | 88+52                    | #1429                  | Perry Road        |
|                      | Bridge Joint           | 90+93                    | #1429                  | Perry Road        |
|                      | Bridge Joint           | 102+18                   | #1428                  | I-395             |
|                      | Bridge Joint           | 103+98                   | #1428                  | I-395             |
|                      |                        | 130+41                   | MM#183                 |                   |
|                      | Overpass               | 148+47                   | Hammond Street         |                   |
| Eq.                  | = - 138.69'            | 168+53.02<br>169+91.71   | BK<br>AHD              |                   |
|                      |                        | 181+35                   | MM# 184                |                   |
|                      | Overpass               | 191+81                   | Union Street           | Crossover         |
|                      | <b>Begin Section 2</b> | 193+66                   | <b>Begin Section 2</b> |                   |
| <b>End Section 1</b> | Bridge Joint           | 214+44                   | # 5791                 | Kenduskeag Stream |

**PROJECT STATIONING**

|                      |         |                      |
|----------------------|---------|----------------------|
| <b>End Section 2</b> | 3661+50 | <b>End Section 2</b> |
| Townline             | 3667+61 | Entering Hampden     |
|                      | 3670+64 | MM# 180              |
| Crossover            | 3675+56 | Crossover            |

**Project Stationing**

|     |                        |                          |                         |
|-----|------------------------|--------------------------|-------------------------|
|     | Overpass               | 3236+92                  | Route 69                |
|     |                        | 3248+46                  | MM# 174                 |
| Eq  | = -98.45'              | 3360+37.23<br>3361+35.68 | BK<br>AHD               |
|     | Crossover              | 3363+93                  |                         |
|     | Townline               | 3384+13                  | Entering Newburgh       |
|     | Overpass               | 3403+68                  | Newburgh Road           |
|     |                        | 3404+88                  | MM 175                  |
|     | Crossover              | 3409+80                  |                         |
| Eq. | = -15.60'              | 3416+57<br>3416+72       | BK<br>AHD               |
|     | Townline               | 3418+56                  | Entering Hampden-Hermon |
|     | <b>Begin Section 3</b> | 3473+00                  | <b>Begin Section 3</b>  |

**Project Stationing**

|    |                      |            |                      |
|----|----------------------|------------|----------------------|
|    | <b>End Section 3</b> | 3165+38    | <b>End Section 3</b> |
|    | Crossover            | 3165+68    |                      |
|    |                      | 3195+70    | MM 171               |
|    |                      | 3248+31    | MM 172               |
| Eq | = +36.28'            | 3256+96.25 | BK                   |
|    |                      | 3256+59.97 | AHD                  |
|    |                      | 3196+14    | MM# 173              |
|    | Crossover            | 3207+00    |                      |
|    | Townline             | 3231+70    | Entering Carmel      |

## CONSTRUCTION NOTES

Reference to left or right is in the direction of stationing which runs North to South.

### 202.2023 Removing Pavement Surface – Medium Cut Drum

#### Section 1

| <u>Station</u> | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                                     |
|----------------|-----------|----------------|--------------|------------------------------------------------------------------------------------|
| 713+27         | -         | 367+89         | ¾"           | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| 367+89         | -         | 303+89         | ¾"           | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 303+89         | -         | 301+50         | ¾"           | 35'0" +/- Bridge #1427 Full Width                                                  |
| 301+50         | -         | 265+22         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 265+22         | -         | 256+48         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 256+48         | -         | 254+91         | ¾"           | 44'0" +/- Bridge #5789 Full Width                                                  |
| 254+91         | -         | 218+70         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 218+70         | -         | 214+44         | ¾"           | 44'0" +/- Bridge #5791 Full Width                                                  |

#### Section 2

|        |   |        |    |                                                                                    |
|--------|---|--------|----|------------------------------------------------------------------------------------|
| 193+66 | - | 164+95 | ¾" | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 164+95 | - | 163+91 | ¾" | 25'0" +/- Passing Lane 12.5'+/- Travel Lane 12.5'+/-                               |
| 168+53 | - | 103+98 | ¾" | 25'0" +/- Passing Lane 12.5'+/- Travel Lane 12.5'+/-                               |
| 103+98 | - | 102+18 | ¾" | 45'0" +/- Bridge #1428 Full Width                                                  |
| 102+18 | - | 90+93  | ¾" | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 90+93  | - | 85+52  | ¾" | 45'0" +/- Bridge #1429 Full Width                                                  |
| 85+52  | - | 14+74  | ¾" | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |

## CONSTRUCTION NOTES

### 202.2023 Removing Pavement Surface- Medium Cut Drum (continued)

#### Section 2

| <u>Station</u> | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                   |
|----------------|-----------|----------------|--------------|--------------------------------------------------|
| 3715+45        | -         | 3689+90        | ¾"           | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3690+92        | -         | 3661+50        | ¾"           | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |

#### Section 3

|         |   |         |    |                                                  |
|---------|---|---------|----|--------------------------------------------------|
| 3473+00 | - | 3361+36 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3360+37 | - | 3256+60 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3256+96 | - | 3165+38 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |

#### Ramps

| <u>Station</u>                                          | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                   |
|---------------------------------------------------------|-----------|----------------|--------------|------------------------------------------------------------------|
| Exit 193 Stillwater Avenue SB Off Ramp (Left slip Ramp) |           |                |              |                                                                  |
| 0+00                                                    | -         | 16+58/-        | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 193 Stillwater Avenue SB On Ramp                   |           |                |              |                                                                  |
| 0+00                                                    | -         | 15+45+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 191 Kelley Road SB Off Ramp (Left slip Ramp)       |           |                |              |                                                                  |
| 0+00                                                    | -         | 14+54+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |

## CONSTRUCTION NOTES

### **202.2023 Removing Pavement Surface- Medium Cut Drum (continued)**

| <u>Station</u>                                           | <u>to</u> | <u>Station</u> | <u>Ramps</u> | <u>Depth</u> | <u>Remarks</u>                                                   |
|----------------------------------------------------------|-----------|----------------|--------------|--------------|------------------------------------------------------------------|
| Exit 191 Kelley Road SB On Ramp<br>0+00                  | -         | 18+48+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 187 Hogan Road SB Off Ramp (Left slip Ramp)<br>0+00 | -         | 13+08+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 174 Route 69 SB On Ramp (Left slip Ramp)<br>0+00    | -         | 17+62+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 186 Stillwater Avenue SB Off Ramp<br>0+00           | -         | 17+13+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 186 Stillwater Avenue SB On Ramp<br>0+00            | -         | 19+15+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 185 Broadway SB Off Ramp (Left slip Ramp)<br>0+00   | -         | 13+44+/-       |              | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 185 Broadway SB On Ramp (Left slip Ramp)<br>0+00    | -         | 24+48+/-       |              | 3/4"         | mill mainline, widen to full width 100'+/- prior to Intersection |

## CONSTRUCTION NOTES

### 202.2023 Removing Pavement Surface- Medium Cut Drum (continued)

|                                                       |           | Ramps          |              |                                                                  |
|-------------------------------------------------------|-----------|----------------|--------------|------------------------------------------------------------------|
| <u>Station</u>                                        | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                   |
| Exit 183 Hammond Street SB Off Ramp (Left slip Ramp)  |           |                |              |                                                                  |
| 0+00                                                  | -         | 17+70+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 183 Hammond Street SB On Ramp (1)                |           |                |              |                                                                  |
| 0+00                                                  | -         | 24+11+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 183 Hammond Street SB On Ramp (2)                |           |                |              |                                                                  |
| 0+00                                                  | -         | 18+45+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 182B I-395 SB Off Ramp                           |           |                |              |                                                                  |
| 0+00                                                  | -         | 30+41+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 180 Cold Brook Road SB Off Ramp (Left slip Ramp) |           |                |              |                                                                  |
| 0+00                                                  | -         | 14+75+/-       | 1.5"         | mill mainline, widen to full width 100'+/- prior to Intersection |
| Exit 174 Route 69 SB Off Ramp (Left slip Ramp)        |           |                |              |                                                                  |
| 0+00                                                  | -         | 17+62+/-       | 1.5"         | mill full width curb to curb to Intersection                     |
| Exit 174 Route 69 SB On Ramp                          |           |                |              |                                                                  |
| 0+00                                                  | -         | 20+46+/-       | 1.5"         | mill full width curb to curb to Intersection                     |

Contractor will remove pavement to maintain existing cross slopes or as directed by the Resident. Mark downs shall be in place on mainline prior to commencing milling operations. Contractor will establish centerline control points prior to removal of existing centerline. See Typical sections for ramps. **The Contractor will retain 100% of the millings/grindings.** Above locations are estimates only and may be changed by the Resident.

## CONSTRUCTION NOTES

### **403.2081 12.5mm Polymer Modified Hot Mix Asphalt**

This item to be used to pave ramps and existing cross overs at the following locations:

| <b><u>Station</u></b> | <b><u>Depth</u></b> |
|-----------------------|---------------------|
| 677+63                | 1-1/2"              |
| 632+73                | 1-1/2"              |
| 565+73                | 1-1/2"              |
| 516+39                | 1-1/2"              |
| 376+58                | 1-1/2"              |

This item will be also be used as surface layer for On Ramps and Off Ramps.

### **403.211 Hot Mix Asphalt Shim**

This item to be used on some cross overs and for possible delamination areas in the medium cut milling areas, rutting areas, or as directed the Resident. At all bridge deck locations, a shim layer will be placed if needed after milling is complete. Shim will be placed prior to placement of Ultra-Thin Bonded Wearing Course Layer.

### **410.151 Emulsified Asphalt Sealcoat Applied**

To be applied to the 4' & 10' shoulders the entire length of project and ramp shoulders as directed. Item will be applied after Item 202.205 Rumble Strips – Shoulder has been completed. It is the intent to seal the rumble strip areas.

### **424.22 Asphalt Rubber Crack Sealer Type 2, Applied**

Item will be used to treat mainline cracks after Item 202.203 has been completed, centerline, longitudinal cracks on mainline, including other areas, as determined and directed by the Resident. Applications in mainline areas shall have a cure time of 48 hours after application prior to placement of UTBWC. Item shall also be applied to 10' shoulders entire length of project, ramps, and as directed prior to application of Item 410.151.

### **424.38 Crack Repair – Hot Pour Mastic**

Item will be used to treat mainline cracks after item 202.203 has been completed. This item will be used on cracks wider than 1" on centerline, longitudinal cracks on mainline, including other areas, as determined and directed by the Resident. Applications in mainline areas shall have a cure time of 48 hours after application prior to placement of UTBWC.

## CONSTRUCTION NOTES

### 462.301 Polymer Modified Ultra-Thin Bonded Wearing Course

#### Section 1

| <u>Station</u> | <u>to</u> | <u>Station</u> | <u>Depth</u> | <u>Remarks</u>                                                                     |
|----------------|-----------|----------------|--------------|------------------------------------------------------------------------------------|
| 713+27         | -         | 367+89         | ¾"           | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/-                                   |
| 367+89         | -         | 303+89         | ¾"           | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 303+89         | -         | 301+50         | ¾"           | 35'0" +/- Bridge #1427 Full Width                                                  |
| 301+50         | -         | 265+22         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 265+22         | -         | 256+48         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 256+48         | -         | 254+91         | ¾"           | 44'0" +/- Bridge #5789 Full Width                                                  |
| 254+91         | -         | 218+70         | ¾"           | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 218+70         | -         | 214+44         | ¾"           | 44'0" +/- Bridge #5791 Full Width                                                  |

#### Section 2

|        |   |        |    |                                                                                    |
|--------|---|--------|----|------------------------------------------------------------------------------------|
| 193+66 | - | 164+95 | ¾" | 30'6" +/- Passing Lane 18'+/- Travel Lane 12.5'+/-<br>Mill to base of barrier wall |
| 164+95 | - | 163+91 | ¾" | 25'0" +/- Passing Lane 12.5'+/- Travel Lane 12.5'+/-                               |
| 168+53 | - | 103+98 | ¾" | 25'0" +/- Passing Lane 12.5'+/- Travel Lane 12.5'+/-                               |
| 103+98 | - | 102+18 | ¾" | 45'0" +/- Bridge #1428 Full Width                                                  |
| 102+18 | - | 90+93  | ¾" | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |
| 90+93  | - | 85+52  | ¾" | 45'0" +/- Bridge #1429 Full Width                                                  |
| 85+52  | - | 14+74  | ¾" | 28'6" +/- Passing Lane 16'+/- Travel Lane 12.5'+/-                                 |

**CONSTRUCTION NOTES**

**462.301 Polymer Modified Ultra-Thin Bonded Wearing Course (continued)**

**Section 2**

| <b><u>Station</u></b> | <b><u>to</u></b> | <b><u>Station</u></b> | <b><u>Depth</u></b> | <b><u>Remarks</u></b>                            |
|-----------------------|------------------|-----------------------|---------------------|--------------------------------------------------|
| 3715+45               | -                | 3689+90               | ¾"                  | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3690+92               | -                | 3661+50               | ¾"                  | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |

**Section 3**

|         |   |         |    |                                                  |
|---------|---|---------|----|--------------------------------------------------|
| 3473+00 | - | 3361+36 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3360+37 | - | 3256+60 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |
| 3256+96 | - | 3165+38 | ¾" | 31'0" +/- Passing Lane 16'+/- Travel Lane 15'+/- |

**627.30 Grooving for Pavement Marking**

Item shall include yellow edge line, white edge line, and white skips. Skip lines shall be ground 15 feet in length.

**Item 627.733 4" White or Yellow Painted Pavement Marking Line**

Item to be used on Rest area that have been milled or received the surface course shall be painted prior to being opened to traffic or immediately after the lane closure is removed. Any striping procedure besides paint, including white and yellow temporary approved raised pavement markers, shall be incidental to paving item.

**627.745 6" White or Yellow Polyurea Pavement Marking Line**

Item shall include yellow edge line, white edge line, and white skips. Skip lines shall be 15 feet in length.

## CONSTRUCTION NOTES

### **627.78 Temporary 4" Painted Pavement Marking Line, White or Yellow**

All areas that have received the surface course shall be painted prior to being opened to traffic or immediately after the lane closure is removed. Any striping procedure besides paint, including white and yellow temporary approved raised pavement markers, shall be considered incidental to item 462.301.

### **627.781 Temporary 6" Painted Pavement Marking Line, White or Yellow**

Item is to be used once lanes have been milled, prior to being opened to traffic or immediately after the lane closure is removed. Any striping procedure besides paint, including white and yellow temporary approved raised pavement markers, shall be incidental to item 462.301.

### **629 and 631 Items**

These items to be used for cleaning winter sand from guardrail areas and paved areas under overpasses, and removing excess material from in-slopes, in-slopes behind guardrail areas, ditching, and other work as directed. All equipment used for certain tasks and operations will be as directed by the Resident.

### **643.87 Weigh In Motion**

3410+80 Travel and Passing Lane. See Special Provision.

### **652.35 Construction Signs**

Two "Road Work Next 25 Miles" signs will be required as part of this project.  
Two "End Road Work" signs will be required at the end of the project.

GUARDRAIL

| Item 606.1305 MID-WAY<br>SPLICE<br>FLARED TERMINAL<br>Station |  |  |              | REMARKS                                          |
|---------------------------------------------------------------|--|--|--------------|--------------------------------------------------|
| 691+67 to 691+29 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 654+80 to 654+42 Right                                        |  |  |              | CAT System Good Condition                        |
| 654+76 to 654+38 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 606+74 to 606+36 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 542+21 to 541+83 Right                                        |  |  |              | Replace existing end / utilize existing widening |
| 541+39 to 541+01 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 417+43 to 417+05 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 380+54 to 380+16 Right                                        |  |  |              | Replace existing end / utilize existing widening |
| 380+16 to 379+78 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 361+59 to 361+21 Right                                        |  |  |              | Replace existing end / utilize existing widening |
| 361+30 to 360+92 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 331+91 to 331+53 Right                                        |  |  |              | Replace existing end / utilize existing widening |
| 331+54 to 331+16 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 309+66 to 309+28 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 305+76 to 305+38 Right                                        |  |  |              | Replace existing end / utilize existing widening |
| 275+39 to 275+01 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 262+65 to 262+27 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 220+64 to 220+26 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| 163+58 to 163+20 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| ***131+63-131+23 Right***                                     |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 117+62 to 117+24 Left                                         |  |  |              | Replace existing end / utilize existing widening |
| ***108+62-108+22***                                           |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 96+91 to 96+53 Left                                           |  |  |              | Replace existing end / utilize existing widening |
| 75+32 to 74+94 Left                                           |  |  |              | Replace existing end / utilize existing widening |
| ***72+10-71+90 Right***                                       |  |  | Item 527.301 | Replace existing end with C-A-T system           |
| 21+36 to 20+98 Left                                           |  |  |              | Replace existing end / utilize existing widening |

GUARDRAIL

| Item 606.1305 MID-WAY<br>SPLICE<br>FLARED TERMINAL<br>Station |  |  |  | REMARKS                                          |
|---------------------------------------------------------------|--|--|--|--------------------------------------------------|
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
| 3687+94 to 3687+56 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3674+47 to 3674+09 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3469+78 to 3470+16 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3469+68 to 3469+06 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3416+86 to 3416+48 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3416+48 to 3416+86 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3406+26 to 3406+26 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3406+35 to 3405+97 Left                                       |  |  |  | Replace existing end / utilize existing widening |
| 3353+29 to 3352+91 Right                                      |  |  |  | Replace existing end / utilize existing widening |
| 3344+01 to 3343+64 Right                                      |  |  |  | Replace existing end / utilize existing widening |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
|                                                               |  |  |  |                                                  |
| 12+08 to 12+46 Right off #193                                 |  |  |  | Replace existing end / utilize existing widening |
| 14+17 to 14+55 Left off #193                                  |  |  |  | Replace existing end / utilize existing widening |
| 9+74 to 10+12 Right off #191                                  |  |  |  | Replace existing end / utilize existing widening |
| 12+59 to 12+97 Left off #191                                  |  |  |  | Replace existing end / utilize existing widening |
| 4+58 to 4+96 Right on #187                                    |  |  |  | Replace existing end / utilize existing widening |
| 7+84 to 8+22 Left off #183                                    |  |  |  | Replace existing end / utilize existing widening |
| 0+93 to 1+31 Left on #183                                     |  |  |  | Replace existing end / utilize existing widening |
| 10+40 to 10+78 Right on #183                                  |  |  |  | Replace existing end / utilize existing widening |
| 0+61 to 0+99 Right on #183                                    |  |  |  | Replace existing end / utilize existing widening |
| 12+38 to 12+76 Right off #182B                                |  |  |  | Replace existing end / utilize existing widening |
|                                                               |  |  |  |                                                  |

[illegible]

**GENERAL NOTES**

1. Pavement thicknesses shown on the typical sections are intended to be nominal.
2. All joints between existing and proposed hot bituminous pavement shall be butted. Payment shall be made under Item 202.203 Pavement Butt Joint.
3. Where deemed necessary by the Resident, unsuitable excess material shall be removed from the edges of shoulders and placed in designated areas or disposed of. Payment will be made under the appropriate contract items.
4. All inslope and ditches in cut areas shall be graded as shown on the typicals or flatter, or as directed by the Resident.
5. All waste material not used on the project shall be disposed of off the project in acceptable waste areas reviewed by the Resident. Grading, seeding and mulching of waste areas shall be considered incidental.
6. Any necessary cleaning of existing pavement prior to paving (or milling) shall be incidental to the related paving (or milling) items. This includes killing and removal of all vegetative matter.
7. When super elevation exceeds the slope of the low side shoulder, the shoulder pavement will have same slope as traveled way.
8. Cross slopes for normal and super elevated sections will be straight unless otherwise directed by the Department
13. The algebraic difference between travelway and shoulder cross slope shall not exceed 8%
14. No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.
15. As directed by the Resident, all existing underdrain outlets shall be located, cleaned out and ditched as required or replaced as necessary. Payment will be made under appropriate contract items.
16. Guardrail end treatments shall be installed concurrently with the placement of each section of beam guardrail.
17. Holes created by Guardrail removal will be filled and compacted with approved materials as directed by the Resident. Payment to be considered incidental to the guardrail items.

GENERAL NOTES

18. Guardrail which is removed and not reused on the project shall become the property of the Contractor. Removal and disposal shall be considered incidental to the guardrail items.
19. Two Reflectorized Flexible G.R. Markers (Item 606.353) will be installed at each guardrail end.
20. Connections for proposed guardrail to existing guardrail will be considered incidental to Item 606.
21. The Contractor is responsible for the careful side staking of existing centerline as per Standard Specification 105.6.2. Side stakes shall be placed safely outside of the construction limits and the existing centerline grades shall be transferred to these stakes. These stakes and grades will be used to layout centerline and determine new construction finish grades from differential elevation sheets furnished by MaineDOT. All layout, stakes, and grades will be checked and must be acceptable to the Resident.
22. Any damage to the slopes caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.
23. No separate payment for superintendent or foreman will be made for the supervision of equipment and layout of work being paid for under the equipment rental items.
24. "Undetermined Locations" shall be determined by the Resident.
25. Stations referenced are approximate.
26. The contractor will place appropriately marked stakes at the following locations on the project: striping pattern changes, cross-slope changes, and every 500' for stationing. The contractor will paint every full station (100') on the existing roadway and will transfer the painted stationing through all intermediate lifts (not surface). Appropriately sized striping pattern changes will be painted on surface. Stationing control must be placed before work can commence. Cross-slope and striping change controls must be placed before paving can commence.

SPECIAL PROVISION  
SECTION 101  
CONTRACT INTERPRETATION  
(Working Day – Pavement Preservation)

Add the following to 101.2 – Definitions:

Weather Event Any precipitation, such as rain, sleet, snow, or fog that causes wet pavement that prevents the contractor from completing work within the Construction Limits as determined by the Department. This excludes ambient air temperatures below Specification.

Weather Dependent Activities Contractor scheduled work that cannot be completed should a Weather Event occur. Paving or other activities as determined by the Department will be considered Weather Dependent Activities.

Working Day Any Calendar Day except:

- Identified non-work days in the Contract Special Provision 107
- Saturdays, Sundays and Holidays – as outlined in Section 107.3.3
- The period from November 15<sup>th</sup> to April 15<sup>th</sup>, inclusive
- Any day a Weather Event prevents the Contractor from performing at least seven hours of weather dependent activities, as determined by the Department. Up to a three-hour hold prior to the start of work may be required if weather conditions are uncertain.

The Contractor may request, in writing, a non-working day due to a Weather Event up to 16 hours in advance of the normal start time. The Department may approve this request depending on the certainty of the forecast.

If the Contractor elects to work a Saturday, an allowable holiday, or receives approval to work Sunday, the same process will be utilized to determine if it is a Working Day.

If the Contractor requests approval to work Saturday and does not cancel their request by Thursday at the end of shift, that Saturday will be considered a Working Day regardless of the actual weather conditions and whether work occurred.

**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.

**"General Decision Number: ME20200047 05/08/2020**

**Superseded General Decision Number: ME20190047**

**State: Maine**

**Construction Type: Highway**

**County: Penobscot County in Maine.**

#### **HIGHWAY CONSTRUCTION PROJECTS**

**Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 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 calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).**

| Modification Number | Publication Date |
|---------------------|------------------|
| 0                   | 01/03/2020       |
| 1                   | 04/17/2020       |
| 2                   | 05/08/2020       |

\* ENGI0004-004 04/01/2018

|                                                                                | Rates    | Fringes |
|--------------------------------------------------------------------------------|----------|---------|
| <b>POWER EQUIPMENT OPERATOR:</b>                                               |          |         |
| Grader/Blade, Mechanic,<br>Paver (Asphalt, Aggregate,<br>and Concrete), Roller |          |         |
| Asphalt.....                                                                   | \$ 22.61 | 12.50   |

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TEAM0340-003 01/01/2017

|                                  | Rates    | Fringes |
|----------------------------------|----------|---------|
| TRUCK DRIVER (Vacuum Truck)..... | \$ 14.84 | 13.08   |

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SUME2014-042 06/23/2017

|                                   | Rates    | Fringes |
|-----------------------------------|----------|---------|
| CARPENTER, Includes Form Work.... | \$ 18.95 | 3.23    |
| CEMENT MASON/CONCRETE FINISHER... | \$ 19.27 | 1.13    |
| ELECTRICIAN.....                  | \$ 25.78 | 6.83    |
| IRONWORKER, REINFORCING.....      | \$ 21.85 | 0.00    |

|                                                                                                           |             |
|-----------------------------------------------------------------------------------------------------------|-------------|
| <b>IRONWORKER, STRUCTURAL.....\$ 22.33</b>                                                                | <b>4.50</b> |
| <b>LABORER: Asphalt, Includes<br/>Raker, Shoveler, Spreader and<br/>Distributor.....\$ 17.08</b>          | <b>2.48</b> |
| <b>LABORER: Common or General.....\$ 12.83</b>                                                            | <b>2.20</b> |
| <b>LABORER: Landscape.....\$ 17.03</b>                                                                    | <b>2.81</b> |
| <b>OPERATOR:<br/>Backhoe/Excavator/Trackhoe.....\$ 16.33</b>                                              | <b>2.78</b> |
| <b>OPERATOR: Bobcat/Skid<br/>Steer/Skid Loader.....\$ 19.26</b>                                           | <b>5.57</b> |
| <b>OPERATOR: Broom/Sweeper.....\$ 18.77</b>                                                               | <b>0.00</b> |
| <b>OPERATOR: Bulldozer.....\$ 21.71</b>                                                                   | <b>5.67</b> |
| <b>OPERATOR: Loader.....\$ 18.94</b>                                                                      | <b>7.66</b> |
| <b>OPERATOR: Milling Machine.....\$ 26.83</b>                                                             | <b>7.05</b> |
| <b>OPERATOR: Roller (Earth).....\$ 17.61</b>                                                              | <b>2.97</b> |
| <b>TRAFFIC CONTROL: Flagger.....\$ 9.00</b>                                                               | <b>0.00</b> |
| <b>TRAFFIC CONTROL:<br/>Laborer-Cones/<br/>Barricades/Barrels -<br/>Setter/Mover/Sweeper.....\$ 17.02</b> | <b>5.37</b> |
| <b>TRUCK DRIVER: Dump Truck.....\$ 14.56</b>                                                              | <b>6.32</b> |
| -----                                                                                                     |             |

**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 [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 clause (29CFR 5.5 (a) (1) (ii)).**

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**The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination.**

The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana.

2012 is the year of 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. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data.

EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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### WAGE DETERMINATION APPEALS PROCESS

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

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write 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 the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write 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 by 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

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

**"General Decision Number: ME20200031 01/03/2020**

**Superseded General Decision Number: ME20190031**

**State: Maine**

**Construction Type: Heavy**

**County: Penobscot County in Maine.**

#### **HEAVY CONSTRUCTION PROJECTS**

**Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 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 calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).**

|                            |                         |
|----------------------------|-------------------------|
| <b>Modification Number</b> | <b>Publication Date</b> |
| <b>0</b>                   | <b>01/03/2020</b>       |

\* IRON0007-032 03/16/2019

|                                     | <b>Rates</b>    | <b>Fringes</b> |
|-------------------------------------|-----------------|----------------|
| <b>IRONWORKER, REINFORCING.....</b> | <b>\$ 26.01</b> | <b>22.57</b>   |
| -----                               |                 |                |
| <b>SUME2014-012 01/30/2017</b>      |                 |                |

|                                                                                                                                                                   | <b>Rates</b>    | <b>Fringes</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|
| <b>CARPENTER.....</b>                                                                                                                                             | <b>\$ 19.87</b> | <b>8.19</b>    |
| <b>ELECTRICIAN.....</b>                                                                                                                                           | <b>\$ 30.43</b> | <b>7.31</b>    |
| <b>IRONWORKER, STRUCTURAL.....</b>                                                                                                                                | <b>\$ 23.39</b> | <b>11.88</b>   |
| <b>LABORER: Asphalt, Includes<br/>Raker, Shoveler, Spreader and<br/>Distributor.....</b>                                                                          | <b>\$ 13.38</b> | <b>1.39</b>    |
| <b>LABORER: Common or General.....</b>                                                                                                                            | <b>\$ 14.19</b> | <b>2.40</b>    |
| <b>LABORER: Concrete Worker<br/>(includes removing forms,<br/>demolition of existing<br/>concrete, and pouring,<br/>leveling and finishing<br/>concrete).....</b> | <b>\$ 23.94</b> | <b>15.15</b>   |
| <b>LABORER: Landscape.....</b>                                                                                                                                    | <b>\$ 15.00</b> | <b>0.58</b>    |

|                                        |                 |             |
|----------------------------------------|-----------------|-------------|
| <b>LABORER: Pipelayer.....</b>         | <b>\$ 21.28</b> | <b>6.15</b> |
| <b>OPERATOR:</b>                       |                 |             |
| <b>Backhoe/Excavator/Trackhoe.....</b> | <b>\$ 22.69</b> | <b>5.63</b> |
| <b>OPERATOR: Bulldozer.....</b>        | <b>\$ 23.54</b> | <b>5.81</b> |
| <b>OPERATOR: Crane.....</b>            | <b>\$ 25.00</b> | <b>8.25</b> |
| <b>OPERATOR: Loader.....</b>           | <b>\$ 20.12</b> | <b>4.25</b> |
| <b>OPERATOR: Roller.....</b>           | <b>\$ 16.64</b> | <b>3.23</b> |
| <b>PAINTER (Brush and Roller).....</b> | <b>\$ 23.36</b> | <b>6.40</b> |
| <b>TRUCK DRIVER: Dump Truck.....</b>   | <b>\$ 15.66</b> | <b>3.20</b> |

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

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

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey.

Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of 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. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

## Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data.

EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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## WAGE DETERMINATION APPEALS PROCESS

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

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

[https://beta.sam.gov/wage-determination/ME20200031/0?index=wd&is\\_active=true&date\\_filter\\_index=0&date\\_rad\\_selection=date&wdType=dbra&construction\\_type=Heavy&state=ME&county=17906&page=1...](https://beta.sam.gov/wage-determination/ME20200031/0?index=wd&is_active=true&date_filter_index=0&date_rad_selection=date&wdType=dbra&construction_type=Heavy&state=ME&county=17906&page=1...)

1/03/2020

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write 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 the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write 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 by 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

4.) All decisions by the Administrative Review Board are final.

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**END OF GENERAL DECISION**

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State of Maine  
Department of Labor  
Bureau of Labor Standards  
Augusta, Maine 04333-0045  
Telephone (207) 623-7906

**Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.**

**2020 Fair Minimum Wage Rates  
Highway & Earth Penobscot County**

| <u>Occupation Title</u>            | <u>Minimum<br/>Wage</u> | <u>Minimum<br/>Benefit</u> | <u>Total</u> | <u>Occupation Title</u>        | <u>Minimum<br/>Wage</u> | <u>Minimum<br/>Benefit</u> | <u>Total</u> |
|------------------------------------|-------------------------|----------------------------|--------------|--------------------------------|-------------------------|----------------------------|--------------|
| Asphalt Raker                      | \$15.00                 | \$0.00                     | \$15.00      | Laborers (Helpers & Tenders)   | \$15.00                 | \$0.26                     | \$15.26      |
| Backhoe Loader Operator            | \$20.00                 | \$2.60                     | \$22.60      | Laborer - Skilled              | \$16.25                 | \$0.68                     | \$16.93      |
| Boom Truck (Truck Crane) Operator  | \$25.00                 | \$4.94                     | \$29.94      | Loader Operator - Front-End    | \$18.00                 | \$3.25                     | \$21.25      |
| Bulldozer Operator                 | \$19.00                 | \$1.18                     | \$20.18      | Mechanic- Maintenance          | \$21.15                 | \$3.23                     | \$24.38      |
| Carpenter                          | \$22.46                 | \$2.19                     | \$24.65      | Millwright                     | \$29.82                 | \$7.73                     | \$37.55      |
| Cement Mason/Finisher              | \$16.00                 | \$4.04                     | \$20.04      | Painter                        | \$18.00                 | \$0.45                     | \$18.45      |
| Crane Operator =>15 Tons)          | \$30.00                 | \$7.76                     | \$37.76      | Paver Operator                 | \$20.25                 | \$0.47                     | \$20.72      |
| Crusher Plant Operator             | \$22.91                 | \$10.21                    | \$33.12      | Pipelayer                      | \$23.78                 | \$1.60                     | \$25.38      |
| Driller - Rock                     | \$12.00                 | \$8.82                     | \$20.82      | Plumber (Licensed)             | \$26.00                 | \$4.50                     | \$30.50      |
| Electrician - Licensed             | \$28.00                 | \$6.27                     | \$34.27      | Reclaimer Operator             | \$22.91                 | \$13.25                    | \$36.16      |
| Electrician Helper/Cable Puller    | \$18.00                 | \$1.84                     | \$19.84      | Roller Operator - Earth        | \$16.00                 | \$0.24                     | \$16.24      |
| Elevator Constructor/Installer     | \$20.00                 | \$1.78                     | \$21.78      | Roller Operator - Pavement     | \$22.91                 | \$13.25                    | \$36.16      |
| Excavator Operator                 | \$19.91                 | \$1.43                     | \$21.34      | Screed/Wheelman                | \$17.75                 | \$0.24                     | \$17.99      |
| Fence Setter                       | \$18.00                 | \$1.30                     | \$19.30      | Stone Mason                    | \$20.00                 | \$0.42                     | \$20.42      |
| Flagger                            | \$12.50                 | \$0.00                     | \$12.50      | Truck Driver - Light           | \$16.00                 | \$0.44                     | \$16.44      |
| Grader/Scraper Operator            | \$19.50                 | \$1.38                     | \$20.88      | Truck Driver - Medium          | \$17.80                 | \$2.34                     | \$20.14      |
| Highway Worker/Guardrail Installer | \$18.00                 | \$1.54                     | \$19.54      | Truck Driver - Heavy           | \$16.00                 | \$0.26                     | \$16.26      |
| Hot Top Plant Operator             | \$22.91                 | \$13.25                    | \$36.16      | Truck Driver - Tractor Trailer | \$16.50                 | \$0.00                     | \$16.50      |
| Ironworker - Reinforcing           | \$29.23                 | \$7.18                     | \$36.41      | Truck Driver - Mixer (Cement)  | \$17.25                 | \$2.26                     | \$19.51      |
| Ironworker - Structural            | \$26.01                 | \$22.27                    | \$48.28      |                                |                         |                            |              |

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

Apprentices – The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Attest:

  
Scott R. Cotnoir  
Wage & Hour Director  
Bureau of Labor Standards

Expiration Date: 12-31-2020

**SPECIAL PROVISIONS**  
**SECTION 104**  
**Utilities**

**UTILITY COORDINATION**

The contractor has primary responsibility for coordinating their work with utilities and/or railroad after contract award. The contractor shall communicate directly with the utilities and/or railroad regarding any utility work necessary to maintain the contractor's schedule and prevent project construction delays. The contractor shall notify the resident 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 or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction.

Utilities and/or railroads have been notified and will be furnished a project specification.

**Overview & Utility/Railroad Contact Information:**

| Utility/Railroad                               | Aerial | Underground | Railroad | Contact Name    | Contact Number |
|------------------------------------------------|--------|-------------|----------|-----------------|----------------|
| Bangor Gas Company                             |        | X           |          | Ryan Rancourt   | 949-4546       |
| Bangor Water District                          |        | X           |          | Kyle Killip     | 852-7178       |
| Charter Communications                         | X      |             |          | Stephen Allen   | 478-1352       |
| City of Bangor                                 |        | X           |          | John Theriault  | 992-4249       |
| Emera Maine                                    | X      |             |          | Dave Perkins    | 949-3918       |
| FirstLight                                     | X      | X           |          | Mike Ellingwood | 462-2759       |
| Hampden Telephone Company (TDS of Maine)       | X      |             |          | Jason Tibbetts  | 635-7249       |
| MaineDOT Traffic                               | X      | X           |          | Ron Cote        | 446-2305       |
| Northern Light Health                          | X      |             |          | Walter Hilenski | 973-5965       |
| Springfield Terminal Railway (Pan Am Railways) |        |             | X        | Shawn Higgins   | (978)866-4660  |
| University of Maine System                     | X      |             |          | Corey Lavoie    | 949-4227       |

Temporary utility/railroad 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.

***\*\* Specific information regarding the line voltage can be requested from Emera Maine\*\****

Utility/railroad working days are Monday through Friday. Times are estimated on the basis of a single crew for each utility/railroad. Any times and dates mentioned are **estimates only** and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractor shall have no claim against the Department if they are exceeded.

### **AERIAL**

Aerial utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, 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.

### **UNDERGROUND**

#### **MaineDOT**

MaineDOT has an active WIM (Weigh-in-motion) site within the project limits near mile marker 175 in both NB and SB lanes. MaineDOT also has inactive sites with loops/sensors in the roadway in other locations. All of these sites can be milled through by the contractor. The WIM sites near mile marker 175 will need to be reinstalled with the appropriate items included in the contract. See the special provision for details of the work.

### **RAILROAD**

Springfield Terminal Railway (Pan Am Railways) has a railroad crossing underneath an I-95 bridge within the limits of this project near Perry Road. Milling/paving and bridge/joint work is being completed on the bridge over the crossing. The contractor will need to get under the bridge to do the bridge/joint work. **It is the contractor's responsibility to coordinate and schedule their work with the Railroad.** The Contractor shall keep all men, equipment and materials out of the railroad right-of-way and shall not do any work on the sides or under the bridge unless authorized by the railroad and a railroad Flagger is present. The Contractor shall provide **two weeks' notification** to the Railroad to discuss the work and Rail Protection.

No work shall be performed without prior notification and approval by the railroad. Reference the Special Provision for Protection of Railroad Traffic and Structures for additional requirements when working near the railroad.

### **PLEASE NOTE**

All underground utilities require **3 working days' notice** for any/all excavation or any other subsurface work around any underground facilities to schedule an on-site representative to be present. The contractor shall hand dig around all the underground facilities.

### **MAINTAINING UTILITY LOCATION MARKINGS**

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

### **UTILITY SIGNING**

Any utility/railroad 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.

## **APPENDIX E**

### **PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES SPECIAL PROVISIONS**

#### **1. GENERAL REQUIREMENTS**

Part of the work required by the Contract will be performed within a railroad right of way and/or adjacent to the tracks, telephone, telegraph, signal and electric supply lines of a railroad or railroads. The Contractor agrees to perform all such work in compliance with all of the terms of this Special Provision and all safety rules, regulations, or standards applicable to the Railroad. The Contractor shall be fully responsible for all damages arising from his failure to comply with the requirements of this Special Provision. The Contractor shall be deemed to have included all costs in the unit prices of the Schedule of Prices and the Proposal.

#### **2. AMOUNT OF RAILROAD WORK**

The estimated amount of work to be done within (50 feet) of the track of Springfield Terminal Railway is 1% of the contract.

#### **3. NUMBER OF TRAINS AND TRAIN SPEED**

The Contractor is notified that a maximum speed of (20 mph) will be considered as prevailing for the operation of trains of the Railroad at this project and that the approximate number of trains per day at this project is 4.

#### **4. PRIORITY OF RAILROAD OPERATIONS**

The train movements of the Railroad, and its lessees, and licensees shall have absolute priority over the performance of the Construction Project within the railroad right of way. The Contractor hereby agrees that the hours and times of work within the Railroad right of way must be coordinated through the Railroad and that such hours and times are subject to change without prior notice to the Contractor, unless other prior arrangements have been made through the Railroad.

#### **5. AUTHORITY OF RAILROAD TO STOP WORK**

If the Contractor fails to comply with the safety terms of this Special Provision, or if the Chief Engineer of the Railroad determines that the Contractor is using unsafe practices that threaten the safety of rail traffic, rail workers, or the general public, the Railroad shall have the right to immediately order the Contractor to cease work and vacate the

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Railroad's property. The Railroad agrees to confirm any cessation of work in writing by delivering to the Department's Construction Manager a completed Stop Work Order form attached as Exhibit A within 24 hours of giving any such order.

## **6. ENTRY UPON RAILROAD PROPERTY**

The Railroad hereby agrees to permit the Contractor, together with their subcontractors, suppliers, consultants and engineers (the "Contractor"), to enter upon the Railroad property for the purpose of performing the Construction Project, PROVIDED THAT the Contractor complies with all of the terms of this Special Provision and all safety requirements and directions of the Chief Engineer of the Railroad, or his authorized representative (the "Railroad's Chief Engineer").

## **7. NOTICE REQUIRED BEFORE ENTRY**

The Contractor shall give written notice to the Railroad's Chief Engineer at least 7 calendar day(s) in advance of the time it proposes to do work within the limits of the Railroad right-of-way or perform operations that may create a Hazard as specified by this Special Provision. The Contractor shall give such notice regardless of whether the work may also be within the limits of a public highway.

## **8. HAZARDS**

The Contractor shall assess to its own satisfaction hazards which may be caused by its operations. At a minimum, the Contractor agrees that the following shall constitute Hazards.

An operating track shall be considered fouled and subject to hazard when any object is brought nearer than (5 feet) to the gauge line of the near rail of the track.

A signal line or communication line shall be considered fouled and subject to hazard when any object is brought nearer than (4 feet) to any wire or cable.

An electric supply line shall be considered fouled and subject to hazard when any object is brought nearer than (10 feet) to any wire of the line.

Cranes, trucks, power shovels or any other equipment shall be considered as fouling and subjecting to hazard a track, signal line, communication or electric supply line when working in such position that failure of equipment, with or without load, could foul the track, signal line, communication or electric supply line.

Railroad operation will be considered subject to hazard when explosives are used in the vicinity of railroad premises, or during the driving or pulling of sheeting for any footing adjacent to a track, or when erecting structural steel adjacent to a track, or when

performing work under, across or adjacent to a track, or when operations involve swinging booms or chutes that could in any way come nearer than (**15** feet) to the gauge line of the near rail of the track, or when erection or removal of staging, false work or forms fouls a track or wire line.

None of the operations specified as a Hazard above shall be carried on during the approach or passing of a train or without permission from the Railroad's Chief Engineer and the presence of a railroad inspector/flagman, unless other prior arrangements have been made through the Railroad.

## **9. MINIMUM CLEARANCES**

During the construction of staging, false work or forms, the Contractor shall at all times maintain a minimum vertical clearance of (**22.5** feet) above the top of high rail and a minimum side clearance of (**10** feet) from the gauge line of the near rail where track is tangent. Additional side clearance must be maintained where track is on a curve.

## **10. WORK PLAN SUBMITTAL AND APPROVAL**

The Contractor shall submit in writing to the Railroad's Chief Engineer or duly authorized representative, and the Department's Railroad Property Manager or his appointed representative, at least **30** calendar day(s) in advance of the start of the project, an outline of his plan for work within the Railroad right of way including contemplated method(s) of construction. This plan must meet with the approval of the Railroad's Chief Engineer and the Department's Railroad Property Manager in every respect. If the Contractor contemplates the use of "on the track equipment", it should so state and obtain from the Railroad the conditions pertaining to such operations. All Railroad costs included in this operation will be borne by the Contractor. In a like manner, any of the Contractor's equipment or material on cars for this project shall be handled in conformance with existing traffic rules with all costs borne by the Contractor.

Prior to submitting their Proposal, the Contractor shall have ascertained from the Railroad and from the Department's Railroad Property Manager or his appointed representative, all information relating to its requirements and regulations and all costs in connection with compliance thereto.

## **11. EXCAVATIONS**

Before excavation for footings adjacent to tracks and/or within the Railroad's right-of-way may commence, whether or not also within the limits of a public highway, plans and calculations for such excavations, prepared by a Professional Engineer authorized to practice in Maine, shall be submitted to the Railroad's Chief Engineer for review and approval. Unless other prior arrangements have been made, the Railroad's Chief Engineer shall have **2** week(s) to perform such review and approval and issue a written

permission to proceed with the excavation. No excavation shall proceed without such permission.

At a minimum, excavations must utilize proper bracing, shoring, sheeting or other support as determined by the Railroad's Chief Engineer, to support the tracks with railroad traffic. Open excavation shall be suitably planked over when construction operations are not in progress. No excavation work shall be performed by the Contractor within the limits of the Railroad right of way, whether or not also within the limits of a public highway, until the Contractor has ascertained from the Chief Engineer of the Railroad the location of any wires, conduits, pipes, cables or other railroad facilities below the surface of the ground. Damage to any such facilities caused by the failure of the Contractor to ascertain the location of such facilities or by failure to use due care to avoid injury to such facilities shall be at the expense of the Contractor.

## **12. EQUIPMENT**

Equipment of the Contractor shall be in such condition so as to prevent failure that would cause delay in the operation of trains or damage to railroad facilities. Equipment shall not be placed or put in operation adjacent to a track without first obtaining permission of the Railroad. The Railroad agrees that such permission shall not be unreasonably withheld.

## **13. RAILROAD SERVICES - GENERALLY**

When work is to be performed within the Railroad's right-of-way, the Railroad shall provide the services, equipment and materials provided in this Special Provision including, but not limited to, engineering, flagging, inspection, signal protection and/or relocation, and restoration or replacement of the Railroad's track structure or ballast. Further, if the Railroad's Chief Engineer determines that the Contractor's operations do not comply with all of the safety requirements of this Special Provision and all safety requirements and directions of said Chief Engineer, the Railroad will employ the necessary qualified employees to protect its trains and other facilities. The Contractor shall pay to the Railroad the cost for performing all Railroad Services unless said costs are to be paid by the Department as specified in this Special Provision.

## **14. INSPECTION / FLAGGING**

The Railroad shall furnish and assign all inspectors / flaggers for general inspection purposes of general protection of railroad property and operations during construction as the Railroad's Chief Engineer determines are necessary to preserve safety.

(a) Responsibility for Cost. The Department will bear the cost of flagging or inspection (including travel time) or any combination thereof up to **8** man days of said flagging or inspection. If, in the opinion of the Railroad's Chief Engineer, further

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services of a flagger or inspector will be required due to the operations of the Contractor, the services will be furnished and the cost thereof (salary, expenses, insurance, taxes and vacation allowance, etc.) shall be paid to the Railroad by the Department, and will be recovered by the Department from the Contractor.

(b) Terms. The minimum hours per day for the Railroad employees engaged in inspection flagging services shall be eight (8) hours. Time at rates for straight time, overtime or for deadheading starts in accordance with established practices in effect in the territory in which the project is located. Information as to these practices should be obtained from the Railroad's Chief Engineer.

The Contractor shall notify the Railroad's Chief Engineer and the Chief Engineer of the Department in writing 7 calendar day(s) before beginning, resuming or suspending work within (25 feet) of the track, so that an inspector may be provided or removed in accordance with the requirements of this Special Provision. An inspector may be removed upon 3 calendar day(s) notice. Failure to give notice of intent to suspend work shall be cause of charge to the Contractor the cost of inspection during the period when work is suspended.

(c) Estimated Cost. The following is an estimate of the cost per day of inspection/flagging necessary for this project. The rates shown include all overhead charges, travel time, deadheading and personal expenses.

Date of estimate 5/20/2020

Estimated daily rate for four (4) consecutive hours Monday-Friday (straight time): \$500

Estimated daily rate for four (4) consecutive hours Saturday, Sunday, Holiday (overtime): \$750

Estimated rate for hours worked in excess of eight (8) hours in any one day:  
\$187.50/hour

Rates charged will be those in effect at the time of the performing the inspection/flagging which may be different than the rates used at the date of the Estimate. The Railroad agrees to notify the Department if rates used to calculate the above estimates change before the date of bids are received for this Contract.

(d) Definitions.

Man day (M.D.) - eight (8) consecutive hours or any portion thereof.

Overtime - Each additional hour or fraction thereof consecutive to and beyond the standard man day will count as 3/16 of a man day.

Town: **Carmel- Old Town**  
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Date: **May 20, 2020**

Standard Man day - Eight (8) consecutive hour, Monday - Friday between the hours of 7 a.m. to 3:30 p.m. unless otherwise noted and agreed to by all parties.

Travel Time - Time required by flagger and/or inspector to commute between his or her point of headquarters to the project site. This time shall not be charged in determining available man days.

## **15. OTHER CONTRACTOR RESPONSIBILITIES**

The restoring and resurfacing of tracks, if disturbed due to Contractor's operations, shall be at the expense of the Contractor.

Any other changes made or services furnished by the Railroad as a result of the Contractor will be at the Contractor's expense.

## **16. EXTRA-CONTRACT SERVICES**

Temporary and permanent changes of tracks and telephone, signal and electric supply lines made necessary by or to clear the permanent work of the Contractor as shown on the construction plans and included in the Railroad force account as recollectable from the State will be made or caused to be made by the Railroad without expense to the Contractor.

## **17. INDEMNIFICATION**

Where work is being performed over, under, across or adjacent to Railroad premises, the Contractor shall defend, indemnify and save harmless the Railroad and the Maine Department of Transportation from and against any and all loss, cost, damage, claims, suits, demands, or liability for damages for personal injury including death and for damage to property, which may arise from or out of the operations conducted under his contract, occurring by reason of any act or omission of the Contractor, his agents, servants or employees, or by reason of any act or omission of any subcontractor, his agents, servants or employees.

## **18. INSURANCE**

In addition to any other forms of insurance or bonds required under the terms of the Contract, the Contractor will be required to procure and maintain, at its sole cost and expense, the following insurance coverages naming the Railroad as an insured.

(a) Railroad Protective Liability Insurance with limits not less than **\$2M** per single occurrence and **\$6M** per aggregate total occurrences.

Town: **Carmel- Old Town**  
Route: **Interstate 95**  
WIN: **24119.00, 23617.50, 24173.00 & 23617.60**  
Date: **May 20, 2020**

(b) Comprehensive General Liability Insurance protecting against liability from bodily injury or property damage arising out of the Construction Project with limits of not less than **\$2M** per single occurrence and **\$6M** per aggregate total occurrences.

(c) Workers Compensation and Occupational Disease Insurance, as required by law.

(d) Automobile Liability Insurance covering all motor vehicles used about or in connection with the Construction Project.

If any part of the work is sublet, these insurance coverages shall be provided by or on behalf of the subcontractors to cover their operations

Each policy shall carry an endorsement covering the “save harmless” clause in favor of the Railroad and the Maine Department of Transportation, as set forth in the paragraph, “Responsibility for Damage Claims”.

If blasting is to be done in the vicinity of the Railroad, the insurance policies shall include such coverage.

The policies shall be in force before any work is done on the project and shall remain in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the State and the Railroad.

Before any work is done on the project, the Department of Transportation and the Railroad's Chief Engineer shall be furnished certificates of each policy. Further, the original policy of the Comprehensive General Liability Insurance and the Railroad Protective Liability Insurance shall be furnished to the Railroad's Chief Engineer and a duplicate shall be furnished to the Department of Transportation.

The policy or policies of the Railroad's protective public liability and property damage liability shall be written by a Company authorized to do business in the State of Maine, and shall be signed by the President and Secretary of the Insurance Company and shall be countersigned by an authorized representative of the Company.

## **19. ROADWAY WORKER SAFETY REGULATION**

Notice to all Contractors/Subcontractors and individuals must be aware of the Federal Roadway Worker Safety Regulation, CFR 49, Part 214(c). They may be required to comply with this regulation. Any requirements for them to comply will be discussed at the pre-construction utility meeting.

Town: **Carmel- Old Town**  
Route: **Interstate 95**  
WIN: **24119.00, 23617.50, 24173.00 & 23617.60**  
Date: **May 20, 2020**

EXHIBIT A

ORIGINAL TO CONTRACTOR

**MDOT/RAILROAD STOP WORK ORDER**

|                                               |                            |
|-----------------------------------------------|----------------------------|
| Section A - Contractor                        | Town                       |
|                                               | DOT Railroad Project #     |
| Railroad Name                                 | Location                   |
|                                               | Notice #                   |
| DESCRIPTION OF SAFETY HAZARD/REASON FOR ORDER |                            |
| Standard Violated                             | RAC (Risk Assessment Code) |
|                                               | <b>N/R</b>                 |
| Railroad Official (Flagger/Inspector) Name    | Date                       |
| Signature                                     |                            |
| SECTION B - ACTION TAKEN:                     |                            |

cc: MDOT - R.E. or Inspector  
MDOT - Utility Section  
MDOT - Construction Division  
Railroad - Chief Engineer

1. **Risk Assessment.** Each identified/validated hazard shall be assigned a Risk Assessment Code (RAC) by the Safety Office. The RAC represents the degree of risk associated with the deficiency and combines the elements of hazard severity and mishap probability. The RAC is derived as follows:

a. **Hazard Severity.** The hazard severity is an assessment of the worst potential consequence: Defined by degree of injury, occupational illness, or property damage, which is likely to occur as a result of a deficiency. Hazard severity categories shall be assigned by roman numeral according to the following criteria.

(1) **Category I - Catastrophic:** The hazard may cause death or loss of a facility.

(2) **Category II - Critical:** May cause severe injury, severe occupational illness, or major property damage.

(3) **Category III - Marginal:** May cause minor injury, minor occupational illness, or minor property damage.

(4) **Category IV - Negligible:** Probably would not affect personnel safety or health, but is nevertheless in violation of a NAVOSH standard.

b. **Mishap Probability.** The mishap probability is the probability that a hazard will result in a mishap, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation, and affected population. Mishap probability shall be assigned an Arabic letter according to the following criteria:

(1) Sub-category A - Likely to occur immediately or within a short period of time.

(2) Sub-category B - Probably will occur in time.

(3) Sub-category C - May occur in time.

(4) Sub-category D - Unlikely to occur.

c. **Risk Assessment Code.** The RAC is an expression of risk which combines the elements of hazard severity and mishap probability. Using the matrix shown below, the RAC is expressed as a single Arabic number that can be used to help determine hazard abatement priorities.

|                 | Mishap Probability |   |   |   |   | RAC            |
|-----------------|--------------------|---|---|---|---|----------------|
|                 |                    | A | B | C | D | 1 - Critical   |
| Hazard Severity | I                  | 1 | 1 | 2 | 3 | 2 - Serious    |
|                 | II                 | 1 | 2 | 3 | 4 | 3 - Moderate   |
|                 | III                | 2 | 3 | 4 | 5 | 4 - Minor      |
|                 | IV                 | 3 | 4 | 5 | 5 | 5 - Negligible |

**SPECIAL PROVISION 105**  
**CONSTRUCTION AREA**

Construction Areas located in the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, Veazie and Cities of Bangor and Old Town have been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

*The sections of highway under construction in Penobscot County:*

***Project 2411900 is on Interstate 95 Northbound:***

*Segment # 1 beginning in Carmel at Mile Marker 170.44 cross over and extending northbound 5.67 miles to Hampden.*

*Segment # 2 beginning in Hampden 0.02 miles north of the Coldbrook Road Overpass and extending north 8.06 miles to Hogan Road in Bangor.*

***Project 2417300 is on Interstate 95 Southbound:***

*Segment # 1 beginning in Old Town at the Kirkland Road Bridge on I-95 extending southbound 14.26 miles to the Coldbrook Road interchange in Hampden.*

*Segment # 2 beginning in Hampden at MM 176.27 and extending southbound 5.83 miles to the cross over at MM 170.44 in Newburgh.*

Per 29-A § 2382 (7) MRSA, the MDOT may “issue permits for stated periods of time for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The permit:

*A. Must be procured from the municipal officers for a construction area within that municipality;*

*B. May require the contractor to be responsible for damage to ways used in the construction areas and may provide for:*

*(1) Withholding by the agency contracting the work of final payment under contract; or*

*(2) The furnishing of a bond by the contractor to guarantee suitable repair or payment of damages.*

*The suitability of repairs or the amount of damage is to be determined by the Department of Transportation on state-maintained ways and bridges, otherwise by the municipal officers;*

*C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and*

*D. For construction areas, carries no fee and does not come within the scope of this section.”*

The Municipal Officers for the Towns of Carmel, Hampden, Hermon, Newburgh, Orono, Veazie and Cities of Bangor and Old Town agreed that an Overlimit Permit will be issued to the Contractor for the purpose of using loads and equipment on municipal ways in excess of the limits as specified in 29-A MRSA, on the municipal ways as described in the “Construction Area.”

As noted above, a bond may be required by the municipality, the exact amount of said bond to be determined prior to use of any municipal way. MaineDOT will assist in determining the bond amount if requested by the municipality.

The maximum speed limits for trucks on any town way will be 25 mph (40 km per hour) unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

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

105.11 Federal Requirements Add the following as the third and subsequent paragraphs:

“Prior to payment by the Department, the Contractor shall provide 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).

All manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size and shape, or the final finish is considered a manufacturing process. These processes include 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.

A Buy America Certification is required from each manufacturer, fabricator, supplier, subcontractor, etc. that meets the “manufacturing” definition above.

Buy America does not apply to raw materials (iron ore and alloys), scrap, pig iron, or processed, pelletized, and reduced iron ore.”

**SPECIAL PROVISION**  
**SECTION 105**  
**CONTROL OF WORK**  
**(Cooperation Between Contractors)**

It is hereby brought to the Contractor's attention that the Department has awarded and plans to award contracts adjacent to the limits of this contract, which may be in progress simultaneously. MaineDOT Maintenance & Operations may have contractually obligated work, as well as routine maintenance activities being conducted within and in close proximity of the limits for this project.

The Contractor shall also coordinate this contract's projects with local municipalities' projects.

The Contractor shall cooperate with other Contractors at all times and provide project access as necessary and as directed by the Resident.

The Contractor will coordinate all activities including traffic control with others to ensure safe travel for motorists. This shall be specifically addressed within the Contractors Traffic Control Plan.

The Contractor shall coordinate their activities with surrounding municipalities and utilities as part of this Contract.

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

- 1. Off Shift lane closures will not be permitted.**
- 2. Ramps may be closed Monday night through Friday morning between the hours of 8 pm to 6 am with 72 hours' notice. Work on ramps may continue after these hours with shoulder closures only. The contractor shall notify local emergency personnel resources of closure dates and times. Under no circumstances will two adjacent on or off ramps be closed simultaneously. Message Boards will be in-place 72 hours prior to ramp closure with a message approved by the Department.**
- 3. The contractor shall plan operations so that the Resident will have sufficient advance notification to provide the necessary inspection and testing. Sufficient notification will be considered 48 hours.**
- 4. Lane closure length will be kept to a minimum required for the day's operation, not to exceed 4.0 miles.**
- 5. Shoulder closures will not be permitted while the opposite lane is closed.**
- 6. Interstate Crossovers shall not be allowed to be utilized to change direction, unless both passing lanes are closed simultaneously. When the Contractor chooses to utilize crossovers, the opposite side lane closure shall be removed at the end of the shift. The use of crossovers must be addressed in the Contractor's traffic control plan. The utilization of the crossovers will be at the discretion of the Department.**
- 7. All reduced work zone speeds shall be covered or removed when lane closures are removed, or no work is present.**

# NOTICE

## (COVID-19 Pandemic)

The Department considers the COVID-19 Pandemic an Uncontrollable Event as defined in Section 101.2 of the Department's Standard Specifications.

Accordingly, any documented delay to the project's Critical Path due to COVID-19 related issues, such as impacted workforce, subcontracts, or material supply, will be considered an Excusable Delay as defined in Section 109.5(A)(3) of the Department's Supplemental Specifications.

As an Excusable Delay, the Contractor is entitled to an extension of time provided that other associated notification, documentation, and procedural requirements set forth in the Contract are met.

MaineDOT DBE Project Attainment Target (PAT)  
for this Project is 4.0 %

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 107**  
**(Contract Time)**

1. Ramps may be closed between the hours of 8 pm to 6 am with 72 hours notice. These closures will need to be coordinated with the City of Bangor and emergency personnel. Work on ramps may continue after these hours with shoulder closures only.
2. The Contractor shall be allowed to work 6 days per week. The working days shall start Sunday at 8 p.m. through Saturday at 6 a.m., as outlined in this Special Provision Note 3, unless otherwise authorized by the Department, or stated elsewhere in contract documents.

Except no work will be allowed on:

September 5, 2020 beginning at 6 a.m. to September 8, 2020 at 8 p.m.

November 25 at 6 a.m. to November 30, 2020 at 8 p.m.

May 28, 2021 at 6 a.m. to June 1, 2021 at 8 p.m.

July 1, 2021 at 6 a.m. to July 6, 2021 at 8 p.m.

September 3, 2021 at 6 a.m. to September 7, 2021 at 8 p.m.

3. The contractor shall be allowed to enter the roadway during the following hours:

Section 1, 2, and 3 will be allowed the times listed below:

- a. Sunday beginning 8 pm ending Monday at 6am.
- b. Monday beginning 8 pm ending Tuesday 6am.
- c. Tuesday beginning 8 pm ending Wednesday 6am.
- d. Wednesday beginning 8 pm ending Thursday 6am.
- e. Thursday beginning 8 pm ending Friday 6am.
- f. Friday beginning 8 pm ending Saturday 6am.

Lane closure set and removal shall be considered to be part of this time:

4. Any circumstance outside of these time frames, the Contractor shall be charged Supplemental Liquidated Damages as outlined in Special Provision 107 (Supplemental Liquidated Damages).

SPECIAL PROVISION  
SECTION 107  
PROSECUTION AND PROGRESS  
(Contract Time – Working Days)

This Contract shall be completed within (132) working days. The Contractor may begin work any time after award in accordance with Standard Specification 104.4.2 and upon approval of all required submittals. Time charge will commence on the start date or no later than **August 24, 2020** whichever occurs first.

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 **[Shawn.Smith@Maine.gov](mailto:Shawn.Smith@Maine.gov)**, **[Dale.Mayo@Maine.gov](mailto:Dale.Mayo@Maine.gov)**, **[Scott.Bickford@Maine.gov](mailto:Scott.Bickford@Maine.gov)**. 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.

The Contractor may request to adjust the submitted schedule of work and Begin Construction Date once after the initial submittal. The Department will allow adjustments in the Begin Construction Date of up to seven calendar days if the request is made at least 21 calendar days prior to the updated 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 **[Shawn.Smith@Maine.gov](mailto:Shawn.Smith@Maine.gov)**, **[Dale.Mayo@Maine.gov](mailto:Dale.Mayo@Maine.gov)**, and **[Scott.Bickford@Maine.gov](mailto:Scott.Bickford@Maine.gov)**. The Contractor shall notify all utility contacts listed in the 104 Special Provision and provide the utility contacts the updated schedule of work within 2 calendar days of the request to adjust the Begin Construction Date.

**SPECIAL PROVISION**  
**SECTION 107**  
**CONTROL OF WORK**  
**(Supplemental Liquidated Damages)**

General: Monetary assessments will be made against the Contractor for each ¼ hour there are lane restrictions as specified below.

Definitions of Terms: For this contract the following definitions apply:

- (a) Calendar Day: Any portion of the day on the calendar including Saturdays, Sundays, and holidays, beginning and ending at midnight.
- (b) Hour: Any continuous 60 minute period or portion of a continuous 60 minute period beginning at the point when a lane and/or shoulder is closed or obstructed by the contractor's operation(s).
- (c) 15 Minute Period: Any portion of a 15 minute continuous period.
- (d) Obstruction: When the contractor's operation(s) have resulted in the useable lane width of the travel lane or passing lane to be less than that specified in the plan documents.

This contract includes a supplemental liquidated damage procedure under which the contractor is assessed a charge for each lane closure outside the time periods specified under Special Provision 105. The charge will be assessed for each lane restriction as follows:

|                 |                         |
|-----------------|-------------------------|
| One Lane Closed | \$2,500/0 - 15 Minutes  |
|                 | \$5,000/ 16 -30 Minutes |
|                 | \$10,000/ 31-45 Minutes |
|                 | \$25,000/ 46-60 Minutes |

\* **These charges will be accumulative in nature. Example: 0 to 15 minutes, the contractor shall be assessed \$2500.00. From 16 minutes to 30 minutes the charges will be \$5000.00 + \$2500.00 = \$7500.00, and so on. Times above 60 minutes shall receive an additional assessment of \$25,000.00 for each portion of a 15 minute time period.**

**Carmel – Bangor, Old Town – Carmel  
23617.50, 23617.60, 24119.00, & 24173.00  
Interstate 95 Northbound  
Interstate 95 Southbound  
June 3, 2020**

The applicable charges will be deducted from any monies due the Contractor for work performed. The deduction will be based on the applicable rate for any and all closures whether work is being performed or not. Deductions will be accomplished through progress payments due the Contractor.

The Contractor shall address in their Traffic Control Plan a contingency plan for opening up both lanes of traffic within one hour of being notified by the Resident. This plan shall be fully detailed, and Permission to open up both lanes shall only be granted if work being performed can safely be stopped to allow lanes to be opened to traffic.

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 PROVISION**  
**SECTION 107**  
**TIME**  
**(Liquidated Damages)**  
**(Working Days)**

**107.7.2 SCHEDULE OF LIQUIDATED DAMAGES**

Revise this section by removing the numbers in the chart and replace with the following:

Original Contract Amount

| From<br>More Than |     | To and<br>Including | Amount of<br>Liquidated Damages<br>per Working Day |
|-------------------|-----|---------------------|----------------------------------------------------|
| \$ 0              | to  | \$ 100,000.00       | \$400.00                                           |
| \$ 100,000.00     | to  | \$ 250,000.00       | \$800.00                                           |
| \$ 250,000.00     | to  | \$ 500,000.00       | \$1,000.00                                         |
| \$ 500,000.00     | to  | \$1,000,000.00      | \$1,250.00                                         |
| \$1,000,000.00    | to  | \$2,000,000.00      | \$1,600.00                                         |
| \$2,000,000.00    | to  | \$4,000,000.00      | \$2,000.00                                         |
| \$4,000,000.00    | and | More                | \$3,350.00                                         |

SPECIAL PROVISIONS  
SECTION 202  
REMOVING STRUCTURES AND OBSTRUCTIONS  
**(Removing Pavement Surface – Medium Cut Drum)**

The November 2014 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 spaced not more than  $\frac{5}{16}$  inches (8mm) apart and 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  $\frac{1}{8}$  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  $\frac{1}{8}$  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

| <b>Depth<br/>(At<br/>Centerline)</b> | <b>Milling Conditions</b>                                                                                                                                                                                                                                                                        |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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 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 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 milled 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.

The Contractor will also be responsible for installing 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 RPM application, or temporary painted line. 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.

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 Traveled Way) | Conditions                                                                                                                                                                                                        |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1" or less                      | The Contractor may leave a vertical edge joint exposed indefinitely.                                                                                                                                              |
| Greater than 1" to 2"           | The Contractor may leave a vertical edge joint exposed for up to <b><u>21 days</u></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.

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 HMA 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.

Any areas of concern, such as de-lamination or pot-holing shall be identified on a continuous basis as milling progresses. Proper corrective action will be determined by the Resident and paid for under the appropriate contract items, and if required, completed prior to opening lane to traffic. Any issues that arise **up to 21 calendar days** after being milled will be the responsibility of the MaineDOT unless otherwise noted in Special Provision Section 105 – Limitations Of Operations.

Basis of Payment

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. Hauling and stockpiling of the material will not be paid for directly, but will be considered incidental to the milling items.

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, or traffic control limitations impact pavement removal operations, or site conditions make operations at the prescribed rate unreasonable. Trimming to create a vertical face along curb line, guardrail, or around structures will be considered incidental to the 202.202 items. Additional trimming beyond the incidental work described will be paid under the appropriate rental items as listed in the Contract.

Pay ItemPay Unit

|                                                                |      |
|----------------------------------------------------------------|------|
| 202.2023 Removing Pavement Surface - Medium Cut Drum           | S.Y. |
| 202.20231 Removing Pavement Surface - Medium Cut Drum (Hourly) | Hour |

SPECIAL PROVISION  
SECTION 202  
REMOVING STRUCTURES AND OBSTRUCTIONS  
(Shoulder Rumble Strip)

Description This work shall consist of milling a pattern onto highway shoulders at the spacing, offset, width, and depth shown on the plans. Rumble strips shall not be placed across ramp openings or bridges. Rumble strips shall not be ground until pavement line striping has been completed.

CONSTRUCTION REQUIREMENTS

Removing Material The bituminous material shall be removed by a cold milling machine capable of removing the pavement to the required depth and width. The machine must be adjustable to grind or plane on various cross-slopes. Salvage and disposal of bituminous material shall be in accordance with Section 203.

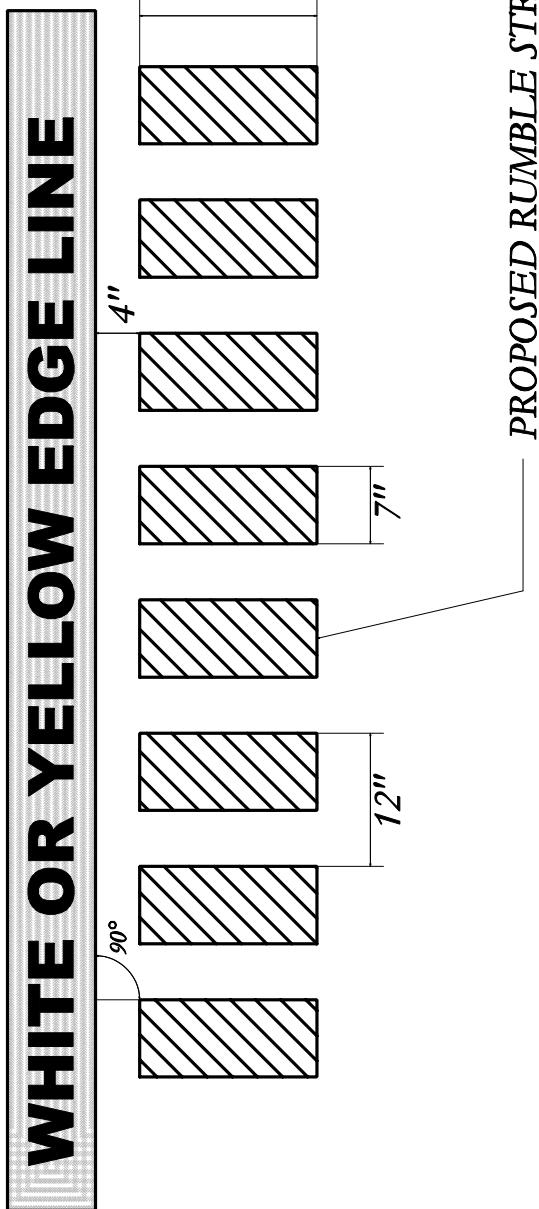
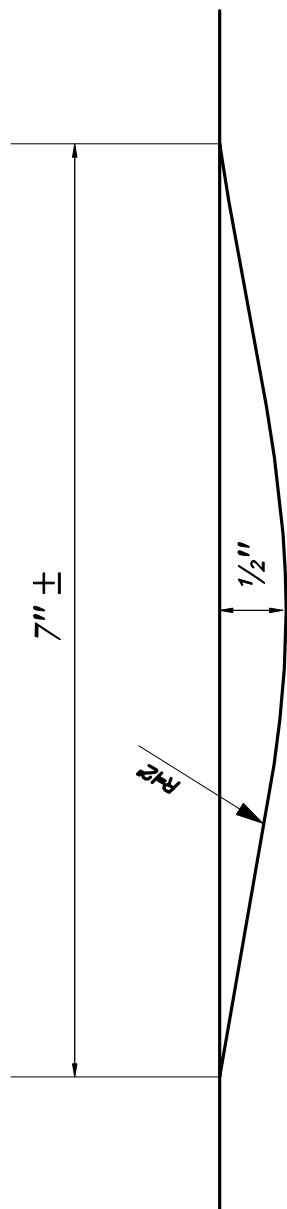
Equipment The equipment shall be a cold milling machine or a cold planing machine specially manufactured for rumble strips. This machine shall be capable of cutting 1200 rumble strips per hour of operation. The Contractor will perform a test section prior to rumble strip installation and at any time as directed by the Resident. The test section will be done to ensure that the machine is capable of milling the rumble strips in accordance with these specifications and the plans.

Method of Measurement Rumble strips will be measured by the meter [foot] longitudinally along the edge of the travelway.

Basis of Payment The accepted quantity of rumble strips will be paid for at the unit price bid per meter [foot] which price will be full compensation for removing and salvaging the bituminous material and for any labor, equipment, and incidentals needed to complete this work.

Payment will be made under:

| <u>Pay Item</u>               | <u>Pay Unit</u> |
|-------------------------------|-----------------|
| 202.205 Rumble Strip Shoulder | Meter [Foot]    |



**NOTE:**  
**SHOULDER RUMBLE STRIPS SHALL BE PLACED ON THE MEDIAN AND OUTSIDE SHOULDER AS SHOWN ON THE ABOVE PLAN. THE WHITE OR YELLOW EDGE LINE SHALL BE PLACED PRIOR TO MILLING RUMBLE STRIPS.**

# *SHOULDER RUMBLE STRIP DETAIL* *(ITEM 202.205)*

State of Maine  
 Dept. of Transportation

SHOULDER RUMBLE STRIP  
 DETAIL

PAGE 1 OF 1

SPECIAL PROVISIONS  
SECTION 202  
REMOVING STRUCTURES AND OBSTRUCTIONS  
(Profile Milling Concrete Wearing Surface)

202.063 Description This Work shall consist of profile milling the concrete wearing surface as shown on the Plans, and as specified herein.

The equipment for profile milling the concrete wearing surface shall be a power operated milling machine or grinder capable of removing non-reinforced concrete 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 concrete removal depth as required, and readily maintain desired cross slope, to compensate for surface irregularities in the existing surface. 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. 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 equipment shall be capable of following a straight plane from the start to end stations and from the roadway centerline to offset limits as indicated in the Plans.

The rotary drum shall have new carbide tip teeth installed in each holder before this work is performed. Teeth shall be spaced not more than  $\frac{5}{16}$  inches (8mm) apart and 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 limited to 30 feet-per-minute unless it can be demonstrated that a surface meeting this specification can be obtained at a higher rate of speed. The tools on the revolving cutting drum must be continually maintained and shall be replaced as warranted to provide a uniform surface texture. The milled surface shall comply with the surface tolerance limits as specified in Table 3 of Standard Specification Section 502.13.E; measurements will be considered from top of ridges only.

202.07 Method of Measurement Profile milling concrete wearing surface will be measured for payment by the square yard of the complete surface area of the wearing surface being milled excluding areas recessed for expansion joints, bridge drains, curb lines, and medians.

202.08 Basis of Payment The accepted quantity of Profile Milling Concrete Wearing Surface will be paid for at the Contract unit price per square yard which price will be full compensation for removing and disposing of concrete waste material and concrete slurry, and all labor, equipment, and incidentals required to satisfactorily complete the Work.

| <u>Pay Item</u>                                 | <u>Pay Unit</u> |
|-------------------------------------------------|-----------------|
| 202.31 Profile Milling Concrete Wearing Surface | Square Yard     |

**SPECIAL PROVISION**  
**SECTION 401 - HOT MIX ASPHALT PAVEMENT**  
(HMA with Fine Micro-Deval Requirement)

The following subsections of the most current version of Specification 401 – Hot Mix Asphalt Pavements have been revised and amended by the following:

401.01 Description The Contractor shall compose Hot Mix Asphalt (HMA) Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. If denoted in Special Provision 403 - Hot Mix Asphalt Pavement, the mixtures shall meet the additional aggregate requirements of this special provision.

401.02 Materials Materials shall meet the requirements specified in Section 700 – Materials, unless otherwise revised in this special provision:

|                             |        |
|-----------------------------|--------|
| Aggregates for HMA Pavement | 703.07 |
| HMA Mixture Composition     | 703.09 |

The HMA blend, minus any RAP used, shall have a Fine Micro-Deval value of 15.0 or less as determined by weighted average of individual fine aggregate source values determined through ASTM D7428.

SPECIAL PROVISION  
SECTION 401  
HOT MIX ASPHALT PAVEMENT  
(Material Transfer Vehicle)

Description The hot mix asphalt pavement for all leveling, base, binder and wearing courses shall be transferred to the paver by a material transfer vehicle (MTV) on mainline travelways, shoulders, and ramps as denoted in Special Provision 403 - Hot Mix Asphalt Pavement.

The MTV shall operate as an independent unit not attached to the paver. It shall be a commercially manufactured unit specifically designed to transfer the hot mix from haul trucks to the paver without depositing the mix on the roadway. A separate hopper with a capacity of 14 ton shall be inserted into the regular paver hopper. The MTV or the hopper insert shall be designed so that the mix receives additional internal mixing action either in the MTV unit or the paver hopper.

Basis of Payment The MTV and the hopper insert will not be paid for directly, but will be considered incidental to the related contract pay items.

**SPECIAL PROVISION**  
**SECTION 403**  
**HOT MIX ASPHALT**

| Desc. Of Course                                                                     | Grad Design. | Item Number | Total Thick | No. Of Layers | Comp. Notes |
|-------------------------------------------------------------------------------------|--------------|-------------|-------------|---------------|-------------|
| <b><u>24119.00 - 1 ½" Mill &amp; UTBWC Overlay with Shim</u></b>                    |              |             |             |               |             |
| <b><u>Travel Lane, Passing Lane, &amp; Shoulders (As Indicated)</u></b>             |              |             |             |               |             |
| Wearing                                                                             | Type C       | 462.301     | ¾"          | 1             | 19,27,29,30 |
| Shim                                                                                | 9.5 mm       | 403.211     | variable    | 1/more        | 2,5,7,14,19 |
| <b><u>¾" Mill &amp; UTBWC Overlay</u></b>                                           |              |             |             |               |             |
| <b><u>Travel Lane, Passing Lane, &amp; Shoulders (As Indicated)</u></b>             |              |             |             |               |             |
| Wearing                                                                             | Type C       | 462.301     | ¾"          | 1             | 19,27,29,30 |
| <b><u>Ramps &amp; Rest Area - 1 ½" Mill &amp; HMA Overlay Areas</u></b>             |              |             |             |               |             |
| <b><u>Travelway &amp; Shoulder (As Indicated)</u></b>                               |              |             |             |               |             |
| Wearing                                                                             | 12.5 mm      | 403.2081    | 1 ½"        | 1             | 5,7,19,30   |
| <b><u>1 ½" HMA Overlay Areas - Cross Overs (As Indicated)</u></b>                   |              |             |             |               |             |
| Wearing                                                                             | 12.5 mm      | 403.2081    | 1 ½"        | 1             | 2,5,7,17,30 |
| <b><u>Spot Shims (As Indicated or as Directed)</u></b>                              |              |             |             |               |             |
| Shim                                                                                | 9.5 mm       | 403.211     | Variable    | 1/more        | 2,5,7,14    |
| <b><u>23617.50 &amp; 26317.60 - 6 ¼" Mill &amp; Fill</u></b>                        |              |             |             |               |             |
| <b><u>Bridge Joint Repair (As Indicated)</u></b>                                    |              |             |             |               |             |
| Wearing                                                                             | Type C       | 462.301     | ¾"          | 1             | 19,27,29,30 |
| Base                                                                                | 12.5 mm      | 403.2131    | 1 ½"        | 1             | 5,7,24,30   |
| Base                                                                                | 12.5 mm      | 403.2131    | 2"          | 1             | 5,7,24,30   |
| Base                                                                                | 12.5 mm      | 403.2131    | 2"          | 1             | 5,7,24,30   |
| <b><u>1" HMA Overlay - Sidewalks, Incidentals (As Indicated or as Directed)</u></b> |              |             |             |               |             |
| Wearing                                                                             | 9.5 mm       | 403.209     | 1"          | 1/more        | 2,10,14     |

**COMPLEMENTARY NOTES**

2. 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.
5. 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**.
7. Section 106.6 Acceptance, (1) Method A.
10. Section 106.6 Acceptance, (2) Method D.
14. 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.

17. Compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **10 ton** vibratory, **12 ton** pneumatic, and a **3-5 ton** finish roller for roadway work. 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 Contractor's representative and presented to the Department's representative by the end of the working day. 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.
19. The use of a Material Transfer Vehicle (MTV) shall be required on **all mainline travelway and adjacent shoulders that are paved in the same operation** on this layer. See Special Provision 401 – Material Transfer Vehicle for specifics.
24. A tack coat of a RS-1, Item #409.15 shall be applied along the longitudinal centerline construction joint, on the horizontal surface immediately adjacent to the construction joint, and in a minimum width of one foot. The rate of application shall be approximately 0.050 to 0.075 G/SY. This application shall be in addition to the normal application of tack coats to the construction joint face and horizontal surfaces prior to placing a new lift.
27. See Special Provision 462 – Ultra Thin Bonded Wearing Course for project specifics.
29. See Special Provision 401 – HMA with Fine Micro-Deval Requirement for project specifics.
30. The required PGAB shall be a storage-stable, homogeneous, polymer modified asphalt binder that meets **PG 64E-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 the **PG 64E-28** requirements. The Contractor shall provide supporting test data showing the PGAB and anti-strip blend meet the required criteria.

#### Tack Coat

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>. Tack used will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

**SPECIAL PROVISION****SECTION 400****Pavements**

(Emulsified Asphalt Seal Coat with Cover Coat Material)

**Description** This work consists of furnishing and applying one or more applications of emulsified asphalt sealcoat material with cover coat material on an approved surface in accordance with these specifications, and in reasonably close conformity with the lines shown on the plans or established.

**Materials** The bituminous material shall meet the applicable requirements of Section 702 – Bituminous Materials. Liquid asphalt grades for the fog coat treatment shall meet the requirements for CSS-1, CSS-1h, CRS-2h, or CRS-2P. The emulsion type selected shall be used for the entire fog seal application areas unless otherwise approved by the Department.

The emulsified asphalt shall be produced with an approved, certified emulsion product, diluted, and thoroughly mixed into a homogenous liquid at the emulsion manufacturing facility. Each load shall be accompanied by a loading invoice listing the material supplier, emulsion type, dilution rate, total quantity loaded, and copy of the undiluted emulsified asphalt product certification. The diluted emulsion shall meet the requirements listed in Table 1 of this specification.

**Table 1 – Diluted Asphalt Emulsion for Seal Coat**

| <u>Test requirements for diluted material</u> | <u>Range</u> |
|-----------------------------------------------|--------------|
| Sieve test %                                  | 0 – 0.10     |
| Residue by distillation, %                    | 28 - 40      |
| Penetration                                   | 40 - 90      |
| Application Temperature                       | 100 - 180°F  |

The cover coat material shall be black or dark brown in color. Cover coat material shall be dried and free from moisture, and be of similar type and size as aluminum oxide or silicon carbide abrasive sandblasting grit meeting the “fine” or “extra fine” gradation requirements (ref: Black Beauty abrasive or similar product).

The Contractor may propose an alternative material for the aggregate cover, but will be required to demonstrate the materials compatibility with the emulsion fog seal prior to use on the project.

**Equipment** Emulsified asphalt sealcoat material application equipment shall meet the requirements specified in Section 409 – Bituminous Tack Coat, subsection 409.05 – Equipment with the addition of the following:

The asphalt distributor shall contain suitable mechanical circulating and heating mechanisms to provide a uniform approved temperature of the entire mass of material. The distributor shall be equipped with a radar type sensor used to measure ground speed, and feed a Digital Volumetric Accumulator capable of measuring gallons applied and distance traveled.

It shall be capable of applying asphalt material in accurately measured quantities at any rate between 0.01 to 2.0 gallons per square yard, of roadway surface, at any length of spray bar up to 16 feet. The distributor shall be capable of maintaining a uniform rate of distribution of asphalt material regardless of change in grade, width or direction of the road. It shall be equipped with an electronic control for setting asphalt pump discharge rate and on/off switching of spray for nozzles in one (1) foot, increments which shall be located in the truck cab. The spray nozzles and pressure system shall provide a sufficient and uniform fan-shaped spray of asphalt material throughout the entire length of the spray bar at all times while operating. The spray shall completely cover the roadway surface receiving the treatment.

The aggregate spreader shall be mounted on the asphalt distributor. It shall have a minimum capacity of 2000 lbs. The hopper shall have vibratory agitation to facilitate material flow. The cover aggregate spinners shall be variable speed, capable of distributing cover aggregate consistently over variable roadway widths in a single pass. All controls shall be cab-mounted and capable of being operated during the application of the asphalt emulsion by the distributor operator.

## CONSTRUCTION PROCEDURES

Weather Limitations Emulsified asphalt sealcoat material shall not to be applied when the atmospheric temperature is below 50°F, or pavement surface temperature below 50°F.

Emulsified asphalt sealcoat shall not be applied in wet conditions, or when wet weather conditions are forecasted within a 6 hour period after application.

Preparation of Surface Before application of the emulsion seal coat material the surface shall be thoroughly cleaned of all loose and objectionable material. Preparation of the surface shall be considered incidental to the contract. The Contractor shall be responsible for covering all utility irons just prior to application of emulsion and uncovering utilities after application.

Immediately before applying an emulsified asphalt seal coat, the pavement surface must be cleaned with a road sweeper, power broom to remove dust, dirt, and debris. The pavement surface must be clean and dry before applying the emulsified asphalt sealcoat.

Application Emulsified asphalt seal coat materials shall be applied by a pressure distributor in a uniform, continuous spread over the area to be treated. The target application rate shall be 0.12 gallons per square yard. Emulsion application rates may be adjusted within the range of 0.10 to 0.14 gallons per square yard, as determined by the test section and as directed by the Department. No additional payment consideration or adjustment shall be made unless the required application rate varies from the rate as specified above.

The cover aggregate shall be applied immediately after the emulsion, prior to the emulsion break or cure, and simultaneously with the pressure distributors pass.

Equipment or traffic will not be allowed on the emulsion treated surface until the emulsion has fully cured. Emulsion materials will be applied within the temperature range specified in Section 702.05 – Application Temperatures, or as otherwise listed in this specification. No moisture shall be present on the roadway surface.

The Contractor shall provide dry cover material meeting the requirements of this specification and at a spread rate of 0.35 to 0.75 lbs./ s.y. as determined by the control section. The Contractor shall be required to apply additional cover material above the prescribed rate in the event that excessive emulsion materials are applied. Use of cover material shall be paid for by the pound, by means of verified bagged quantity, or by scaled weight of actual materials applied.

A test section shall be established to verify emulsion and cover coat material target application rates. The section shall be of sufficient length to verify the approximate emulsion use at the prescribed rate. Generally, the length of test section shall be approximately 200-500 linear feet. During emulsion seal material application, adequate provisions shall be made to prevent marring and discoloration of adjacent pavements, structures, vehicles, foliage or personal property. The use of skirting or end panels may be required to control application widths, and limit overspray.

Areas found to lack the proper emulsified asphalt seal coat application rate will require a re-application of emulsion material to meet the required rate. Areas requiring re-application will not be paid for directly but shall be considered incidental to the emulsified asphalt seal coat pay item,

In the event that excessive emulsion materials are applied, the use of cover coat material shall be used to reduce the risk of bleeding and tracking by traffic. Additional aggregate cover material, if required, will be considered incidental to the emulsified asphalt seal coat pay item.

Traffic Control The Contractor may be allowed a limited lane closure lengths if outlined in the contract. If allowed in the contract, traffic volumes shall be monitored to determine peak traffic levels, and lane closures shall be allowed outside peak traffic level times. The Traffic Control Plan will be amended to address traffic control at intersections, businesses, or other high traffic areas. Additional signage shall be used to at .5 mile intervals to warn motorists to stay out of the closed lane and off the sealant. When mainline travelway sealing work is required, adequate quantity and properly spaced cones for travelway delineation along with cones or barricades shall be required. Whether treating travelway, or shoulders, cones or barricades shall be placed across the treated area every 500 ft, immediately after the emulsion and aggregate application, to prevent vehicles from traveling through the sealant during the cure period.

All traffic shall be kept off the emulsified asphalt seal coat areas for a minimum of 4 hours or until curing is complete. The emulsified asphalt seal coat surface will be considered cured when the emulsion and cover coat material does not track off the treated surface and there are no visible uncured emulsion on the surface. The Contractor may elect to use a polymer modified emulsion to further reduce cure time. No additional payment will be made should a polymer modified emulsion be used.

## METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Method of Measurement The Department will measure the emulsified asphalt seal coat by the square meter (square yard). Payment will be for the actual number of square yards applied in accordance with the typicals, Standard Specifications, and Section 109 - Measurement and Payment. Payment for the cover coat material will be paid for by the pound, verified by independent scale checks for bagged or bulk products. Payment shall be full compensation for all labor, materials and equipment required to complete the work in accordance with these specifications.

Basis of Payment The Department will pay for the Work, in place and accepted, in accordance with the applicable sections of the Special Provisions at the contract unit price per square yard applied, and by the pound applied.

Payment will be made under:

| <u>Pay Item</u>                               | <u>Pay Unit</u> |
|-----------------------------------------------|-----------------|
| 410.151 Emulsified Asphalt Seal Coat, Applied | Square Yard     |
| 410.161 Cover Coat Material, Sand             | Pound           |

SPECIAL PROVISION  
SECTION 424  
ASPHALT RUBBER CRACK SEALER – Type 2

Description This work shall consist of furnishing all labor, equipment and materials necessary to clean, fill and seal longitudinal and transverse cracks in bituminous concrete pavement courses. Materials are to be thoroughly applied to seal the cracks. This work shall consist of the furnishing and placement of crack sealing material in the cracks of existing bituminous concrete pavement in accordance with these Special Provisions. This work shall consist of crack cleaning and drying, material supply and heating, preparation and application material, material finishing or shaping, and providing and installing barrier material or curing materials as required.

Materials Asphalt Rubber Crack Sealer shall be an asphalt and rubber compound designed for a temperature range of 64-28 °C, and which improves the strength and performance of the base asphalt cement. Hot pour rubber crack sealant material shall conform to ASTM D-6690, Type 2.

|                                   |                                                            |
|-----------------------------------|------------------------------------------------------------|
| Cone Penetration                  | 90 max                                                     |
| Flow @ 60°C [140°F]               | < 1/4 inch                                                 |
| Bond, non-immersed                | Three ½ inch specimens pass 3 cycles @ 50% extension @ -20 |
| Resilience, %                     | N/A                                                        |
| Asphalt Compatibility, ASTM D5329 | pass*                                                      |

\* There shall be no failure in adhesion, formation of any oily exudate at the interface between the sealant and asphaltic concrete or other deleterious effects on the asphaltic concrete or sealant when tested at 140°F.

The contractor shall provide the Resident or authorized representative with a copy of the material manufacturer's recommendations pertaining to heating, application, and reheating prior to the beginning of operations or the changing of materials.

CONSTRUCTION REQUIREMENTS

Weather Asphalt Rubber Crack Sealer shall not be applied on a wet surface, or when the atmospheric temperature is below 50°F in a shaded area at the job site, or when weather conditions are otherwise unfavorable to proper construction procedures.

Equipment Equipment used in the performance of the work shall be subject to the Resident's or authorized representative's approval and shall be maintained in a satisfactory working condition at all times. As a minimum, the equipment required will consist of the following:

(1) Air Compressor and air wand: A portable air compressor shall be supplied to clean the cracks to be sealed prior to using a hot air lance. The air compressor shall be coupled with hose and air wand and be capable of furnishing not less than 150 CFM of air at not less than 100 psi pressure through a 5/8"- inch diameter nozzle. A ½ -inch or ¾-inch nozzle may be used with approval of the Inspector as long as the pressure requirements are being met. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.

(2) Sweeper: Manually operated, gas powered air-broom or self-propelled sweeper designed especially for use in cleaning pavements shall be used to remove debris, dirt, and dust from the cracks.

(3) Hot Air Lance: The hot air lance shall be independent of the air wand unit. The hot air lance shall be operated with propane and compressed air in combination and provide 1000 ft/sec of heated air at 2000°F - 3000°F. The lance should draw propane from no smaller than a 100 lb tank using separate hoses for propane and air draw. The hoses shall be wrapped together with reflectorized wrap to keep them together and to protect workers in low light situations.

(4) Hand Tools: Shall consist of V-shaped squeegee, brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work.

(5) Melting Kettle: The unit used to melt the joint sealing compound shall be a double boiler, indirect fired type. The space between inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 608°F. The kettle shall be equipped with a satisfactory means of agitating and mixing the joint sealer at all times. This may be accomplished by continuous stirring with mechanically operated paddles and/or a continuous circulating gear pump attached to the heating unit. The kettle must be equipped with thermostatic control calibrated between 200°F and 550°F. The Contractor shall either provide a jacketed thermometer that accurately displays the sealant temperature within the kettle, or provide the Resident or authorized representative with a suitable device for verifying the sealant temperature in the kettle. Temperatures must be able to be checked at any time during the heating of material, application of material, or at the end of the application operation.

Preparations of Cracks All cracks shall be blown free of loose material, dirt, vegetation, and other debris by high pressure air prior to the used of the hot air lance. Material removed from the crack shall be removed from the pavement surface by means of compressed air, power sweeper or appropriate hand tools as required. Cracks showing evidence of vegetation after being blown out shall be additionally cleaned by appropriate hand tools and additionally blown out. All cracks must be blown and heated via the hot air lance no more than 5 minutes prior to the crack

being sealed. Distance between the hot air lance and the crack sealing unit should be no more than 50 ft to eliminate reinvasion of water, debris, and other incompressible materials. All debris, vegetation, and water shall be removed to enhance adhesion of the crack sealing material. THIS WORK SHALL NOT BE DONE IN INCLEMENT WEATHER.

Preparation and Placement of Sealer The rubber crack sealer material shall be heated and applied at the temperature specified by the manufacturer and approved by the Resident or authorized representative. Any material that has been heated above the manufacturer's specification shall not be used. Material that is reheated or held at temperature for an extended period of time may be used as allowed by the manufacturer's specification and approval of the Resident or authorized representative. A copy of the manufacturer's specification shall be provided to the Project when requested.

The Contractor shall provide the Resident or authorized representative with a suitable device for verifying the sealant temperature in the kettle and at the application site.

Any loose material on the surface or in the crack, which may contaminate the crack sealer or impede bonding of the sealant to the pavement, is to be removed by hand tools prior to crack filling. No crack filling material shall be applied in a crack that is wet or where frost, snow, or ice is present. The ambient air temperature must be 50 or higher.

Any over application or spills are to be removed to the satisfaction of the Resident or authorized representative. Any sealed areas with damaged or contaminated sealer or visible voids are to be removed, prepared and resealed. Defective or leaking valves and wands will be repaired or replaced before work continues. If repairs or replacement of defective equipment cannot be accomplished immediately then the Department may permit work to continue but deduct any excess quantities placed as it determines.

Sealer shall be delivered to the crack while the cracks are still hot from the hot air lance preparation through a pressure hose line and applicator nozzle or shoe.

If the work scope requires a flush fill with minimal overbanding then a nozzle sized to fill the cracks shall be used.

If the work scope required crack filling and sealing with overband, then a shoe sized to meet the overband width shall be used. Generally, the shoe width and the sealer overbanding area shall range from 1 inch – 1.5 inch. Overbanding width may vary from the range specified depending on the width and severity of the cracks.

The applicator shall be followed by a V-shaped squeegee to minimize the thickness of the overband. The sealer shall be applied at a rate that produces a coating thickness of 1/8 - inch, typical.

If the sealed area is to be opened to traffic immediately, a barrier material (de-tackifier) such as Glenzoil or an equivalent product approved by the Resident shall be provided by the Contractor and shall be applied to the crack sealer to prevent pickup as directed by the Resident or authorized representative.

If the sealed areas are to be paved over with a hot mix treatment then a 48 hour minimum cure time and use of barrier material (de-tackifier) will be required. Cure times may be extended if excessive pick-up of the crack sealants occurs.

Quality of Work Any excess of sealer, spilled or overapplied, shall be removed from the pavement by approved methods and discarded. Any quality of work determined to be below normal acceptable standards will not be accepted, and will be corrected and/or replaced as directed by the Resident or authorized representative.

Method of Measurement Asphalt Rubber Crack Sealer will be measured by the pound of sealant used. The manufacturer's weights of the sealant for each block (pill) will be accepted as a basis for measurement.

Should tank checks be required to verify material usage, or calculate initial or final gallons remaining in the kettle, a calibrated tank gauge or tank stick shall be used to measure the tank gallons, and a volume correction shall be calculated using Table:1 to correct the gallons to 60 ° F. The corrected gallons shall then be multiplied by the pounds per gallon at 60 ° F listed in the product data sheet provided for the crack seal product being used. The corrected volume and resultant pounds shall be made part of the method of measurement, with consideration given to blocks (pills) added during the day and applied in an acceptable manner.

Basis of Payment The accepted quantity of Asphalt Rubber Crack Sealer will be paid for at the contract unit price per pound complete in place. This price shall be full compensation for furnishing and placing crack sealer, including cleaning cracks and furnishing and placing barrier materials if necessary.

Payment will be made under:

| <u>Pay Item</u>                                    | <u>Pay Unit</u> |
|----------------------------------------------------|-----------------|
| 424.22 Asphalt Rubber Crack Sealer Type 2, Applied | Pound           |

**Conversion Table:1**

| t   | M      | t   | M      | t   | M      | t   | M      | t   | M      | t   | M      |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 100 | 0.9861 | 135 | 0.9740 | 170 | 0.9621 | 205 | 0.9503 | 240 | 0.9385 | 275 | 0.9269 |
| 101 | 0.9857 | 136 | 0.9737 | 171 | 0.9618 | 206 | 0.9499 | 241 | 0.9382 | 276 | 0.9266 |
| 102 | 0.9854 | 137 | 0.9734 | 172 | 0.9614 | 207 | 0.9496 | 242 | 0.9379 | 277 | 0.9263 |
| 103 | 0.9851 | 138 | 0.9730 | 173 | 0.9611 | 208 | 0.9493 | 243 | 0.9375 | 278 | 0.9259 |
| 104 | 0.9847 | 139 | 0.9727 | 174 | 0.9607 | 209 | 0.9489 | 244 | 0.9372 | 279 | 0.9256 |
| 105 | 0.9844 | 140 | 0.9723 | 175 | 0.9604 | 210 | 0.9486 | 245 | 0.9369 | 280 | 0.9253 |
| 106 | 0.9840 | 141 | 0.9720 | 176 | 0.9601 | 211 | 0.9483 | 246 | 0.9365 | 281 | 0.9250 |
| 107 | 0.9837 | 142 | 0.9716 | 177 | 0.9597 | 212 | 0.9479 | 247 | 0.9362 | 282 | 0.9246 |
| 108 | 0.9833 | 143 | 0.9713 | 178 | 0.9594 | 213 | 0.9476 | 248 | 0.9359 | 283 | 0.9243 |
| 109 | 0.9830 | 144 | 0.9710 | 179 | 0.9590 | 214 | 0.9472 | 249 | 0.9356 | 284 | 0.9240 |
| 110 | 0.9826 | 145 | 0.9706 | 180 | 0.9587 | 215 | 0.9469 | 250 | 0.9352 | 285 | 0.9236 |
| 111 | 0.9823 | 146 | 0.9703 | 181 | 0.9584 | 216 | 0.9466 | 251 | 0.9349 | 286 | 0.9233 |
| 112 | 0.9819 | 147 | 0.9699 | 182 | 0.9580 | 217 | 0.9462 | 252 | 0.9346 | 287 | 0.9230 |
| 113 | 0.9816 | 148 | 0.9696 | 183 | 0.9577 | 218 | 0.9459 | 253 | 0.9342 | 288 | 0.9227 |
| 114 | 0.9813 | 149 | 0.9693 | 184 | 0.9574 | 219 | 0.9456 | 254 | 0.9339 | 289 | 0.9223 |
| 115 | 0.9809 | 150 | 0.9689 | 185 | 0.9570 | 220 | 0.9452 | 255 | 0.9336 | 290 | 0.9220 |
| 116 | 0.9806 | 151 | 0.9686 | 186 | 0.9567 | 221 | 0.9449 | 256 | 0.9332 | 291 | 0.9217 |
| 117 | 0.9802 | 152 | 0.9682 | 187 | 0.9563 | 222 | 0.9446 | 257 | 0.9329 | 292 | 0.9213 |
| 118 | 0.9799 | 153 | 0.9679 | 188 | 0.9560 | 223 | 0.9442 | 258 | 0.9326 | 293 | 0.9210 |
| 119 | 0.9795 | 154 | 0.9675 | 189 | 0.9557 | 224 | 0.9439 | 259 | 0.9322 | 294 | 0.9207 |
| 120 | 0.9792 | 155 | 0.9672 | 190 | 0.9553 | 225 | 0.9436 | 260 | 0.9319 | 295 | 0.9204 |
| 121 | 0.9788 | 156 | 0.9669 | 191 | 0.9550 | 226 | 0.9432 | 261 | 0.9316 | 296 | 0.9200 |
| 122 | 0.9785 | 157 | 0.9665 | 192 | 0.9547 | 227 | 0.9429 | 262 | 0.9312 | 297 | 0.9197 |
| 123 | 0.9782 | 158 | 0.9662 | 193 | 0.9543 | 228 | 0.9426 | 263 | 0.9309 | 298 | 0.9194 |
| 124 | 0.9778 | 159 | 0.9658 | 194 | 0.9540 | 229 | 0.9422 | 264 | 0.9306 | 299 | 0.9190 |
| 125 | 0.9775 | 160 | 0.9655 | 195 | 0.9536 | 230 | 0.9419 | 265 | 0.9302 | 300 | 0.9187 |
| 126 | 0.9771 | 161 | 0.9652 | 196 | 0.9533 | 231 | 0.9416 | 266 | 0.9299 | 301 | 0.9184 |
| 127 | 0.9768 | 162 | 0.9648 | 197 | 0.9530 | 232 | 0.9412 | 267 | 0.9296 | 302 | 0.9181 |
| 128 | 0.9764 | 163 | 0.9645 | 198 | 0.9526 | 233 | 0.9409 | 268 | 0.9293 | 303 | 0.9177 |
| 129 | 0.9761 | 164 | 0.9641 | 199 | 0.9523 | 234 | 0.9405 | 269 | 0.9289 | 304 | 0.9174 |
| 130 | 0.9758 | 165 | 0.9638 | 200 | 0.9520 | 235 | 0.9402 | 270 | 0.9286 | 305 | 0.9171 |
| 131 | 0.9754 | 166 | 0.9635 | 201 | 0.9516 | 236 | 0.9399 | 271 | 0.9283 | 306 | 0.9167 |
| 132 | 0.9751 | 167 | 0.9631 | 202 | 0.9513 | 237 | 0.9395 | 272 | 0.9279 | 307 | 0.9164 |
| 133 | 0.9747 | 168 | 0.9628 | 203 | 0.9509 | 238 | 0.9392 | 273 | 0.9276 | 308 | 0.9161 |
| 134 | 0.9744 | 169 | 0.9624 | 204 | 0.9505 | 239 | 0.9389 | 274 | 0.9273 | 309 | 0.9158 |

**Legend:** t = observed temperature in degrees Fahrenheit.  
M = multiplier for reducing volumes to the basis of 60° F.

**Conversion Table:1**

| t   | M      | t   | M      | t   | M      | t   | M      | t   | M      |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 310 | 0.9154 | 350 | 0.9024 | 390 | 0.8896 | 430 | 0.8768 | 470 | 0.8643 |
| 311 | 0.9151 | 351 | 0.9021 | 391 | 0.8892 | 431 | 0.8765 | 471 | 0.8640 |
| 312 | 0.9148 | 352 | 0.9018 | 392 | 0.8889 | 432 | 0.8762 | 472 | 0.8636 |
| 313 | 0.9145 | 353 | 0.9015 | 393 | 0.8886 | 433 | 0.8759 | 473 | 0.8633 |
| 314 | 0.9141 | 354 | 0.9011 | 394 | 0.8883 | 434 | 0.8756 | 474 | 0.8630 |
| 315 | 0.9138 | 355 | 0.9008 | 395 | 0.8880 | 435 | 0.8753 | 475 | 0.8627 |
| 316 | 0.9135 | 356 | 0.9005 | 396 | 0.8876 | 436 | 0.8749 | 476 | 0.8624 |
| 317 | 0.9132 | 357 | 0.9002 | 397 | 0.8873 | 437 | 0.8746 | 477 | 0.8621 |
| 318 | 0.9128 | 358 | 0.8998 | 398 | 0.8870 | 438 | 0.8743 | 478 | 0.8618 |
| 319 | 0.9125 | 359 | 0.8995 | 399 | 0.8867 | 439 | 0.8740 | 479 | 0.8615 |
| 320 | 0.9122 | 360 | 0.8992 | 400 | 0.8864 | 440 | 0.8737 | 480 | 0.8611 |
| 321 | 0.9118 | 361 | 0.8989 | 401 | 0.8861 | 441 | 0.8734 | 481 | 0.8608 |
| 322 | 0.9115 | 362 | 0.8986 | 402 | 0.8857 | 442 | 0.8731 | 482 | 0.8605 |
| 323 | 0.9112 | 363 | 0.8982 | 403 | 0.8854 | 443 | 0.8727 | 483 | 0.8602 |
| 324 | 0.9109 | 364 | 0.8979 | 404 | 0.8851 | 444 | 0.8724 | 484 | 0.8599 |
| 325 | 0.9105 | 365 | 0.8976 | 405 | 0.8848 | 445 | 0.8721 | 485 | 0.8596 |
| 326 | 0.9102 | 366 | 0.8973 | 406 | 0.8845 | 446 | 0.8718 | 486 | 0.8593 |
| 327 | 0.9099 | 367 | 0.8969 | 407 | 0.8841 | 447 | 0.8715 | 487 | 0.8590 |
| 328 | 0.9096 | 368 | 0.8966 | 408 | 0.8838 | 448 | 0.8712 | 488 | 0.8587 |
| 329 | 0.9092 | 369 | 0.8963 | 409 | 0.8835 | 449 | 0.8709 | 489 | 0.8583 |
| 330 | 0.9089 | 370 | 0.8960 | 410 | 0.8832 | 450 | 0.8705 | 490 | 0.8580 |
| 331 | 0.9086 | 371 | 0.8957 | 411 | 0.8829 | 451 | 0.8702 | 491 | 0.8577 |
| 332 | 0.9083 | 372 | 0.8953 | 412 | 0.8826 | 452 | 0.8699 | 492 | 0.8574 |
| 333 | 0.9079 | 373 | 0.8950 | 413 | 0.8822 | 453 | 0.8696 | 493 | 0.8571 |
| 334 | 0.9076 | 374 | 0.8947 | 414 | 0.8819 | 454 | 0.8693 | 494 | 0.8568 |
| 335 | 0.9073 | 375 | 0.8944 | 415 | 0.8816 | 455 | 0.8690 | 495 | 0.8565 |
| 336 | 0.9070 | 376 | 0.8941 | 416 | 0.8813 | 456 | 0.8687 | 496 | 0.8562 |
| 337 | 0.9066 | 377 | 0.8937 | 417 | 0.8810 | 457 | 0.8683 | 497 | 0.8559 |
| 338 | 0.9063 | 378 | 0.8934 | 418 | 0.8806 | 458 | 0.8680 | 498 | 0.8556 |
| 339 | 0.9060 | 379 | 0.8931 | 419 | 0.8803 | 459 | 0.8677 | 499 | 0.8552 |
| 340 | 0.9057 | 380 | 0.8928 | 420 | 0.8800 | 460 | 0.8674 |     |        |
| 341 | 0.9053 | 381 | 0.8924 | 421 | 0.8797 | 461 | 0.8671 |     |        |
| 342 | 0.9050 | 382 | 0.8921 | 422 | 0.8794 | 462 | 0.8668 |     |        |
| 343 | 0.9047 | 383 | 0.8918 | 423 | 0.8791 | 463 | 0.8665 |     |        |
| 344 | 0.9044 | 384 | 0.8915 | 424 | 0.8989 | 464 | 0.8661 |     |        |
| 345 | 0.9040 | 385 | 0.8912 | 425 | 0.8984 | 465 | 0.8658 |     |        |
| 346 | 0.9037 | 386 | 0.8908 | 426 | 0.8781 | 466 | 0.8655 |     |        |
| 347 | 0.9034 | 387 | 0.8905 | 427 | 0.8778 | 467 | 0.8652 |     |        |
| 348 | 0.9031 | 388 | 0.8902 | 428 | 0.8775 | 468 | 0.8649 |     |        |
| 349 | 0.9028 | 389 | 0.8899 | 429 | 0.8772 | 469 | 0.8646 |     |        |

**Legend:** t = observed temperature in degrees Fahrenheit.  
M = multiplier for reducing volumes to the basis of 60° F.

SPECIAL PROVISION  
SECTION 424  
 CRACK REPAIR with HOT POUR MASTIC

Description. This work shall consist of preparing and repairing areas identified for crack repair in existing bituminous or concrete pavement layers using hot pour mastic. The hot pour mastic shall be supplied in solid form in boxes containing pre-measured binder blended with aggregates. Products to be used will be subject to approval by the Department. Repair areas will be free of sand, vegetation, water, and any previously placed rubber crack seal or crack repair materials, including cold patch. Preparation, such as cleaning and drying of the cracks by use of oil free compressed air and hot air lance shall be considered included the price per pound of crack repair mastic. Routing or any pavement removal required will be paid for under the appropriate item as described in this Special Provision.

MATERIALS

The hot pour mastic materials are hot-applied, pourable, self-adhesive mastics blended with aggregates designed for maintenance and repair of asphalt and Portland cement concrete pavements. The hot pour mastic materials are composed of highly modified polymer asphalt binder and fine graded lightweight aggregate, or standard weight aggregates as required by the application.

The mastic materials shall be delivered in the manufacturer's original container. The material shall be pre-packaged with the manufacturers name and product name marked on each container. The materials shall conform to the following requirements:

Parameter

|                                      |              |
|--------------------------------------|--------------|
| Color                                | Black        |
| Pourability @ 400F (PTM1)*           | 1000-1400 gm |
| Stability @ 158F (PTM2)              | .6in. max    |
| Flexibility @ Low Temperature (PTM3) | Pass @ -20F  |
| Adhesion @77F (PTM4)                 | 15psi min.   |
| Specific Gravity (ASTM D792)         | 1.35max.     |
| Skid Resistance, BPN (ASTM E303)     | 40 min.      |
| Minimum Application Temperature      | 375°F        |
| Maximum Application Temperature      | 410°F        |

The density of the mastic with fine lightweight aggregate is 76 pcf (+/- 3%) and weight per gallon is 10.2 lb/ gal at 60°F. (ref: PolyPatch or equivalent)

The density of the mastic with standard weight aggregate is 116 pcf ( +/- 3%) and the weight per gallon is 15.5 lbs/gal at 60°F. (ref: MasticOne or equivalent)

## EQUIPMENT

Equipment Equipment used in the performance of the work shall be subject to the Departments or authorized representative's approval and shall be maintained in a satisfactory working condition at all times.

(a) Air Compressor: Air compressors shall be portable and capable of furnishing not less than 4 yd<sup>3</sup> of air per minute at not less than 90 psi pressure at the nozzle. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.

(b) Sweeper: Manually operated, gas powered air-broom or self-propelled sweeper designed especially for use in cleaning pavements shall be used to remove debris, dirt, and dust from the cracks.

(c) Hot Air Lance: Should operate with propane and compressed air in combination at 2000°F - 3000°F, exit air heated at 1000 ft/s. The lance should draw propane from no smaller than a 100 lb tank using separate hoses for propane and air draw. The hoses shall be wrapped together with reflectorized wrap to keep them together and to protect workers in low light situations.

(d) Hand Tools: Shall consist of Boxed or V-shaped squeegee, brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work.

(e) Melting Kettle: ) The unit used to heat the mastics shall be a double boiler unit equipped with continuous horizontal full sweep agitation and have separate thermostatic control devices that will automatically regulate hot oil and material temperature. Separate digital readouts shall display the temperatures of the hot oil and material. The kettle shall be equipped with mixing paddles, blending augers, or other satisfactory means of agitating, mixing, and blending the aggregates and mastic together. The kettle must be equipped with thermostatic control calibrated between 200°F and 550°F.

If required in the contract the router or crack saw equipment for preparing cracks shall be of a rotary impact type cutter, equipped with a carbide bit or a diamond-blade crack saw which will provide a reservoir of specified dimensions.

An application wand may be required for the work type, and shall apply a controlled flow of material via an insulated or heated hose. The nozzle shall distribute the material as called for in this specification. A pressure regulator shall be provided to regulate pressure at the nozzle. A bypass line into the holding tank is required for use when the nozzle is shut off.

## CONSTRUCTION REQUIREMENTS

Weather Hot Pour Mastics shall not be applied on a wet or damp surface, or when the atmospheric temperature is below 45°F in a shaded area at the job site, or when weather conditions are otherwise unfavorable to proper crack repair procedures.

Preparation All cracks shall be prepared to receive the mastic material. All cracks must be cleaned of debris, dried and heated to ensure optimal bonding of the sealant material to the existing pavement and crack edges. All cracks shall be flush filled with pre-blended mastic with minimal overband in the same workday as directed by the Resident or authorized representative.

Cracks of less than 1 inch in width shall be shaped as directed by using a crack router or crack saw to a minimum 1 inch width and depth. The router or saw shall be guided so that the crack lies entirely within the routed channel. All material routed or sawn from the cracks shall immediately be removed from the crack and surrounding paved area by use of compressed air, sweeping, or combination of both.

Cracks greater than 1 inch in width shall be thoroughly cleaned by use of compressed air and dried by use of a hot air lance. Any loose or broken materials will be removed from the repair area before placing mastic materials. If it is determined that additional pavement removal or preparation is needed by means of milling, sawing, or cutting of existing pavement the work will be paid under an appropriate pay item. All materials routed, sawn, cut, or otherwise removed from the areas to be repaired shall immediately be removed from the crack and surrounding paved area by use of compressed air sweeping, or combination of both.

Cracks 1 inch in width to 3 inch in width shall be filled with mastic pre-blended with fine lightweight aggregate.

Cracks 3 inch in width to 6 inch width, or repairs that are more structural in nature, such as potholes, depressions, fills or repairs around utility adjustments shall be filled with mastic pre-blended with standard weight aggregates. Generally repairs wider than 6 inches, or that extend below the surface layer may require additional pavement removal or other preparation.

All mastic materials shall be heated to between 380°F and 410°F and thoroughly agitated prior to application. A non-contact infrared thermometer shall be used periodically to monitor the temperature of the material as it exits the kettle. Material may not be used if it is heated beyond the safe heating temperature of 410°F, exceeds the recommended pot life, or is reheated more than one time.

The mastics may be applied to large repair areas when the material has been heated to the lower end of the temperature range to minimize material flow and cooling time.

Mastics shall be applied to the repair areas directly from the melting kettle chute, wand or other conveyance method filled from the kettle. If bucketed, material cooling during transfer must be minimized.

The repair area shall be filled flush to the pavement surface. The material shall be poured into the repair area and worked using boxed or v-shaped squeegees, tools, lutes or heated irons. Care should be taken not to over work the material and cause unequal dispersion of the aggregate within the repair. The material may be applied in multiple lifts to accommodate material shrinkage or flow during cooling.

After the material has been applied to the repair, indirect heating by torch or hot air lance can be used to heat the edges and ensure a watertight seal. Do not burn, scorch or ignite the mastic or adjoining pavement when heating.

Do not allow traffic on the repaired areas for ½ hour, or until the material has cooled enough to support traffic and tracking is minimal.

Quality of Work Excess mastic shall be removed from the pavement by approved methods and discarded. Any work determined to be below normal acceptable standards will not be accepted, and will be corrected and/or replaced as directed by the Resident or authorized representative.

Basis of Payment The accepted quantity of Crack Repair with Hot Pour Mastic will be paid for at the contract unit price per pound. This price will be full compensation for furnishing the appropriate material type for the repair being done, heating, placing and finishing the mastic materials, as well as cleaning and preparing the areas for installation of the mastic, including the use of compressed air, hot air lance, and any sweeping required to remove contaminants from and dry the areas to be treated. Areas identified as requiring pavement removal by means of cutting, sawing, grinding, or routing will be paid under an appropriate contract item.

Payment will be made under:

| <u>Pay Item</u>                      | <u>Pay Unit</u> |
|--------------------------------------|-----------------|
| 424.38 Crack Repair, Hot Pour Mastic | Pound           |
| 424.42 Crack Routing                 | Linear Foot     |

**SPECIAL PROVISION**  
**SECTION 462**  
**GAP-GRADED HMA**  
**(Ultra-Thin Bonded Wearing Course)**

The following subsections of the most current version of Specification 401 – Hot Mix Asphalt Pavements have been revised and modified by the following:

Description This work shall be constructed in accordance with the applicable referenced sections of Division 400 – Pavements; Section 401 – Hot Mix Asphalt Pavement, and the requirements of Section 106 – Quality. All sections not revised by this Special Provision shall be as outlined in the Special Provision 400 Pavements, Section 401 – Hot Mix Asphalt Pavement. References to Standard Specifications, Special Provisions, or other documents, shall be determined as the most current version available at the time of bid, or as amended. The Ultra-Thin Bonded Wearing Course consists of a warm polymer modified asphalt emulsion tack coat followed immediately with an Ultra-Thin hot mix asphalt wearing course. The tack coat is spray applied immediately prior to the application of the wearing course to produce a durable wearing surface that can be opened to traffic. The finished surface treatment has a nominal thickness of  $\frac{1}{2}$ ", for Type A,  $\frac{5}{8}$ " for Type B, and  $\frac{3}{4}$ " for Type C.

**MATERIALS**

The Contractor shall formulate and submit to the Department, a job mix formula (JMF) that satisfies the design general limits listed in Table 1 – Mixture requirements. The JMF aims shall not fall outside the general design limits.

TABLE 1: COMPOSITE GRADATION

| <b>AASHTO Standard<br/>Sieve Size</b> | <b>Total % Passing by Weight</b>          |                                           |                                           |
|---------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
|                                       | <b>Type A - <math>\frac{1}{4}</math>"</b> | <b>Type B - <math>\frac{3}{8}</math>"</b> | <b>Type C - <math>\frac{1}{2}</math>"</b> |
| 19 mm ( $\frac{3}{4}$ "               | -                                         | -                                         | 100                                       |
| 12.5 mm ( $\frac{1}{2}$ "             | -                                         | 100                                       | 85-100                                    |
| 9.5 mm ( $\frac{3}{8}$ "              | 97-100                                    | 85-100                                    | 45-85                                     |
| 4.75 mm (#4)                          | 40-60                                     | 24-41                                     | 24-41                                     |
| 2.36 mm (#8)                          | 21-33                                     | 21-33                                     | 21-33                                     |
| 1.18 mm (#16)                         | 15-26                                     | 15-26                                     | 15-26                                     |
| 0.60 mm (#30)                         | 11-20                                     | 11-20                                     | 11-20                                     |
| 0.30 mm (#50)                         | 8-16                                      | 8-16                                      | 7-16                                      |
| 0.15 mm (#100)                        | 5-10                                      | 5-10                                      | 5-10                                      |
| 0.075 mm (#200)                       | 4.0-7.0                                   | 4.0-7.0                                   | 4.0-7.0                                   |
| Minimum % PGAB                        | 5.1                                       | 5.0                                       | 5.0                                       |

\*All aggregate percentages are based on the total weight of the aggregate. The composite gradation for each individual type of mixture shall meet the gradation requirements of Table 1.

The estimated PG binder film thickness shall be calculated for the submitted mix design. Designs with estimated film thickness less than 10 microns may be approved pending successful placement in the field. The estimated film thickness of asphalt shall be calculated using the effective asphalt content in conjunction with the surface area for the aggregates in the JMF according to the following formula and the factors in Table 2:

$$FT = \frac{AC \cdot 1000}{SA \cdot SG}$$

where: *FT* = film thickness (microns)  
*AC* = asphalt content of mix design (%)  
*SA* = total surface area of aggregate (SM/Kg)\*  
*SG* = specific gravity of asphalt

\* Surface area is calculated by multiplying the percent passing for the design by the factors in the table below for each sieve size and summing the resultant values.

TABLE 2: SURFACE AREA FACTORS

| AASHTO Standard<br>Sieve Size | Surface Area Factors (SM/Kg) |             |             |
|-------------------------------|------------------------------|-------------|-------------|
|                               | Type A - ¼"                  | Type B - ⅜" | Type C - ½" |
| 19 mm (¾")                    | -                            | -           | 0.41        |
| 12.5 mm (½")                  | -                            | 0.41        | 0           |
| 9.5 mm (⅜")                   | 0.41                         | 0           | 0           |
| 4.75 mm (#4)                  | 0.41                         | 0.41        | 0.41        |
| 2.36 mm (#8)                  | 0.82                         | 0.82        | 0.82        |
| 1.18 mm (#16)                 | 1.64                         | 1.64        | 1.64        |
| 0.60 mm (#30)                 | 2.87                         | 2.87        | 2.87        |
| 0.30 mm (#50)                 | 6.14                         | 6.14        | 6.14        |
| 0.15 mm (#100)                | 12.29                        | 12.29       | 12.29       |
| 0.075 mm (#200)               | 32.77                        | 32.77       | 32.77       |

Aggregates used shall be from an approved source and shall meet the requirements of section 703.07 for 3.0 to < 10 million ESALs, and as modified by items 1 through 7 listed below.

1. Individual coarse aggregates sources shall meet a Micro-Deval (AASHTO T 327) value of 18 or less.
2. Individual coarse aggregates sources shall have a maximum LA Abrasion (AASHTO T96) of 30.
3. Absorption by AASHTO T 84 shall be less than 2.0% for fine aggregate blends.
4. Absorption by AASHTO T 85 shall be less than 2.0% for coarse aggregate blends.
5. Aggregates shall have a minimum sand equivalent of 45, (AASHTO T 176), and the fine aggregate shall be 100% crushed.
6. 95 % of the aggregate shall have at least a single face crushed and 85% shall have 2 or more crushed.
7. Percent by weight of Flat and Elongated particles shall be (5:1 ratio) with 10% maximum.
8. Coarse aggregates, when measured in any dimension, shall not contain particles larger than the lift being placed or ¾ inch, whichever is less.

The Contractor shall test all materials and provide copies of all test results to the Department for materials utilized in the completion of the work. The Contractors' test results shall be submitted to the Department along with the mix design submittal in accordance with the MaineDOT HMA Policy and Procedures Manual.

Performance Graded Asphalt Binder Unless otherwise shown in the contract bid items or noted in Special Provision 403 - Hot Bituminous Pavement, all asphalt binders shall meet a 64-28 PGAB grade. The Contractor may use an approved chemical or wax based warm mix additive when producing UTBWC mixtures using modified PGAB such as 64E-28.

Emulsified Tack Coat Tack Coat shall be modified with latex, natural or synthetic, and shall be certified as meeting the requirements of ASTM D2397 except as modified in Table 3 – Tack Coat Material Properties. It is required that the latex be co-milled at the bulk emulsion facility, to ensure complete and balanced blending. CRS-1P asphalt grade emulsions shall have a minimum asphalt content ratio of 63%.

TABLE 3: TACK COAT MATERIAL PROPERTIES

| Property                               | Method      | Minimum | Maximum |
|----------------------------------------|-------------|---------|---------|
| Latex Content, % Mass of Total Residue |             | 3.0     |         |
| Viscosity at 25°C, (Sec.)              | ASTM D244   | 20      | 100     |
| Setting Time, Minutes                  | Observation | 3       | 7       |
| Demulsibility, % by wt. Residue        | ASTM D244   | 40      |         |
| Penetration, 25°C (77°F)               | T 49        | 60      | 150     |

Deliveries of the emulsified tack coat shall be accompanied by a loading invoice, delivery ticket, or slip, as required under Section 108.1.3 f in addition to the Certificate of Analysis. The emulsified tack coat loading invoice/delivery ticket and Certificate of Analysis shall be provided to the Resident. In the event an intermediate hauler of the asphalt material is involved, a copy of their own delivery slip shall be furnished, as well as a copy of the supplier's loading invoice. The hauler's delivery slip and the supplier's loading invoice shall be cross-referenced by use of their respective serial numbers.

### EQUIPMENT

Spray Pavers The spray paver shall be configured to spray tack at the specified rate, and apply hot mix asphalt seconds later. The spray bar shall be located just ahead of the paver's auger, and distribute the liquid through computer-controlled, self-cleaning valves. An onboard microprocessor shall be capable of precisely controlling the rate of flow interlocked to the paver speed. Spray valves shall also be controlled manually if needed. The paver shall have a receiving hopper with sufficient capacity for a uniform spreading operation and a mixture distribution system to place the mixture uniformly, without segregation. The screed assembly shall produce a finished surface of the uniform texture without tearing, shoving, or gouging the mixture.

The self-priming spray paver must be capable of spraying the tack coat, applying the hot asphalt overlay and smoothing the surface of the mat being paved in one pass, at the rate of 33-98 feet per minute. The self-priming spray paver must incorporate a receiving hopper, feed conveyor, heated or insulated storage tank for emulsion, metered tack coat spray bar and a variable width, heated, ironing type screed. The self-priming spray paver shall be a track or rubber tire mounted highway class paver with a minimum combined tractor and screed weight of 44,000 pounds, and a minimum main screed

width of 8 feet. All paver screeds shall be outfitted with auger and tunnel extensions as required to distribute the mix within two feet of the end gate. All pavers shall 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. 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. The screed must be sized to place the mixture over the entire lane width being paved in one pass. It shall also have the ability to be positively crowned at the center of lane and have adjustable extensions to accommodate the desired pavement width and cross sectional profile. The Contractor shall operate the paver in such a manner as to produce a visually uniform surface texture. Any UTBWC that becomes visually unacceptable due to mixture cooling, checking, segregation or deformation as a result of an interruption in mix delivery, or excessive delays in re-charging the emulsion tanks shall be removed and replaced with material that meets contract specifications at no cost to the Department.

Rollers The Contractor shall use 7 foot wide double drum steel wheeled rollers weighing at least 8 to 10 ton, that are equipped with functioning water systems and scrapers to prevent the fresh mix from adhering to the roller drums. If the rollers narrower than 7 foot are to be used, the Contractor will be required to use additional rollers or slow placement speed of the paver to ensure full mat coverage is made immediately behind the spray paver.

### CONSTRUCTION DETAILS

Weather and Seasonal Limitations All work shall be in accordance with Section 401 – Hot Mix Asphalt Pavement , subsection 401.06 - Weather and Seasonal Limitations.

Surface Preparation The Contractor shall remove painted striping, mill the existing pavement surface as described in the contract documents, crack seal as required by the contract documents, and sweep the roadway as needed prior to the surface treatment. Stripe removal, milling and crack seal will be paid for under the appropriate contract items.

Crack sealing, if required in the contract, will be paid under the appropriate crack seal item. The Contractor shall crack seal transverse and longitudinal cracks as considered appropriate. Unless otherwise directed cracks shall be flush filled with minimal over-banding, and the material type and shall conform to ASTM D-6690, Type II or AASHTO M 324, and paid under the appropriate Type II crack seal item.

Spot shims or leveling course, if required by the Department, shall be paid for under the appropriate 403.211 - 9.5mm shim unit price included in the contract. Sweeping will not be paid for directly, but shall be included in the 462.30 or 462.301 - Ultra-Thin Bonded Wearing Course contract price.

Application The screed on the paver shall be heated to a temperature between 275°F-335°F before placing Ultra-Thin Bonded Wearing Course on the roadway. Apply the tack coat meeting the requirements of Table 3 at a temperature of 120° - 180° F. The application of tack coat shall be uniform across the entire width to be overlaid, at a rate of 0.22 - 0.25 gallons per square yard, depending upon the existing surface texture. Field adjustments to the target application rate of tack coat shall be determined based upon the existing surface condition of the pavement. The tack coat application rate may be adjusted to 0.17-0.22 gallons per square yard if used over newly placed HMA

levelling course. Adjustments to the tack coat target application rate shall be approved by the Department. All changes to the emulsified tack coat application shall be located with station references, recorded, and included in the daily QC report.

The Contractor shall make all efforts to minimize walking on the unrolled mat. Displacement, marring, or depressions that result from walking on or across the mat will require immediate repair before rolling. Repeated incidences of irreparable surface defects may result in work stoppage until the issue is resolved.

A tack coat of CRS-1P shall be applied to the vertical transverse joint surface and the underlying roadway at each transverse joint takeoff. Should the spray paver be unable to apply tack coat to the vertical transverse joint when paving a tack coat of CRS-1P or RS-1 shall be applied to the vertical joint and adjacent surfaces for at least the first 10 feet. The application rate shall be a minimum of 0.05 gal/s.y. for the tack application at transverse joints. The Contractor shall continuously monitor the rate of spray. No equipment shall come in contact with the tack coat before the hot mix asphalt wearing course is applied. Immediately after applying the tack coat, the contractor shall apply the hot mix asphalt overlay across the full width of the tack coat at a temperature of 290° - 335° F.

Compaction The Contractor shall begin compaction immediately behind the spray paver after the application of wearing course. The roller(s) shall make a minimum of two passes. The roller(s) will not be allowed to stop on the freshly placed wearing course. The Contractor shall use an adequate number of rollers to complete compaction and aggregate seating before the pavement surface temperature falls below 185° F for 64-28 PGABs, or below 210° F for PG 64E-28. The Contractor shall provide an additional roller if the Contractor elects to pave travelway and adjacent shoulder concurrently and the adjacent shoulder exceeds four feet in width. The Contractor shall protect the wearing course from traffic until the rolling operation is complete and the material has cooled sufficiently to resist damage.

UTBWC Documentation The Contractor and the Department shall agree on the amount of UTBWC, measured in square yards, that has been placed each day. The Contractor and the Department shall agree on the amount of emulsified tack coat (in gallons) and HMA (in tons) that have been placed each day. All delivery slips shall conform to the requirements of 401.073.

Quality Control All work shall be in accordance with Division 400 – Pavements; Section 401 – Hot Mix Asphalt Pavement , subsection 401.19- Quality Control Method A, B & C, with the exception of the following revisions;

The Contractor shall sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with the following minimum frequencies per each approved mix design:

TABLE 4: 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                                 | -                        |
| Emulsified tack coat application rate & yield* | 1 per 10,000 SY<br>(minimum of 2 per day) | -                        |
| Gradation                                      | 1 per 500 ton                             | AASHTO T 30              |
| PGAB content                                   | 1 per 500 ton                             | AASHTO T 164 or<br>T 308 |
| Rice Specific Gravity                          | 1 per 500 ton                             | AASHTO T 209             |
| Coarse Aggregate Angularity                    | 1 per 5000 ton                            | ASTM D5821               |
| Flat and Elongated Particles                   | 1 Per 5000 ton                            | ASTM D4791               |
| Fine Aggregate Angularity                      | 1 Per 5000 ton                            | AASHTO T 304             |

\* Emulsified tack coat application rate and yield shall be verified independent of the rate displayed on the paver

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 5 below.

TABLE 5: CONTROL LIMITS

| Property                             | UCL and LCL                |
|--------------------------------------|----------------------------|
| Passing NMAS sieve                   | Target +/-4.0 <sup>∨</sup> |
| Passing 4.75 mm and larger sieves    | Target +/-4.0              |
| Passing 2.36 mm sieve                | Target +/-2.5              |
| Passing 0.075 mm sieve               | Target +/-1.0 <sup>^</sup> |
| PGAB Content*                        | Target +/-0.25             |
| Theoretical Maximum Specific Gravity | JMF Target +/-0.020        |

<sup>∨</sup> The mixture shall be produced to comply with the control points outlined in Table 1.

\* Based on AASHTO T 308

<sup>^</sup> The minimum LCL shall be 3.0% and the maximum UCL shall be 7.0%.

Acceptance Acceptance shall be in accordance with this Special Provision. The 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 4,500 tons (120,000 square yards). Remaining tonnage (square yards) may be rolled into the last lot allowed up to a maximum size of 6,000 tons (160,000 square yards). Sublot sizes shall be 750 tons (20,000 square yards) for mixture properties, with unanticipated over-runs of up to one-half of the sublot rolled into the last sublot. The minimum number of sublots per Lot for mixture properties shall be five.

TABLE 6: UTBWC ACCEPTANCE CRITERIA

| Property     | Point of Sampling | Test Method  |
|--------------|-------------------|--------------|
| Gradation    | Paver Hopper      | AASHTO T 30  |
| PGAB Content | Paver Hopper      | AASHTO T 308 |

TABLE 7: UTBWC ACCEPTANCE LIMITS

| Property                          | USL and LSL                                |
|-----------------------------------|--------------------------------------------|
| Passing NMA sieve                 | Target +/-5%*                              |
| Passing 4.75 mm and larger sieves | Target +/-5%                               |
| Passing 2.36 mm to 1.18 mm sieves | Target +/-3%                               |
| Passing 0.60 mm                   | Target +/-3%                               |
| Passing 0.30 mm to 0.15 mm sieve  | Target +/-2%                               |
| Passing 0.075 mm sieve            | Target +/-2%^                              |
| PGAB Content                      | LSL = Target - 0.3%<br>USL = Target + 0.4% |

\* The mixture shall be produced to comply with the control points outlined in Table 1.

^ The minimum LSL shall be 3.0% and the maximum USL shall be 7.0%.

**Pay Adjustment** The Department will sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with Section 106 - Quality and Section 401.20 - Acceptance, of Division 400 – Pavements, and this Special Provision.

The Department will use Performance Graded Asphalt Binder content, and the screen sizes listed in this specification for the type of mixture represented in the JMF. If any pay factor for any single property falls below 0.85, the Contractor shall cease production at the HMA plant. If the percent passing the nominal maximum sieve, the 2.36 mm sieve, the 0.300 mm sieve or the 0.075 mm sieve falls below 0.80, then the composite pay factor for the four sieves shall be 0.55.

**PGAB Content and Gradation** The Department will determine a pay factor for each square yard using Table 7: Acceptance Limits. The Department will calculate the price adjustment for Mixture Properties as follows:

$$PA = 0.70[(\% \text{ Passing Nom. Max PF}-1.0)(Q)(P)X0.05+(\% \text{ passing 2.36 mm PF}-1.0)(Q)(P)X0.05+(\% \text{ passing 0.30 mm PF}-1.0)(Q)(P)X0.05+(\% \text{ passing 0.075 mm PF}-1.0)(Q)(P)X0.10+(PGAB \text{ PF}-1.0)(Q)(P)X0.25]$$

**Dispute Resolution** All work shall be in accordance with Division 400 – Pavements; Section 401 – Hot Mix Asphalt Pavement, subsection 401.23 Process for Dispute Resolution.

**Method of Measurement** The Ultra-Thin Bonded Wearing Course shall be measured by the square yard.

**Basis of Payment** The accepted quantity of Ultra-Thin Bonded Wearing Course will be paid for at the contract unit price per square yard, complete in-place which price will be full compensation for furnishing all equipment, material, labor, and all incidentals necessary to complete the work. Pay adjustments may be made as outlined in this specification.

Payments will be made under:

| <u>Pay Item</u>                                           | <u>Pay Unit</u> |
|-----------------------------------------------------------|-----------------|
| 462.30 Ultra-Thin Bonded Wearing Course                   | Square Yard     |
| 462.301 Polymer-Modified Ultra-Thin Bonded Wearing Course | Square Yard     |

**SPECIAL PROVISION**

**SECTION 520**

**EXPANSION DEVICES**

(Bridge Joint Modifications)

520.01 Description This work shall consist of removal, adjustment, repair, modification, and replacement of bridge joints, as indicated on the plans, and in accordance with the specifications.

520.02 Materials All structural concrete removed shall be replaced with Class LP concrete, per Section 502. A bonding agent from the Maine Department of Transportation's Qualified Product List shall be used for bonding fresh concrete or patching material to existing hardened concrete.

As an alternative to the standard Class LP concrete, the Contractor may propose the use of an accelerated Class LP concrete. Acceptable methods for rapid strength gain shall include, but are not limited to, additional cementitious content, non-chloride chemical accelerators, Type III Portland Cement, and heated mix water and aggregates. Trial batches shall be performed and submitted to the Department indicating a minimum of 4,000 PSI compressive strength in 24 hours.

When called for in the plans or specifications, Elastomeric Concrete shall be one of the products listed on the Maine Department of Transportation's Qualified Product List. The mixing and installation of elastomeric concrete shall be completed in strict accordance with the manufacturers published recommendations.

The headers, joints, and seals, as required, shall be the type indicated on the plans and shall meet the material, fabrication, and construction requirements of Section 520 - Expansion Devices - Non-Modular. Compression Seals and Gland Seals shall be selected from the appropriate MaineDOT Qualified Product List of Bridge Compression Seals and Gland Seals.

For all joint systems the materials furnished, and equipment and installation procedures used, shall be in strict accordance with the manufacturer's and or supplier's published product data and installation guidelines. Product data, installation guidelines, test data and reports, and material certifications shall be submitted for review and approval.

520.03 Construction Requirements The removal, adjustment, modification and replacement of bridge joints shall be completed in a manner that accommodates maintenance of traffic requirements and shall be coordinated with the highway paving work.

- (a) Bridge Joint Modifications Type 3a and Type 3b involve removing the existing concrete, elastomeric concrete, or asphalt headers, or combination thereof to a minimum depth of three inches or as required to achieve a sound concrete substrate. Joint Modification Type 3b also includes the replacement of the joint seal as shown on the plans or “in kind” for the full deck width and completely through raised curbs plus six inch extensions per side. The new compression, Emseal, or gland seal shall be an appropriate size, based on field measurements and the provided movement ratings, selected from the Department’s Qualified Products List. Both modification types also include the placement of new elastomeric concrete headers to the limits shown on the Plans or as directed by the Resident. The Contractor shall take care not to cause damage to the existing bituminous pavement, waterproofing membrane, or reinforcement that is to remain; any damage will be the responsibility of the Contractor to repair at no additional cost to the Department. Any preexisting conditions that require steel repairs or modifications, as determined by the Resident, will be paid Time and Materials.
- (b) Bridge Joint Modification Type 4 involves removing the existing joint in its entirety to the extents shown on the Plans or as directed by the Resident. The work shall also include the installation of new LP concrete headers, reinforcement, and Emseals as shown on the Plans and specified herein. The new Emseals shall be sized according to the joint movement ratings and as required to maintain clearance of the joint ledges as shown on the Plans.

The modifications at each joint shall be completed in multiple phases to accommodate maintenance of traffic, and installation of concrete and seals. Concrete headers that cannot be completed within a single allotted lane closure shall be temporarily paved to grade; temporary pavement shall be considered incidental to the related joint modification and no additional payments will be made.

Where applicable, the Contractor shall cut a neat line for the substrate block out per the dimensions indicated on the plans and standard details. The Contractor shall sand blast the substrate, blow it clean with dry oil-free compressed air, and thoroughly dry the substrate prior to placing joint material. Care shall be taken where reinforcing steel is uncovered not to damage the steel or its bond to the surrounding concrete. All existing reinforcing steel exposed by the joint and concrete removal shall be cleaned by sandblasting, or by other means approved by the Resident. Prior to casting the new concrete, the Contractor shall apply a bonding agent from the Department’s Qualified Products List.

520.05 Method of Measurement Bridge Joint Modification Type 3a, Type 3b and Type 4 will be measured by each unit, complete in place and accepted for the type(s) identified on the plans and described in this specification.

520.06 Basis of Payment The accepted quantity of Bridge Joint Modification Type 3a, Type 3b, and Type 4 will be paid for at the contract unit price per each. Payment will be full compensation for furnishing and installing all materials, labor, equipment, and incidentals necessary to complete the work, including removing, disposing and installing structural concrete and steel; fabricating, drilling and grouting new reinforcing steel; adjusting and cleaning existing joint materials and reinforcing steel; fabricating and installing new joint material, and new seals; welding; phasing the joint installation; saw cutting; removal of existing header material and patching of the existing deck.

Payment will be made under:

| <u>Pay Item</u>                           | <u>Pay Unit</u> |
|-------------------------------------------|-----------------|
| 520.243 Bridge Joint Modification Type 3a | Each            |
| 520.243 Bridge Joint Modification Type 3b | Each            |
| 520.244 Bridge Joint Modification Type 4  | Each            |

**SPECIAL PROVISION  
SECTION 524  
TEMPORARY STRUCTURAL SUPPORTS  
(Temporary Roadway Plate)**

**524.01 Description**

The following paragraph is added:

The Contractor shall furnish and maintain a Temporary Roadway Plate and associated temporary pavement approaches at each bridge joint modification where the Contractor cannot complete the work in the allotted lane closure window and must open the roadway up to traffic curb to curb every day. The Temporary Roadway Plate shall be as shown on the Plans, or as submitted by the Contractor and approved by the Resident. The Temporary Roadway Plate includes the installation of temporary bituminous pavement ramps as shown on the plans and shall be installed full width across the shoulders and travel lanes where the bridge joint modification cannot be completed as required above. The Temporary Roadway Plate shall remain in place until the work is completed and traffic can traverse the repaired area without damage to the new work.

**524.02 Materials**

The first paragraph is revised to read as follows:

Materials used for the Temporary Roadway Plate and approaches shall be as shown on the Plans and specified in this Specification; or shall conform to the detailed plans and specifications submitted by the Contractor.

**524.03 Design**

The first paragraph is deleted and replaced with the following:

If the Contractor proposes to furnish and maintain the Temporary Roadway Plate at a bridge joint modification that differs from the design shown on the Plans, the Contractor shall submit design calculations and drawings for the Temporary Roadway Plate. The Temporary Roadway Plate shall be designed in accordance with current AASHTO LRFD Bridge Design Specification, except as noted herein, to meet live load requirements for an HL-93 loading. All computations, drawings, plans and other materials submitted for review and approval shall be stamped by a Professional Engineer licensed in the State of Maine.

The Department shall have no obligation to review or comment on any design, construction, maintenance or removal of Temporary Roadway Plate and approaches. No review or comment by the Department, or any lack of review or comment by the Department, shall relieve the Contractor of its responsibility to properly design, construct, maintain in good condition, and remove the Temporary Roadway Plate and approaches in accordance with the Contract, nor shall any review or comment by the Department, or any lack of review or comment by the Department shift any responsibility to the Department. The Contractor shall be responsible for all damages resulting from the failure of Temporary Roadway Plate and approaches.

#### 524.04 Erection and Removal

The following paragraphs are added:

The Temporary Roadway Plate shall be fastened or anchored so that all contact surfaces with adjacent supporting members bear continuously. Immediate corrective action shall be taken by the Contractor to remedy any condition in the structure that results in objectionable or distracting noise levels, or results in the decking becoming loose, when subject to traffic loads.

The Contractor shall be responsible for maintenance. Should any part, or all, of the Temporary Roadway Plate and approaches be damaged or destroyed by any cause, prior to, or after, opening the temporary structures and approaches to traffic, it shall be repaired or replaced by the Contractor without additional compensation.

The Contractor shall remove all Temporary Roadway Plate and approaches in their entirety upon the completion and acceptance of the associated bridge joint modification. Pavement removal shall be by scraping or micro-milling. Removal limits shall be to the surface of the pavement platforms installed by the Contractor.

The slope on the approach and departure pavement ramps shall be no steeper than 96H:1V.

The temporary approach pavement shall meet the requirements of Special Provision 461 and shall be maintained in a compacted and smooth condition.

#### 524.05 Method of Measurement

The following paragraphs are added:

Temporary Roadway Plate and associated approaches will be measured by each joint location where the installation of a Temporary Roadway Plate is required.

The installation and removal of the temporary bituminous pavement ramps will not be measured separately but shall be incidental to the Temporary Roadway Plate pay item.

524.06 Basis of Payment

The following paragraphs are added:

The Temporary Roadway Plate will be paid for at the contract unit price each, which price shall be full compensation for the respective items as shown on the Plans, or as called for in these specifications, designed, constructed, maintained, and completely removed.

| <u>Pay Item</u> |                         | <u>Pay Unit</u> |
|-----------------|-------------------------|-----------------|
| 524.50          | Temporary Roadway Plate | Each            |

SPECIAL PROVISION  
SECTION 527  
ENERGY ABSORBING UNIT  
(C-A-T System)

Description This work consists of furnishing and installing a C-A-T crash cushion as a permanent energy absorbing system in accordance with these specifications at location(s) shown on the plans or established by the Resident.

Materials The energy absorbing system shall be the C-A-T System as manufactured by Syro Steel Company of Girard, Ohio as approved and crash tested by the Federal Highway Administration.

Installation A set of installation drawings will be provided to the Resident for the system installed. The system shall be installed in accordance with the manufacturer's recommendations and the installation drawings.

Method of Measurement Energy absorbing system will be measured by each unit, complete in place and accepted.

Basis of Payment The accepted quantity of energy absorbing system will be paid for at the contract unit price which shall include the tail end length required and all incidentals necessary.

Payment will be made under:

| <u>Pay Item</u>                         | <u>Pay Unit</u> |
|-----------------------------------------|-----------------|
| 527.301 Energy Absorbing System (C-A-T) | Each            |

**SPECIAL PROVISION**  
**SECTION 606**  
**GUARDRAIL**

**(LINEAR DELINEATION SYSTEM)**

Description This work shall consist of furnishing and installing linear delineation system panels on w-beam guardrail.

Materials Each linear delineation system panel 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. Reflective sheeting shall be white or fluorescent yellow and shall meet the applicable requirements of Standard Specification 719.01. Sheeting shall be laminated to thin gauge aluminum with a pre-applied adhesive tape on the back.

Construction Requirements Linear delineation system panels shall be applied 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 vertically on the guardrail beam. Panels shall not be applied to seams or bolt heads; each panel shall be fully attached to only one guardrail beam. The guardrail beam surface shall be cleaned and prepared according to the manufacturer's instructions. Application air temperature and guardrail surface temperature must be a minimum of 50 degrees F (10 C) with rising temperature.

On two directional highways, panels shall be white on both sides of the highway. On one-way or divided highways panels shall be yellow on the left and white on the right.

Method of Measurement Linear delineation system panels will be measured for payment by each, installed, complete in place and accepted.

Basis of Payment The accepted quantity of 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. Linear delineation system panels shall be considered incidental to the new guardrail item and no additional payment shall be made.

Payment will be under:

| <u>Pay Item</u>                          | <u>Pay Unit</u> |
|------------------------------------------|-----------------|
| 606.3521 Linear Delineation System Panel | Each            |

**SPECIAL PROVISION  
SECTION - 627  
GROOVING FOR PAVEMENT MARKING**

627.30 Description

This work shall consist of furnishing and installing a groove in the pavement for placement of pavement markings as shown on the Plans or as directed by the Resident.

627.30.1 Construction Requirements

Prior to grooving any recessed lines, the Contractor shall layout the proposed pavement markings on the surface course with a chalk line or other suitable method so that the Resident can inspect the locations. Once the Resident has inspected and approved the proposed striping layout, the grooves for the proposed pavement markings may be ground. No pavement grooving shall be done without the prior approval of the Resident.

The Contractor shall use gang stacked diamond tipped cutting blades that will produce a smooth texture at the bottom of the groove that will be a flat, uniform texture with minimal variation in height so that the rise in the finished groove between each bottom of the cutting blade does not exceed 10 mils in depth. The acceptability of the surface texture will be decided by the Resident and/or Manufacturer's Technical Representative.

The final depth of the groove shall be 105 mils  $\pm$  5 mils for paint applications, the final depth of groove shall be 125 mils  $\pm$  5 mils for any tape application. The width of the groove shall be one (1)  $\pm$  ¼ inch wider than the width of the painted lines indicated in the Contract or as directed by the Resident. A two (2) inch offset from the edge of the recessed groove to the longitudinal surface course pavement joint is desirable. Lengths of grooves shall be determined in the Contract. Depth plates shall be provided by the contractor to assure that desired groove depth is achieved.

Grooves shall be clean, dry with no visible moisture, free of laitance, oil, dirt, grease, paint or other foreign contaminants. Prior to the installation of the pavement marking the grooves shall be air blasted to remove any remaining dirt and residue. The Contractor shall prevent traffic from traversing and damaging the grooves and re-groove or re-clean grooves as necessary prior to application of any pavement markings. All debris resulting from the installation of the grooves shall be removed and disposed of by the contractor.

All grooved locations shall be constructed in accordance with this specification and any additional manufacturer's recommended procedures.

627.30.2 Method of Measurement

The quantity of grooving for markings measured for payment will be the number of Square Feet (ft<sup>2</sup>) as shown in the Schedule of Items in the Contract. Additional measurement will not be made except for authorized changes during construction or where significant errors are found in the contract quantity. The revision or correction in quantity will be measured, computed and added to or deducted from the contract quantity. When required, grooves will be measured separately and made to the nearest square foot.

When grooving is used for sections of broken lines for acceleration/deceleration, auxiliary lanes and passing zones the length measured for payment shall include only the grooved areas. Breaks or gaps will not be included in the length measured for payment.

627.30.3 Basis of Payment

The accepted quantity of grooving will be paid for at the contract unit price per each of the pay items included in the contract. Payment will be considered full compensation for all labor, equipment, necessary material to complete the described work, including cleaning, loading, hauling, stockpiling and disposal of material; and any other incidental items.

Pay ItemPay Unit

|        |                               |                                |
|--------|-------------------------------|--------------------------------|
| 627.30 | Grooving for Pavement Marking | Square Foot (ft <sup>2</sup> ) |
|--------|-------------------------------|--------------------------------|

**SPECIAL PROVISION  
SECTION 627- PAVEMENT MARKINGS  
POLYUREA PAVEMENT MARKING**

627.01 Description This work shall consist of furnishing and placing reflectorized pavement lines and markings, removing pavement lines and markings, and furnishing and applying reflectorized paint to curbing in reasonably close conformity with the Plans and as designated. The liquid marking material shall be applied by spray method onto asphalt cement concrete and Portland cement concrete surfaces. Following an application of retroreflective optics, and upon curing, the resulting marking shall be an adherent reflectorized stripe during dry and wet conditions of the specified thickness and width that is capable of resisting deformation by traffic.

Work under these items shall consist of the furnishing and installation of white and lead-free yellow polyurea reflectorized pavement markings (including edge lines, center lines, skip lines, cross walks, stop bars and symbols) on all pavement surfaces noted on the Plans.

627.02 Materials Materials shall conform to the requirements identified below:

627.02.1 Polyurea Material The Contractor shall use a polyurea paint that is classified as VERY FAST CURING POLYUREA TRAFFIC PAINT (no-track times < 10 minutes). The following paint or an approved equal shall be used:

- Innovative Performance Systems HPS-5, Ph. 800.448.3482
- Epoplex LS-90, Ph. 800.822.6920
- 3M Series 5000 LPM, Ph. 800.553.1380

At least one component shall be composed of secondary amines, pigments and fillers as needed to meet performance requirements of this specification.

These films shall be manufactured without the use of lead chromate pigments or other similar, lead-containing chemicals.

The white polyurea shall contain not less than 13% by weight rutile titanium dioxide pigment to ensure adequate opacity, hiding power and reflective properties.

The reflective media must include a first drop of 3M CR AW 90 Series elements and second drop of Swarco 18/50 beads (former Utah Performance) bead blend based on manufacturers recommended drop rates. These beads and elements shall be for drop-on application applied simultaneously with paint by pressurized or mechanical means.

627.03 General The pavement markings shall be applied in accordance with the Manual on Uniform Traffic Control Devices.

Longitudinal lines placed on tangent roadway segments shall be straight and true. Longitudinal lines placed on curves shall be continuous smoothly curved lines consistent with the roadway alignment. All pavement markings placed shall meet the tolerance limits shown on the Plans. Broken lines shall consist of alternate 10- foot painted line segments and 30 -foot gaps on non-Interstate or expressway. Broken lines on Interstate and expressway shall consist of alternate 15-foot painted line segments and 25- foot gaps.

Temporary pavement marking lines, defined in Special Provision Section 652, Maintenance of Traffic, Temporary Centerline, will be applied as many times as necessary to properly delineate traffic lanes for the safe passage of traffic. Bi-directional delineators may be used in place of temporary lines, except where specified otherwise in Special Provision 652 Maintenance of Traffic, Temporary Centerline. Delineators will be applied at 40 foot intervals.

In overnight lane closure areas that are not to be overlaid, temporary plastic lines or raised pavement markers shall be used through the length of the taper.

Newly painted lines, markings and curb shall be protected from traffic using cones, stationary vehicles or other approved methods until the paint is dry.

627.02.1 Polyurea Marking Polyurea Marking equipment shall be certified by the manufacturer as suitable for the application of the polyurea and reflective media. The striping equipment shall bear a decal identifying it as manufacturer certified.

At any time throughout the duration of the project, the Contractor shall provide free access to his application equipment for inspection by the Resident, his authorized representative, or the materials representative.

627.04 Polyurea Performance Requirements The preformed markings shall consist of white and yellow films with pigments selected and blended to conform to standard highway colors. The mixed polyurea compound, both white and yellow, when applied to a 144 in<sup>2</sup> aluminum panel at 15±3 mil in thickness with no glass beads and exposed for 500 hours in a Q.U.V. Environmental Testing Chamber, as described in ASTM G-154, Cycle #1, shall conform to the following minimum requirements. The color of the white polyurea system shall not be darker than Federal Standard No. 595A-17778. The color of the yellow polyurea system shall be reasonably close to Federal Standard No. 595A-13538.

The surface of the retroreflective marking shall provide an initial average skid resistance value of 45 BPN when tested according to ASTM E303.

When tested in accordance with ASTM D-711 the polyurea marking material shall reach a track-free condition in 7 minutes or less at 15 mils with no retroreflective material.

When installed at 77° F, at a wet film thickness of  $22 \pm 1$  mils and reflectorized with glass beads, the polyurea markings shall reach a no-track condition in less than 6 minutes. Dry to “no-tracking” shall be considered as the condition where no visual deposition of the polyurea marking to the pavement surface is observed when viewed from a distance of 50 feet, after a traveling vehicle’s tires have passed over the line.

The polyurea pavement marking materials, when tested according to ACI Method 503, shall demonstrate 100% concrete failure in the performance of this test. The prepared specimens shall be conditioned at room temperature ( $75^\circ \pm 2^\circ$  F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.

The polyurea pavement marking materials, when tested according to ACI Method 503, shall demonstrate 100% asphalt failure in the performance of this test. The prepared specimens shall be conditioned at room temperature ( $75^\circ \pm 2^\circ$  F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.

The material shall have a minimum Shore D Hardness of between 70 and 100 when tested in accordance with ASTM D 2240.

The material shall have a maximum abrasion resistance of 150 mg at  $15 \pm 1$  mil ( $0.375 \pm 0.025$  mm) when tested in accordance with ASTM D-4060 (formally ASTM C 501).

The Contractor shall furnish a certificate of compliance showing the Polyurea material conforms to all requirements of this specification.

627.05 Preparation of Surface At the time of Polyurea application all pavement surfaces shall be grooved to create a recess for the paint that shall be in accordance with specification 627.30 Grooving for Pavement Markings in addition any polyurea manufacturer’s recommended procedures. The acceptability of the surface texture will be decided by the Resident and/or Manufacturer’s Technical Representative prior to application.

The pavement surface temperature and the ambient temperature shall be above 32° F at the time of application. The Resident shall determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

627.06 Application All work shall be done in accordance with the Material Suppliers specifications and the following:

1. The polyurea binder shall be applied at rates to achieve a minimum uniform wet thickness of 25±2 mils.
2. Marking Performance: The typical dry average initial retro reflectance of the markings shall be 600 [(mcd(ft-2)(fc-1)] for white and 400 [(mcd(ft-2)(fc-1)] for yellow per ASTM E1710. The typical wet average initial retro reflectance of the markings shall be 375 [(mcd(ft-2)(fc-1)] for white and 275 [(mcd(ft-2)(fc-1)] for yellow per ASTM E2177.

The average initial retro reflectance shall be determined according to the measurement and sampling procedures outlined in ASTM D 6359, using a 30 meter retro reflectometer. The 30 meter retro reflectometer shall measure the coefficient of retroreflected luminance, RL, at an observation angle of 1.05 degrees and an entrance angle of 88.76 degrees. RL shall be expressed in units of millicandelas per square foot per foot-candle [(mcd(ft-2)(fc-1)]. The metric equivalent shall be expressed in units of millicandelas per square yard per lux [mcd(m-2)(lux-1)].

627.07 Installation The Contractor shall provide to the Department a written quality control report of the application. The report will include: a thorough summary of the application, weather, temperature, groove depth, wet mil thickness, reflectivity verification tests and any corrective actions taken while applying the Polyurea. The Contractor will submit the report to the Resident within 14 days of application.

The Department will measure initial performance of the pavement markings within fourteen (14) days after application. Measurements shall also be made six (6) and twelve (12) months after application for data purposes only.

627.09 Removing Lines and Markings When it is necessary to remove pavement lines and markings, it shall be done by high pressure water, sand blasting, or other acceptable means approved by the Department. The method chosen must be capable of completely eradicating the existing line or marking without damage to the pavement. Burning or the use of solvents is not permitted.

627.10 Method of Measurement The quantity of permanent pavement marking lines measured for payment will be the number of feet shown in the Schedule of Items in the contract.

Polyurea Pavement Marking Lines (Recessed) shall be measured by the linear foot. Double yellow centerline, broken or solid, will be considered one line for measurement purposes. Any broken or dotted white lines measurement will not include the gaps. All other pavement markings will be measured by the square foot for work completed in accordance with the contract.

Reflectorized curb will be measured or computed by the square foot of curb surface painted and reflectorized.

627.11 Basis of Payment The accepted quantity of permanent pavement marking lines will be paid for at the contract unit price per foot. No adjustment will be made to the quantity for payment, except as described under Method of Measurement above. All other permanent pavement markings will be paid for at the contract unit price per square foot.

Payment will be made under:

| <u>Pay Item</u>                                                      | <u>Pay Unit</u> |
|----------------------------------------------------------------------|-----------------|
| 627.734 4" White or Yellow Polyurea Pavement Marking Line (Recessed) | Linear Foot     |
| 627.745 6" White or Yellow Polyurea Pavement Marking Line (Recessed) | Linear Foot     |
| 627.751 White or Yellow Polyurea Pavement Markings (Recessed)        | Square Foot     |

**SPECIAL PROVISION**  
**SECTION 643**  
(Weigh-In -Motion system)

**Description**

This work shall consist of installing a Weigh-in-Motion (WIM) system, as shown in the attached standard detail. Two 2 meter quartz sensors will be supplied per lane.

| Task                      | Description of work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Loop Installation         | <ul style="list-style-type: none"><li>• Lead in saw cuts to be 2 inches deep by 3/8 inch wide</li><li>• Loops are to be centered in the lane, 6 feet by 6 feet with 4 turns of wire in IMSA loop duct.</li><li>• Prior to installing sealant, wires to be held in bottom of saw cut by Styrofoam backer rod.</li><li>• Loop lead-in wires from controller box are to be twisted (min 3 twists per foot), and routed separately to each loop for each travel lane.</li><li>• There shall be 5 feet of the lead-in wire in the cabinet to be connected by MDOT to the WIM electronics.</li></ul>                                                                                                                                                                     |
| Piezo sensor Installation | <ul style="list-style-type: none"><li>• Installation will be done by Kistlser certified installers</li><li>• The sensors supplied will be 2 meter quartz sensors by Kistlser Corp of 75 John Glenn Drive, Amherst, NY. Sensors will not require any temperature compensation.</li><li>• Sensor wires will not be routed with loop wires. Sensor wires will also be separated from other sensor wires.</li><li>• Sensors to be located 13 inches downstream of trailing edge of loop.</li><li>• Center line sensor must be located in advance of shoulder sensor according to travel direction.</li><li>• sensor wires shall be routed back to the cabinet. There shall be 4 feet of lead in wire in the cabinet, terminated with a female BNC connector.</li></ul> |

**Carmel – Bangor, Old Town – Carmel**  
**24119.00 & 24173.00**  
**Interstate 95 Northbound**  
**Interstate 95 Southbound**  
**June 22, 2020**

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cabinet and post | <ul style="list-style-type: none"> <li>• post shall be 20 foot long, pressure treated 6 inch by 6 inch post meeting section 720.12</li> <li>• Post shall be installed 6 feet in the ground and drilled to the TS 350 breakaway standard.</li> <li>• Unpainted aluminum M cabinet (H 51" x W 30" x D 18") no police door required shall be installed on the above post with the center of the cabinet being 5 feet above ground level.</li> <li>• 2 12 volt 80 Watt solar panels shall be installed on the top of the post. Panels shall be facing south with an angle of approximately 60° to the horizontal.</li> <li>• Solar panels shall be wired in parallel and terminated in the cabinet.</li> </ul> |
| Ducting          | <ul style="list-style-type: none"> <li>• A tier 2 23,000lb rated tier 2 junction box (18" x 24" x 18") will be set in the ground next to the shoulder, top flush with surface, this will be connected to buried 1.5 inch PVC conduit that enters into the bottom of the Type M cabinet (conduit will be installed a minimum of 3 feet deep) from edge of pavement to M cabinet (including expansion couplings). All loop wires and sensor wires shall enter the cabinet via this conduit junction box and conduit.</li> </ul>                                                                                                                                                                              |

**Materials**

Contractor will be asked to supply and install:

- (1) 20 foot long, pressure treated 6 inch by 6 inch post meeting standard 720.12
- (1) unpainted aluminum M cabinet (H 51" x W 30" x D 18") no police door required.
- (2) 80 watt solar panels
- (2) 105 AH AGM batteries
- Approximately 200 feet of 1.5 inch PVC conduit meeting standard 715.03
- (1) vehicle rated junction box
- (2) Kistler sensors per lane (as shown in detail)
- (2) IMSA loop ducts per lane meeting standard 718.04

MaineDOT will supply

- WiM measurement and control unit and required remote communications, which will be installed in the cabinet by Maine DOT

## **Weigh in Motion Installation**

### **Cabinet:**

- Post shall be installed 6 feet in the ground and drilled to the TS 350 breakaway standard
- Solar panels shall be installed at 60 degrees from horizontal, facing true south

### **Sensor loop:**

- Lead in saw cuts to be 2 inches deep by 3/8 inch wide
- Prior to installing sealant, wires are to be held in bottom of saw cut by Styrofoam backer rod.
- Loops are to be centered in the lane, 6 feet by 6 feet with 4 turns of wire in IMSA loop duct.
- Loop lead-in wires from controller box are to be twisted, and routed separately to each loop for each travel lane.
- Piezo Sensor wires will not be routed with loop wires.
- Trailing edge of loop to trailing edge of loop to be 12 feet.
- Furthest loop's lead-in will not pass in front of nearest sensor array.
- Center line sensor must be located in advance of shoulder sensor according to travel direction.
- Installation should resemble the attached detail diagram

### **Piezo Sensor:**

- Lead in saw cuts to be 2 inches deep by 3/8 inch wide
- The sensors supplied will be 2 meter quartz sensors by Kistler Corp of 75 John Glenn Drive, Amherst, NY. Sensors will not require any temperature compensation.
- Sensor wires will not be routed with loop wires. Sensor wires will also be separated from other sensor wires.
- Sensors to be located 13 inches downstream of trailing edge of loop.
- After sensor grout hardens, the grout/sensor surface will be ground to be level with pavement.
- Furthest sensor's lead-in will not pass in front of nearest sensor array.
- Leading edge to leading edge of sensor to be 12 feet.
- Center line sensor must be located in advance of shoulder sensor according to travel direction.
- Installation should resemble the configuration labeled "Two Way Highway" for one northbound and one southbound lane, and "Interstate or Other Divided Highway" for two or more northbound and two or more southbound lanes.

**Carmel – Bangor, Old Town – Carmel**  
**24119.00 & 24173.00**  
**Interstate 95 Northbound**  
**Interstate 95 Southbound**  
**June 22, 2020**

MaineDOT staff to mark location during construction. Call Ron Cote, MaineDOT WIM Program Coordinator prior to installation. He can be reached via e-mail at [ron.cote@maine.gov](mailto:ron.cote@maine.gov) or via phone at (207) 446-2305.

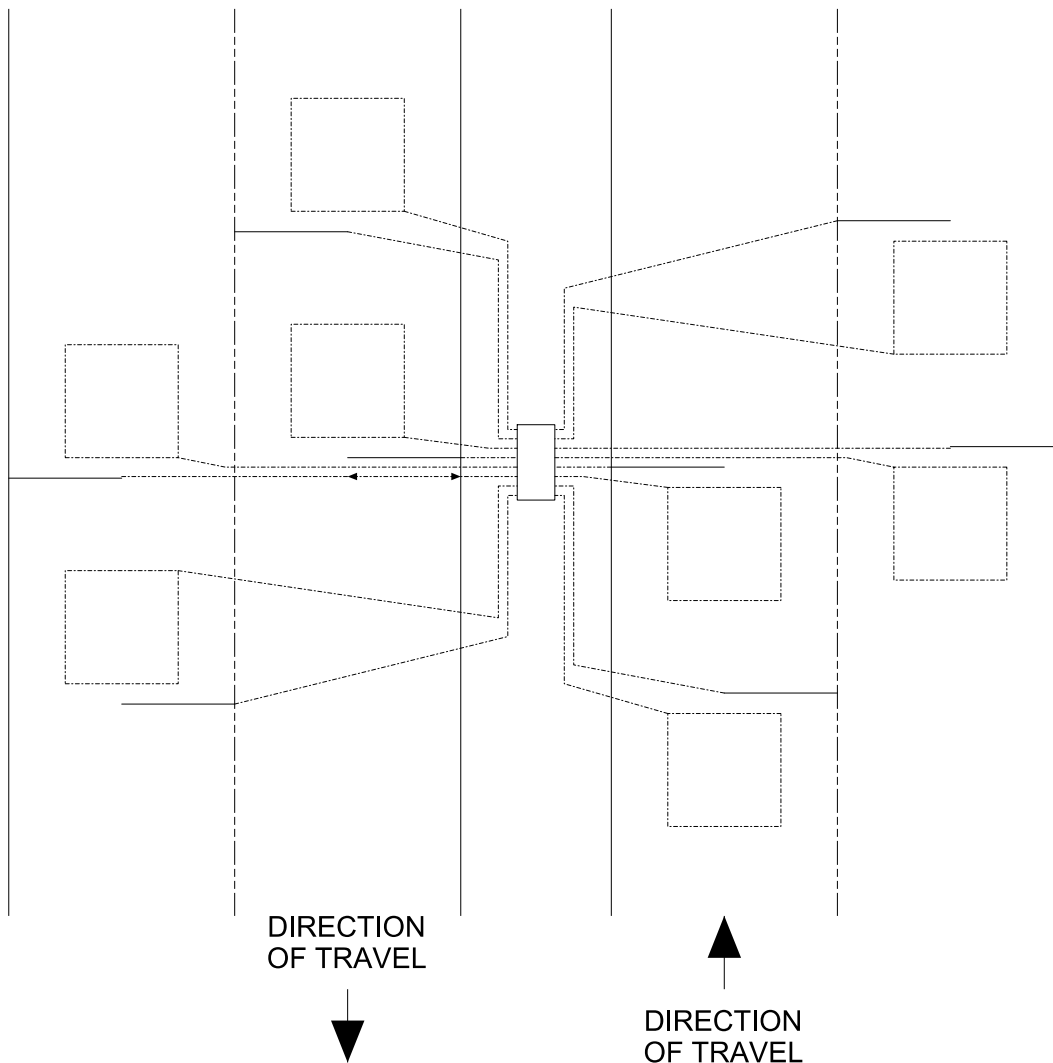
Method of measurement

WIM site shall be measured as one lump sum, completed in place, inspected and accepted

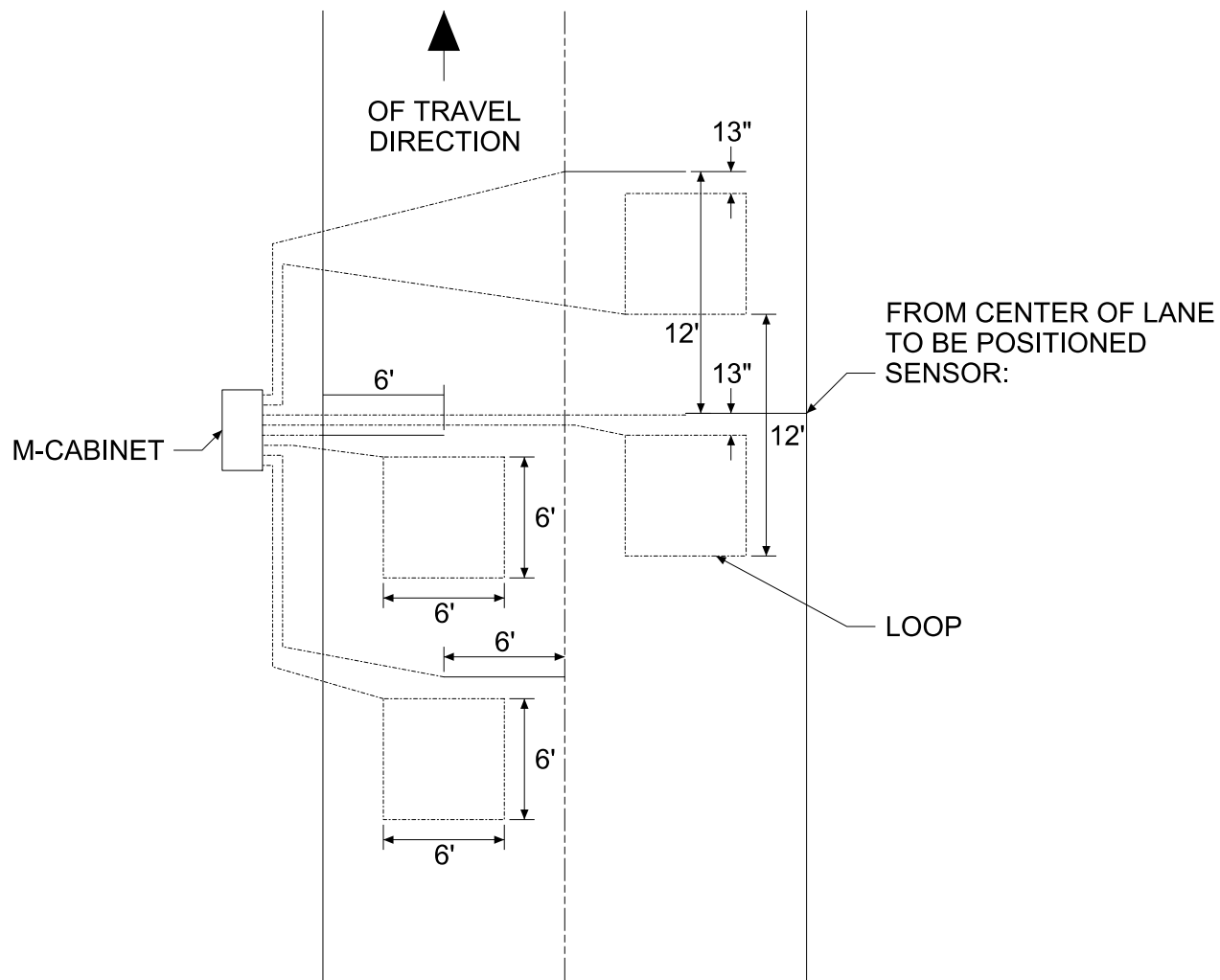
Basis of payment

Payment for this item shall be full compensation for furnishing **two** quartz sensors and associated hardware **per lane** as shown on the detail sheet and installation of the devices on the roadway, including any incidentals required to make the system perform as stated on the accompanying plan sheet.

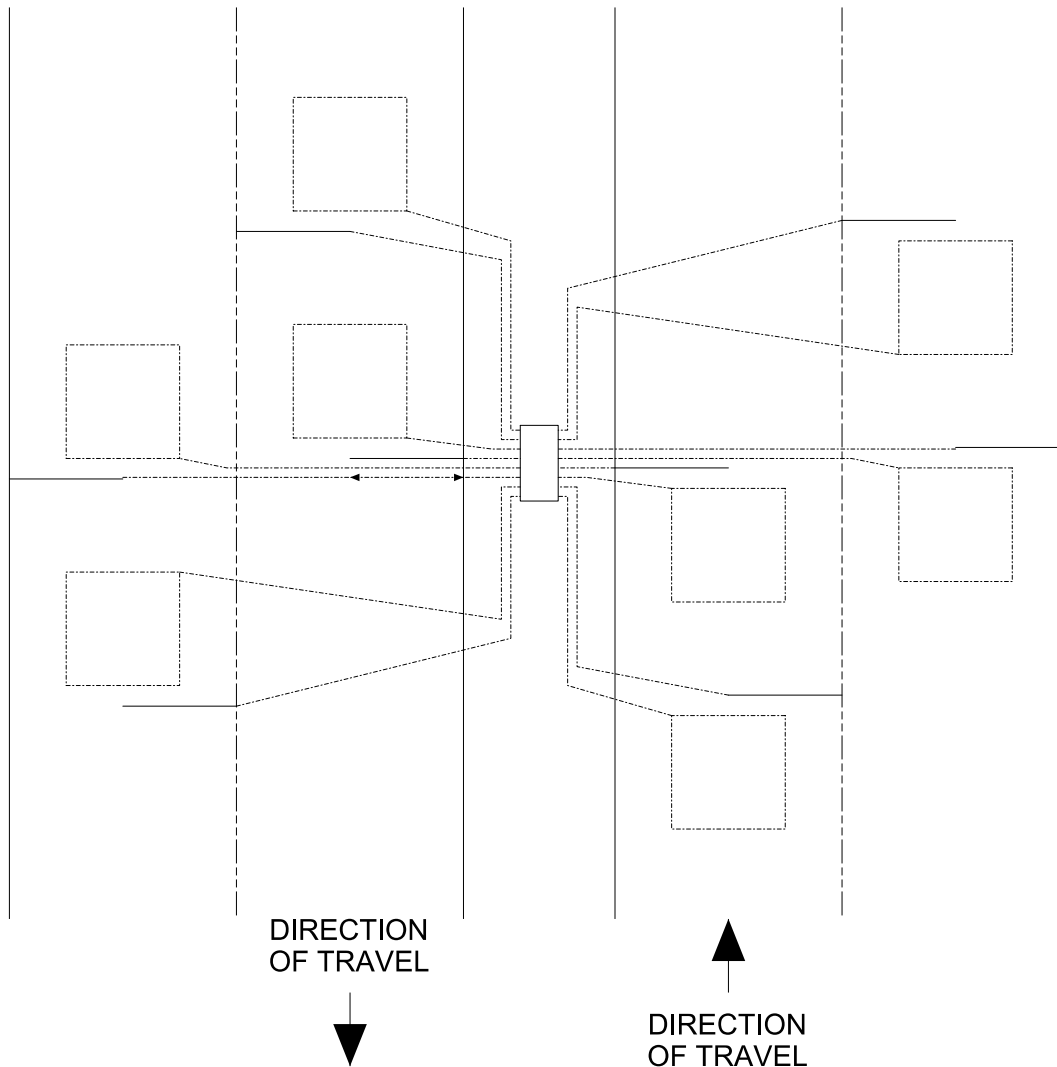
| Pay Item |                               | Pay Unit |
|----------|-------------------------------|----------|
| Item     | 643.87 Weigh in Motion System | LS       |



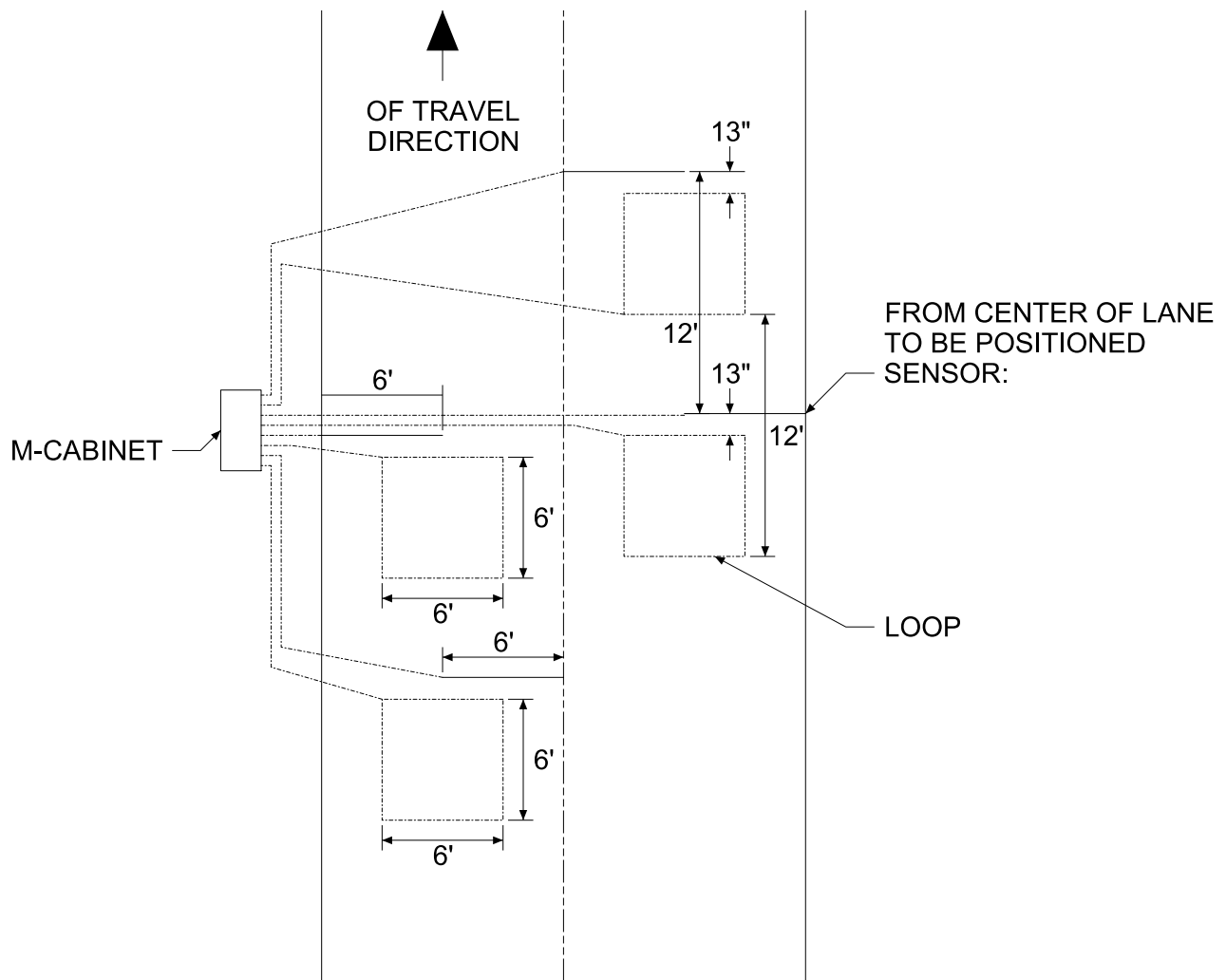
|              |                                             |                          |
|--------------|---------------------------------------------|--------------------------|
| 03/07/2016   | CARMEL - BANGOR<br>INTERSTATE 95 NORTHBOUND | SHEET NUMBER<br><b>1</b> |
| WIN 24119.00 | WEIGH IN MOTION                             | OF 2                     |



|              |                                             |                                  |
|--------------|---------------------------------------------|----------------------------------|
| 03/07/2016   | CARMEL - BANGOR<br>INTERSTATE 95 NORTHBOUND | SHEET NUMBER<br><b>2</b><br>OF 2 |
| WIN 24119.00 | WEIGH IN MOTION                             |                                  |



|              |                                                    |                                  |
|--------------|----------------------------------------------------|----------------------------------|
| 03/07/2016   | <b>OLD TOWN-CARMEL</b><br>INTERSTATE 95 SOUTHBOUND | SHEET NUMBER<br><b>1</b><br>OF 2 |
| WIN 24173.00 | WEIGH IN MOTION                                    |                                  |



|              |                                               |                          |
|--------------|-----------------------------------------------|--------------------------|
| 03/07/2016   | OLD TOWN - CARMEL<br>INTERSTATE 95 SOUTHBOUND | SHEET NUMBER<br><b>2</b> |
| WIN 24173.00 | WEIGH IN MOTION                               | OF 2                     |

**SPECIAL PROVISION  
SECTION 652  
MAINTENANCE OF TRAFFIC  
(Automated Speed Limit Sign)**

**Item 652.45 – Automated Trailer-Mounted Speed Limit Sign**

652.1 Description This special provision provides for furnishing, operating, and maintaining an Automated Trailer Mounted Radar Speed Limit Sign for project use. The Contractor shall furnish, operate, and maintain the Automated Trailer Mounted radar Speed Limit Signs during the project operations.

652.1.1 Instruction and maintenance manuals shall be provided.

652.2 Materials

**Automated Trailer Mounted Speed Limit Sign**

Trailer mounted speed limit signs shall be self-contained units including sign assembly, flashing lights, directional radar to measure speed limits, a regulatory speed limit sign, a construction sign stating “Work Zone Speed Limit When Flashing” and power supply specifically constructed to operate as a trailer-mounted sign. The preferred color of the unit shall be “construction orange”.

Signs Base material for the regulatory speed limit signs shall be weather proof, rigid substrate specifically manufactured for highway signing and meet the retro-reflective sheeting application requirements of the sheeting manufacturer.

Sign text shall consist of the letters, digits and symbols either applied by stick-on or silk screen, to conform to the dimensions and designs indicated in the Contract, MUTCD and/or FHWA Standard Highway Signs. The materials and methods shall be in accordance with standard commercial processes.

The regulatory sign should have changeable speed limit numbers.

“Work Zone” construction signs shall be mounted on the trailer unit above and below the regulatory speed limit sign. (see attached detail). The “When Flashing” construction sign shall be added to the trailer, if the Resident deems the sign necessary.

Signs and secondary signs shall follow the MUTCD for minimum mounting heights.

Power supply The power supply shall be either full battery power with solar panel charging (capable of maintaining a charged battery level) and 135 ampere, 12 volt deep cycle batteries, or diesel powered generator with a fuel capacity sufficient for 10 hours of continuous operation.

Flashing Lights Each unit shall be equipped with two mono-directional flashing lights, placed in accordance with the MUTCD, with amber lenses and reflectors, which are visible through a range of 120 degrees when viewed facing the sign. The lights, either strobe, halogen, or incandescent lamps, shall be visible for a minimum distance of one mile under daylight conditions and shall have a minimum flash rate of 40 flashes per minute. An “On” indicator light shall be mounted on the back of the signs, which is visible for at least 500 feet to provide confirmation that the flashing lights are operating.

Radar The directional radar shall monitor approaching traffic only. The radar shall be capable of measuring speeds from 5 to 70 MPH at a distance of up to 1500 feet and shall have a high speed cut off thresh hold.

**Data Collection Units shall obtain traffic data, statistics, to include location, speeds, and times. This information shall be capable of being downloaded from the sign location with Bluetooth, wireless connection, or be accessed remotely via cellular data link. Units shall also have the capability to download this information via a USB port. Software to interface with PC or MAC Operating Systems shall be provided to the Department.**

### CONSTRUCTION REQUIREMENTS

652.3.2 Responsibility of the Contractor The Contractor shall furnish the automated Trailer Mounted Speed Limit Sign as described in 2.1 for this project.

All existing speed limit signs, which conflict with the construction zone trailer mounted speed limit signs shall be covered completely during the operation of the flashing lights. These signs shall be immediately uncovered when the use of the flashing lights is discontinued.

Automated Trailer Mounted Speed Limit Signs shall be used only during the Contractor’s actual work hours, unless specifically authorized by the Engineer.

The Resident will record the actual time and location for the signs on a daily basis when the Automated Trailer Mounted Speed Limit Signs are in use.

Automated Trailer Mounted Speed Limit Signs shall be located as directed by the Resident. Placement of additional “Reminder” signs may be ordered by the Resident.

Automated Trailer Mounted Speed Limit Signs shall be placed outside the clear zone whenever practical and possible. The signs shall be removed outside the clear zone of the traveled way as specified in the Traffic Control Plan when not in use unless protected by portable barrier or equivalent. The signs shall be delineated with retro-reflective temporary traffic control devices while in use and shall also be delineated by affixing a retro-reflective material directly on the trailer.

Upon delivery of the Automated Trailer Mounted Speed Limit Sign and before acceptance by the Department, the Contractor shall have a representative of the manufacturer review the condition and notify the Resident in writing, of all deficiencies noted.

The Contractor shall arrange to have all necessary repairs performed at no cost to the Department.

To avoid impairing driver vision, the Contractor shall dim the lighted speed limit readings by 50 percent during nighttime use, and restore full power lighting during daytime operation.

#### METHOD OF MEASUREMENT

652.7 Method of Measurement Each Automated Trailer Mounted Speed Limit Sign will be measured as a unit.

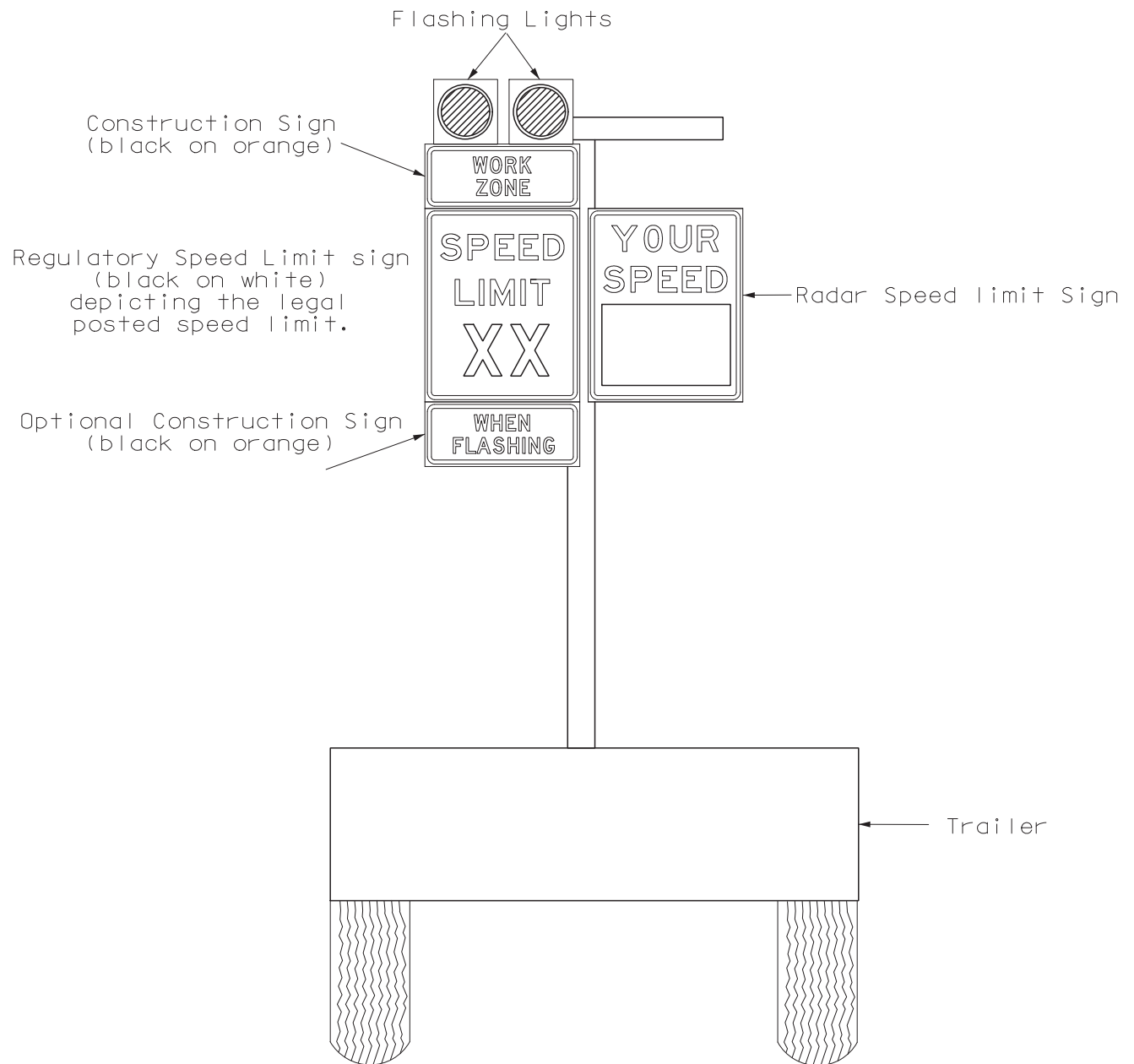
A unit will include the unit as described in 2.1, the trailer, radar Speed Limit Sign, flashing beacon amber lights, regulatory speed limit sign, "Work Zone Speed limit when flashing" construction sign, fuel, necessary maintenance, and all checking of radar Speed Limit Signs by manufacturer. Also included are all project moves including the transporting and delivery of each unit.

#### BASIS OF PAYMENT

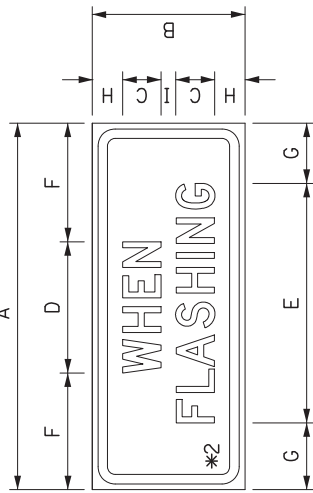
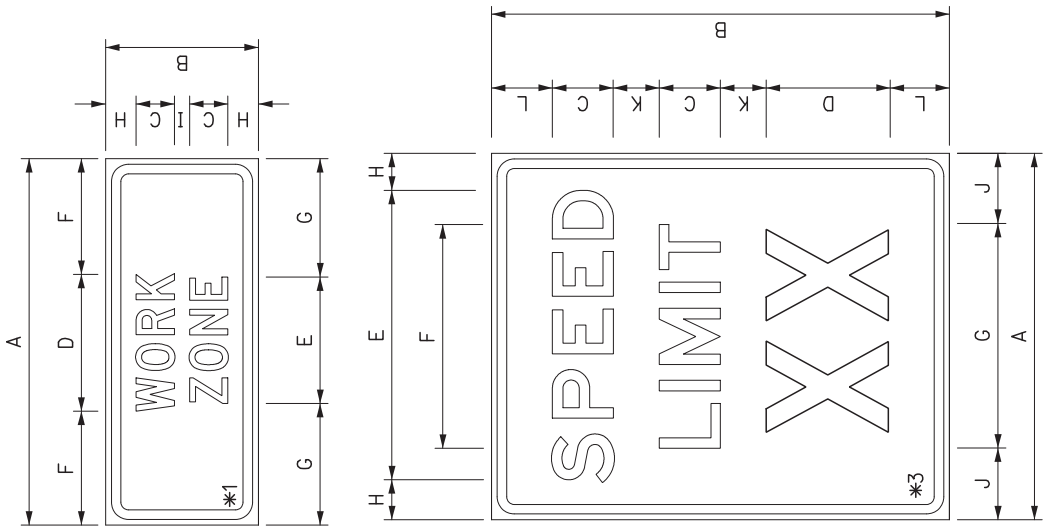
652.8 Basis of Payment The accepted quantity of Automated Trailer Mounted Speed Limit Sign will be paid for at the contract price per unit for the number of units used and accepted.

Payment will be made under:

| Pay Item                                          | Pay Unit |
|---------------------------------------------------|----------|
| 652.45 Automated Trailer Mounted Speed Limit Sign | Unit     |



Automated Trailer Mounted Speed Limit Sign  
note: not to scale



\*1 - 1.25" BORDER, 0.75" INDENT, BLACK ON ORANGE; BB GRADE PLYWOOD SIGN  
\*2 - 1.25" BORDER, 0.75" INDENT, BLACK ON WHITE; BB GRADE PLYWOOD SIGN  
\*3 - 1.25" BORDER, 0.75" INDENT, BLACK ON WHITE; BB GRADE PLYWOOD SIGN

| DIMENSIONS (inches)/LETTER FONTS |    |    |    |                                |                                |                                |                                |                               |                               |                               |     |     |
|----------------------------------|----|----|----|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-----|-----|
|                                  | A  | B  | C  | D                              | E                              | F                              | G                              | H                             | I                             | J                             | K   | L   |
| *1                               | 48 | 20 | 5D | 18 <sup>1</sup> / <sub>8</sub> | 16 <sup>5</sup> / <sub>8</sub> | 14 <sup>7</sup> / <sub>8</sub> | 15 <sup>5</sup> / <sub>8</sub> | 4                             | 2                             | N/A                           | N/A | N/A |
| *2                               | 48 | 20 | 5D | 17 <sup>1</sup> / <sub>4</sub> | 31 <sup>3</sup> / <sub>8</sub> | 15 <sup>1</sup> / <sub>2</sub> | 8 <sup>1</sup> / <sub>4</sub>  | 4                             | 2                             | N/A                           | N/A | N/A |
| *3                               | 48 | 60 | 8E | 16E                            | 38 <sup>1</sup> / <sub>4</sub> | 29 <sup>1</sup> / <sub>4</sub> | 29 <sup>1</sup> / <sub>2</sub> | 4 <sup>7</sup> / <sub>8</sub> | 9 <sup>3</sup> / <sub>8</sub> | 9 <sup>1</sup> / <sub>4</sub> | 8   | 6   |

CONSTRUCTION SIGN/REGULATORY SIGNS

TRAILER MOUNTED CONSTRUCTION ZONE  
SPEED LIMIT SIGN

**SPECIAL PROVISION**  
**SECTION 652**  
**MAINTENANCE OF TRAFFIC**

**SEQUENTIAL FLASHING WARNING LIGHTS**

Description Furnish and install Sequential Flashing Warning Lights on drums used for merging tapers during nightly work activities on interstates and freeways with speed limits greater than 55 MPH and or facilities that have significant traffic volumes.

The purpose of these lights is to assist the motorist in determining which direction to merge when approaching a lane closure. It's also designed to reduce the number of late merges resulting in devices being struck and having to be reset to maintain positive guidance at the merge point. The successive flashing of the lights shall occur from the upstream end of the merging taper to the downstream end of the merging taper in order to identify the desired vehicle path.

Materials The Sequential Flashing Warning Lights shall meet all of the requirements for warning lights within the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

Each light unit shall be capable of operating fully and continuously for a minimum of 200 hours when equipped with a standard battery set.

Each light in the sequence shall be flashed at a rate of not less than 55 times per minute and not more than 75 times per minute. The flash rate and flash duration shall be consistent throughout the sequence.

Supply a Type 3 Certification (Independent Test Lab results) documenting all actual test results for the specified parameters contained in the Institute of Transportation Engineer's (ITE's) *Purchase Specification for Flashing and Steady Burn Warning Lights*. The laboratory shall also identify all manufacturer codes and part numbers for the incandescent lamp or LED clusters, lenses, battery, and circuitry, and the total width of the light with the battery in place. The complete assembly shall be certified as crashworthy when firmly affixed to the channelizing device.

The Contractor shall submit for approval, literature and all necessary certifications to the Department prior to procurement of the product.

Construction Requirement Sequential Flashing Warning Lights are to be used for night time lane closures.

These lights shall flash sequentially beginning with the first light and continuing until the final light.

The Sequential Flashing Warning Lights shall automatically flash in sequence when placed on the drums that form the merging taper.

The number of lights used in the drum taper shall equal one half the number of drums used in the taper.

Drums are the only channelizing device allowed to mount sequential flashing warning lights.

The Sequential Flashing Warning Lights shall be weather independent and visual obstructions shall not interfere with the operation of the lights.

The Sequential Flashing Warning Lights shall automatically sequence when placed in line in an open area with a distance between lights of 10 to 100 feet. A 10 foot stagger in the line of lights shall have no adverse effect on the operation of the lights.

If one light fails, the flashing sequence shall continue. If more than 2 lights fail, all of the lights are to be automatically turned to the "off" mode. Non-sequential flashing is prohibited.

When lane closures are not in effect, the Sequential Flashing Warning Lights shall be deactivated.

Method of Measurement Sequential Flashing Warning Lights will be measured as the maximum number of sequential flashing warning lights satisfactorily installed and properly functioning at any one time during the life of the project.

This includes all materials and labor to install, maintain and remove all Sequential Flashing Warning Lights.

| Pay Item                                  | Pay Unit |
|-------------------------------------------|----------|
| 652.46 Sequential Flashing Warning Lights | Each     |

**SPECIAL PROVISION**  
**SECTION 652**  
**MAINTENANCE OF TRAFFIC**

**TEMPORARY PORTABLE RUMBLE STRIPS**

Description This special provision describes providing, relocating, maintaining, and removing temporary portable rumble strips.

Materials Furnish a portable rumble strip system to be used in a transverse installation used within a travel lane. The color of the rumble strip shall only be white, black, or orange and shall not match the color of the pavement. The Contractor will be allowed at their option to use a combination of the color options (i.e. orange, black, orange or white, black, white etc.) or a continuous solid color that does not match the color of the pavement in each transverse installation to delineate the rumble strips to the traveling public. The Contractor shall submit for approval, literature and all necessary certifications to the Department prior to procurement of the product.

Construction Requirement

Provide rumble strips where the plans show or as directed by the Resident as follows:

1. Prior to placing rumble strips, clean the roadway of sand and other materials that may cause slippage.
2. Place one end of the rumble strips 6 inches from the roadway centerline. Extend the strips perpendicular to the direction of travel. Ensure strips lay flat on the roadway surface. Spacing of the rumble strip strips will be per the manufactures recommendation.
3. Only one group of rumble strips, placed before the first work zone, is required per direction of travel for multiple work zones spaced 1 mile or less apart. Work zones spaced greater than 1 mile apart require a separate group of rumble strips. Each lane shall use one group of temporary rumble strips.
4. The use of rumble strips will require an additional work zone sign stating “Caution Rumble Strips” in the approach sign package meeting all applicable MUTCD guidelines. The use of the temporary rumble strips and work zone signage will be discussed in the Contractor’s traffic control plan.

Maintain rumble strips as follows:

1. If rumble strips slide, become out of alignment, or are no longer in the wheel path of approaching vehicles during the work period, thoroughly clean both sides of the rumble strips and reset on a clean roadway.
2. Repair or replace damaged rumble strips immediately.

Method of Measurement The Department will measure temporary portable rumble strips as one group, per lane. A group shall be considered 3 full lane width of rumble strips.

Basis of Payment The accepted quantity of temporary portable rumble strips will be paid for at the contract unit price per group. Payment is full compensation for providing, relocating, maintaining or replacing, and removing temporary portable rumble strips.

Pay Item

Pay Unit

652.47 Temporary Portable Rumble Strip

Group

SPECIAL PROVISION  
SECTION 652  
MAINTENANCE OF TRAFFIC

Approaches. Approach signing for the work on the Interstate shall include the following signs

|                   |                        |
|-------------------|------------------------|
| Road Work 3 Miles | Road Work Next x Miles |
| Road Work 2 Miles | End Road Work          |
| Road Work 1 Mile  |                        |

Work Areas Interstate. At the work sites, signs, flashing arrow boards and channeling devices as shown on the Work Zone Signing details shall be used as directed by the Resident.

Signs Include:

Right or Left Lane Closed 2 Miles  
Lane Ends 1 mile Merge Right or Left Now  
Right or Left Lane Closed 1/2 Mile  
Speed Limit 55\*\*\* <sup>1</sup> (Existing speed limit signs will be covered when in use)  
Speed Limit 60\*\*\* <sup>1</sup> (Existing speed limit signs will be covered when in use)  
Fines Doubled\*  
Work Zone <sup>1</sup>  
Do Not Pass\*  
Right/Left Merge Symbol (W 4-2)  
End Work Zone <sup>1</sup>  
Resume Speed  
Exit (green with white legend and border)  
Road Work Ahead <sup>1</sup>  
Merging Traffic Symbol (At on-ramp in right lane closure)  
Stop Ahead (At on-ramp in right lane closure)  
Single Lane Ahead (At on-ramp in left lane closure)  
Stop (At on-ramp in right lane closure)  
Directional Arrows (At on-ramp in right lane closure)

Detour

End Detour

Bump  
Trucks Entering  
Stay In Lane\*  
Left Turning Trucks with 500 Feet Advisory Plate  
Flagger Sign  
Grooved Pavement

Caution Rumble Strip  
Uneven Lanes  
Motorcycles Use Caution

\* White with black legend and border

<sup>1</sup> In addition to work zone package these signs will also be required at the end of any on ramps that are within the lane closure

The preceding list of Approach signs and Work Area signs are representative of the contract requirements. Other sign legends may be required.

General Requirements-Interstate.

The Contractor shall provide a minimum traveled way width of 14 feet through an expressway lane closure.

The maximum length of lane closure shall be 4 miles in length.

Lane closures shall not be set up until work in the area is to be performed and must be removed when no work is being performed. **See Special Provision 105 & 107.**

Lane closures shall be separated by at least 2 miles.

All construction work shall be confined to the lane closed to traffic.

Slow moving construction equipment may travel the closed lane for short distances, **ALL** vehicles shall be orientated with the flow of traffic unless otherwise authorized by the Resident.

**Any vehicle using LED Lights shall have them angled as to not to impeded or disrupt normal traffic flow at any time as determined by the Resident. Vehicles unable to manipulate these devices shall be removed from the project immediately.**

**All trucking shall be done in the lane open to traffic.**

No equipment or vehicles of the Contractor, his Subcontractor or employees engaged in work on this contract, shall be parked or stopped on lanes carrying traffic, or on lanes or shoulders adjacent to lanes carrying traffic, at any time.

The Contractor shall keep all paved areas of the roadway as clear as possible at all times. The Contractor's personnel and equipment shall avoid crossing traffic lanes whenever possible. "Road Work Ahead" signs shall be used on roads adjacent to the interstate when the Contractor is working on or near an on-ramp or when the on-ramp enters a lane closure area.

**Off Shift Lane Closures shall not be permitted.**

All temporary pavement marking lines or markers will be paid under Item 627.781 Temporary 6 Inch Painted Pavement Marking Line, White or Yellow or Item 627.78 Temporary 4 Inch Painted Pavement Marking Line, White or Yellow. TOM's will not be permitted.

12:1 paved tapers constructed of Hot Mix Asphalt shall be placed at all off/on ramps immediately following milling and paving. Millings shall not be used.

**Crossovers shall not be allowed to be utilized to change direction unless a closure package is installed in the northbound passing lane according to Special Provision 652, incorporated into the contractor's traffic control plan, and authorized by the Department. Crossovers may not be used for storage areas.**

The Contractor and employees shall conduct all work in a safe and professional manner as it relates to the traveling public (i.e. not adversely disrupting the flow of traffic in an unsafe manner when exiting or entering a lane closure or crossover, negative verbal or physical gestures).

**The intent is that attenuator vehicles are to be used at all stationary operations and under most circumstances. They shall be rated for highway speeds. They shall be used in accordance with manufacturers' recommendations. The use of these vehicles shall be written into the contractor's traffic control plan. The cost for these vehicles shall be considered incidental to the traffic control plan. An example would be culvert work or guardrail replacement. Maximum distance between operations and attenuator vehicles will be 500'. Attenuators shall be present at the beginning of paving and milling operations. The cost for these vehicles shall be considered incidental to Item 652.36.**

**Item 652.47 Temporary Portable Rumble Strips shall be deployed during approach sign set up.**

Channelization. Channelization devices shall include the following:

Flashing Arrow Boards

Vertical Panel Markers

Drums **(To be used in tapers and as directed by the Resident.)**

Cones **(In lane closures, the contractor shall place 3 drums across a closed lane every 1500’.)**

Channelization devices shall be installed and maintained at the spacing determined by the MUTCD to delineate travel lanes through the project. Vertical Panel markers shall be placed 2 feet from the outside edge of the shoulder on the passing lane at 600 feet intervals when the travel lane is closed in overnight lane closures. The vertical panel marker size shall be 12 inches x 36 inches. The bottom of these panels shall be 4’ from the ground below. When directed by the Engineer, drums or other channelization devices shall be placed in the closed lane at a maximum spacing of 2 x speed limit.

Temporary Centerline or Edge Line. A temporary painted centerline and edge line shall be marked each day on all milled surfaces or new pavement to be used by traffic. The temporary line shall conform to the standard marking patterns used for permanent markings and will be paid for under Section 627. Failure to apply a temporary line daily will result in suspension of milling or paving until temporary markings are applied to all previously milled surfaces or placed pavement. In the event of inclement weather that would prevent markings to be applied, MaineDOT will determine the procedure to be followed and whether additional pavement may be removed or placed based upon safety, traffic volumes and patterns.

Item 627.30 Grooving for Pavement Markings must have a temporary painted centerline and edge line applied within according to the following guidelines:

One line grooved                      48 hours of grooving

Two or more lines grooved      24 hours of grooving

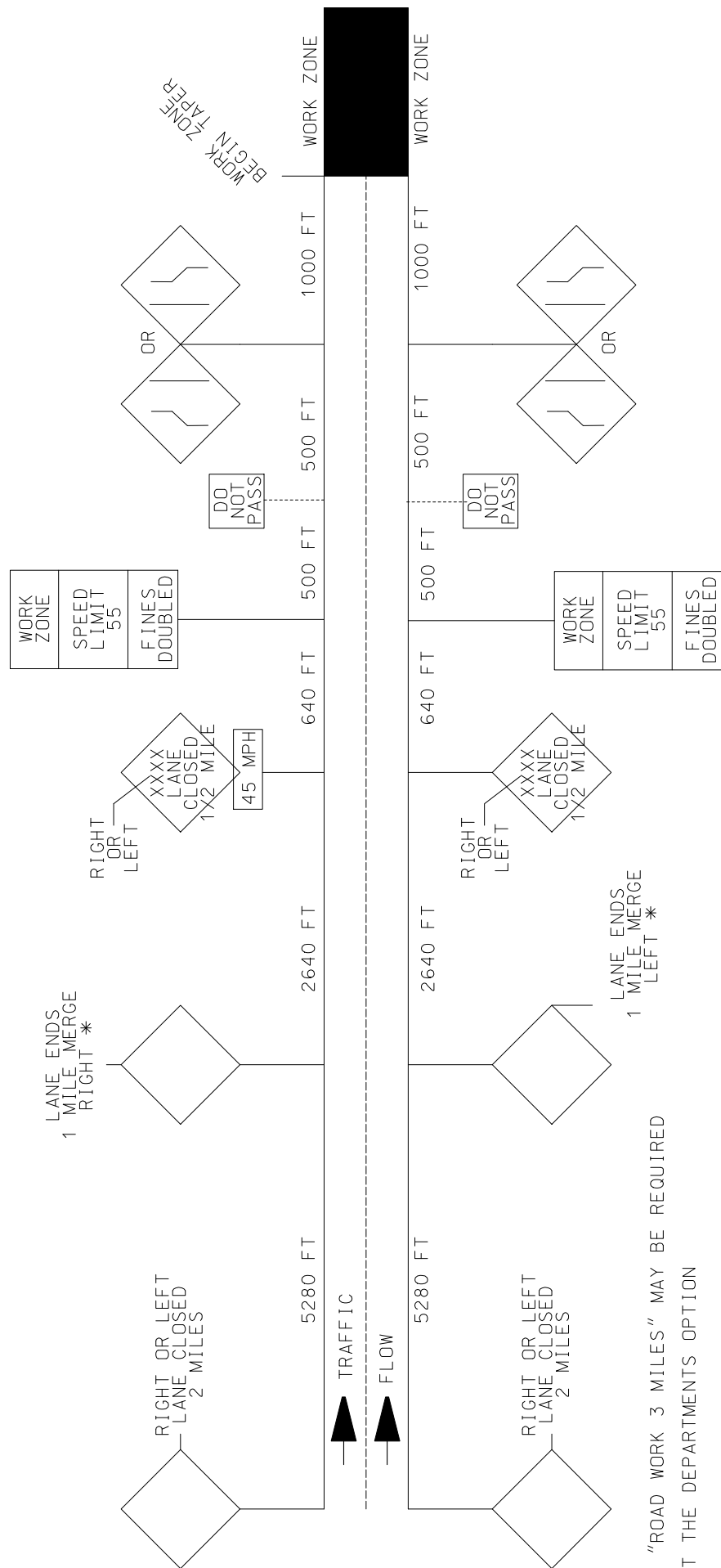
Under no circumstances shall this time span over a weekend or a no work period. Failure to comply with this will result in a traffic control violation until such line has been marked.

Roadside Recovery Area. The Contractor shall not store material nor park equipment within 15 feet of the edge of the established travel lanes.

No long term storage of equipment or material will be allowed within 30 feet of the edge of the established travel lanes. Short term storage of equipment or material less than 30 feet from the edge of the established travel lanes must be approved by the Department and shall be clearly marked by **drums and cones**. Short term storage shall be defined as less than 12 hours. No equipment or material will be allowed within 30 feet of the edge of the established travel lanes at night.

Speed Limits in Work Zones. The Contractor shall sign all approved reduced speed limits on construction project according to APM #431 - A Policy on the Establishment of Speed Limits in Work Zones.

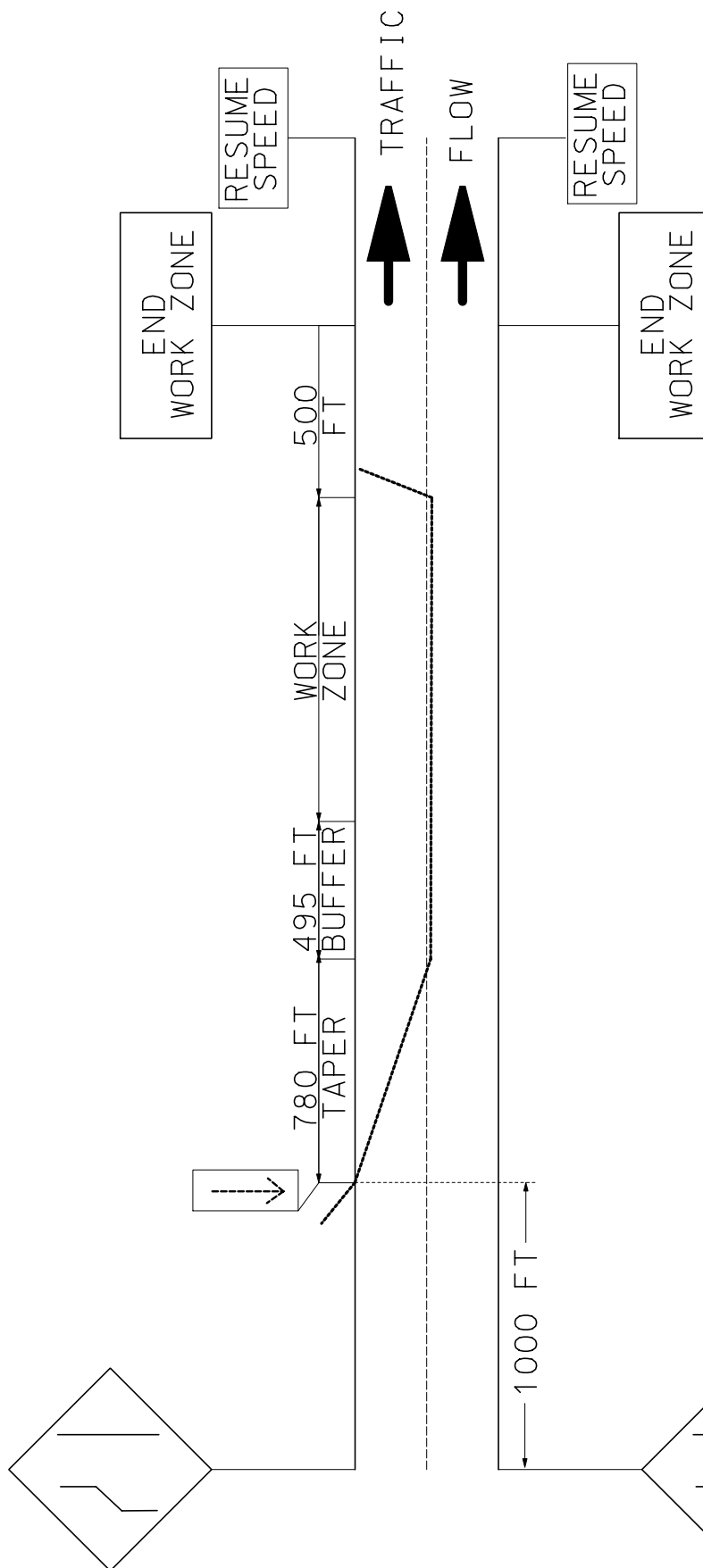
# WORK ZONE SIGNING



A "ROAD WORK 3 MILES" MAY BE REQUIRED AT THE DEPARTMENT'S OPTION

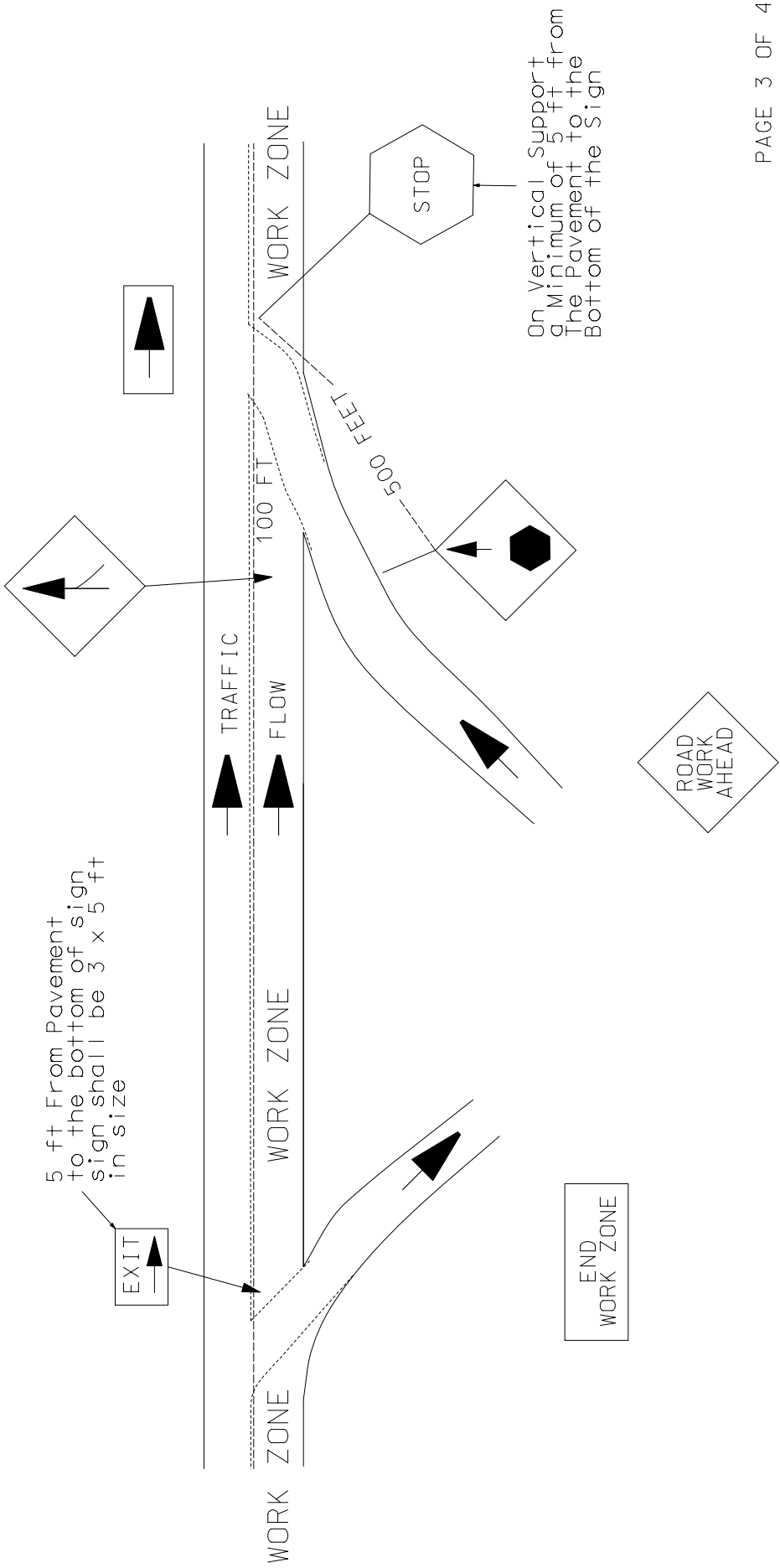
\* LANE ENDS 1 MILE MERGE RIGHT OR LEFT SIGNS SHALL ONLY BE PLACED ON SIDE OF ROAD THAT NEEDS TO MERGE

# WORK ZONE

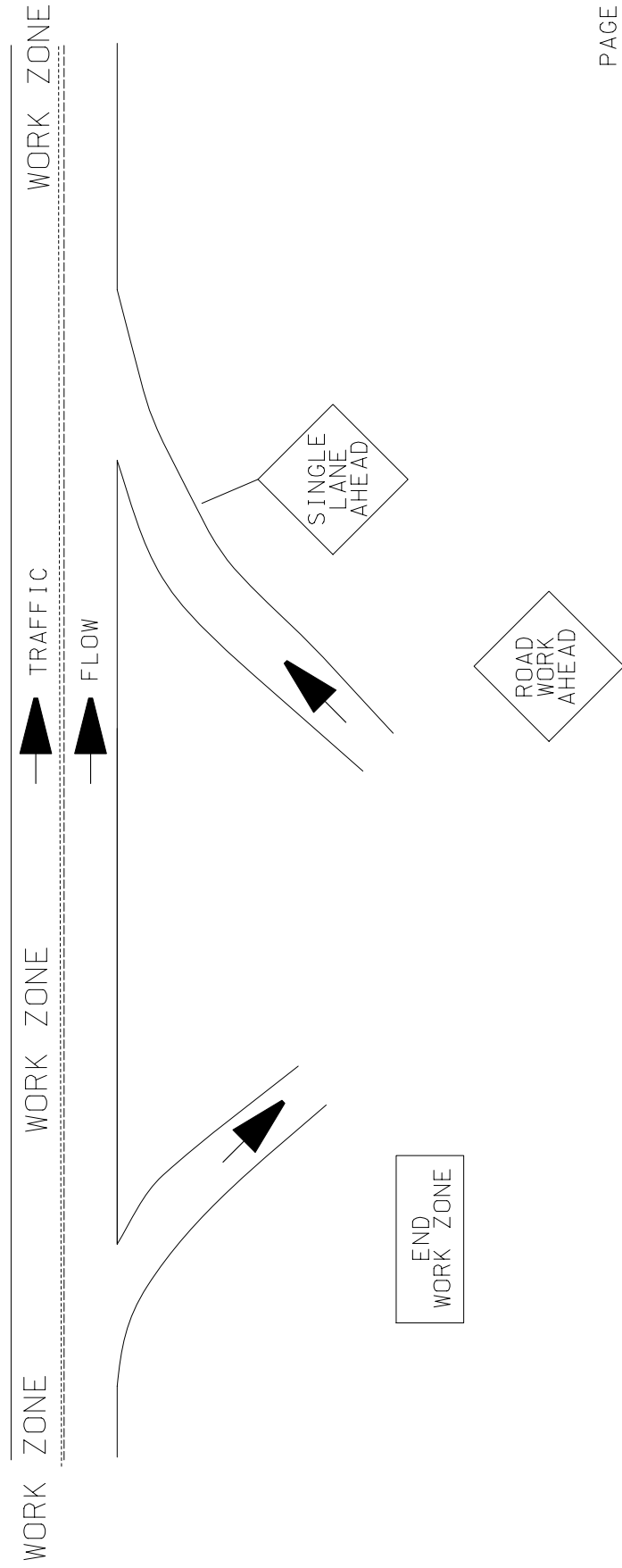


NOTE:  
CHANNELIZING DEVICES SHALL BE SPACED AT A DISTANCE OF 110 FEET  
APART WITH 3 DEVICES ACROSS THE CLOSED LANE EVERY 1500 FEET.  
DEVICES IN THE TAPER SHALL BE SPACED AT 55 FEET APART.

# RAMPS - RIGHT LANE CLOSED



## RAMPS - LEFT LANE CLOSED



SPECIAL PROVISION  
SECTION 652  
MAINTENANCE OF TRAFFIC

Approaches. Approach signing shall include the following signs at a minimum. Field conditions may warrant the use of additional signs as determined by the Resident.

Road Work Next X\* Miles  
Road Work 500 Feet (Ahead)  
End Road Work

Work Areas. At each work site, signs and channelizing devices shall be used as directed by the Resident.

Signs include:

Road Work xxxx<sup>1</sup>.  
One Lane Road Ahead  
Flagger Sign

Other typical signs include:

Be Prepared to Stop  
Low Shoulder  
Bump  
Pavement Ends

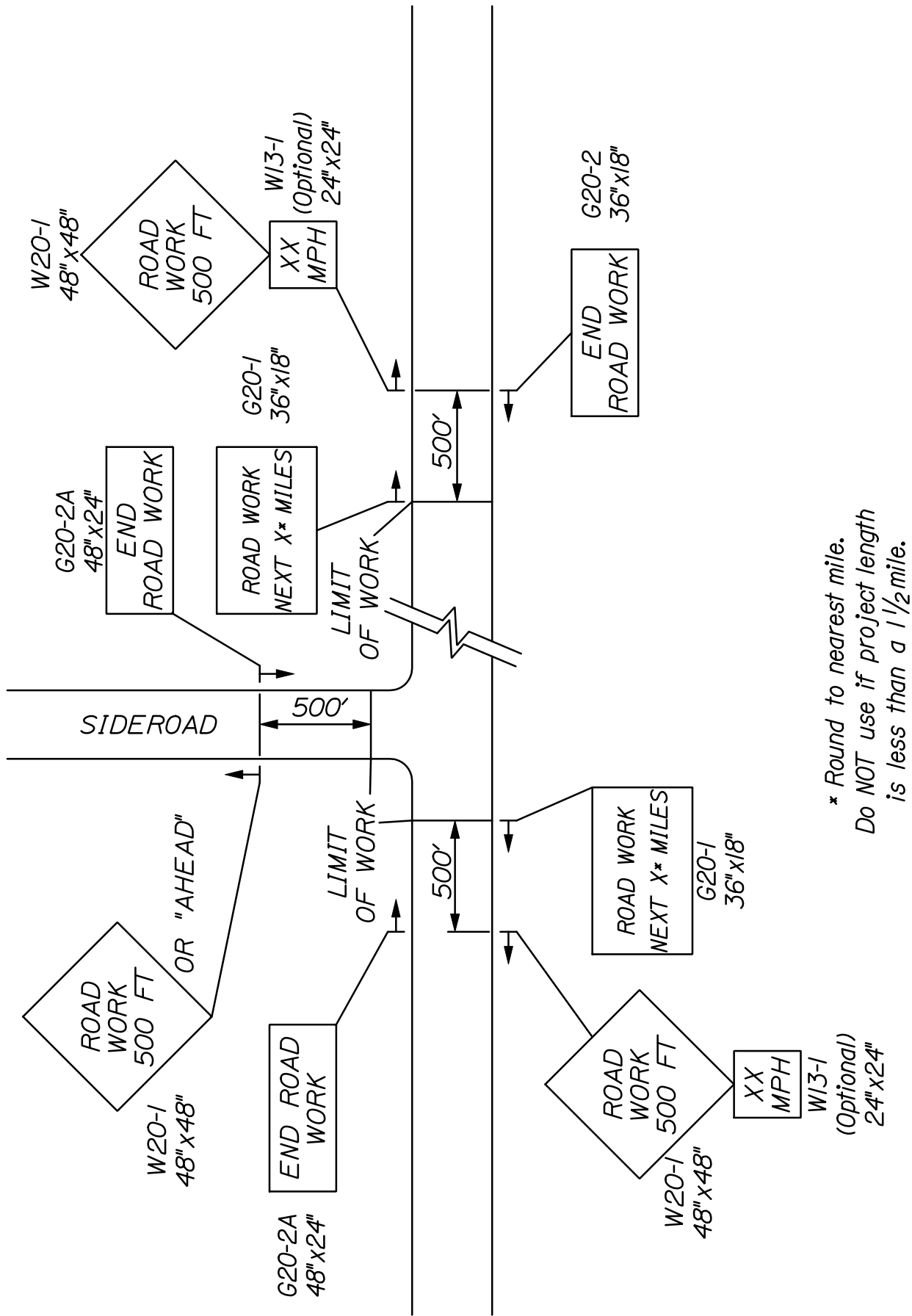
The above lists of Approach signs and Work Area signs are representative of the contract requirements. Other sign legends may be required.

Unless otherwise defined in Special Provision 105/107 or submitted and approved in the Traffic Control Plan, the following shall apply:

- The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 2,500 feet at each work area and no more than 4,000 feet for paving and milling work areas.
- Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 1 mile of two-way operation.

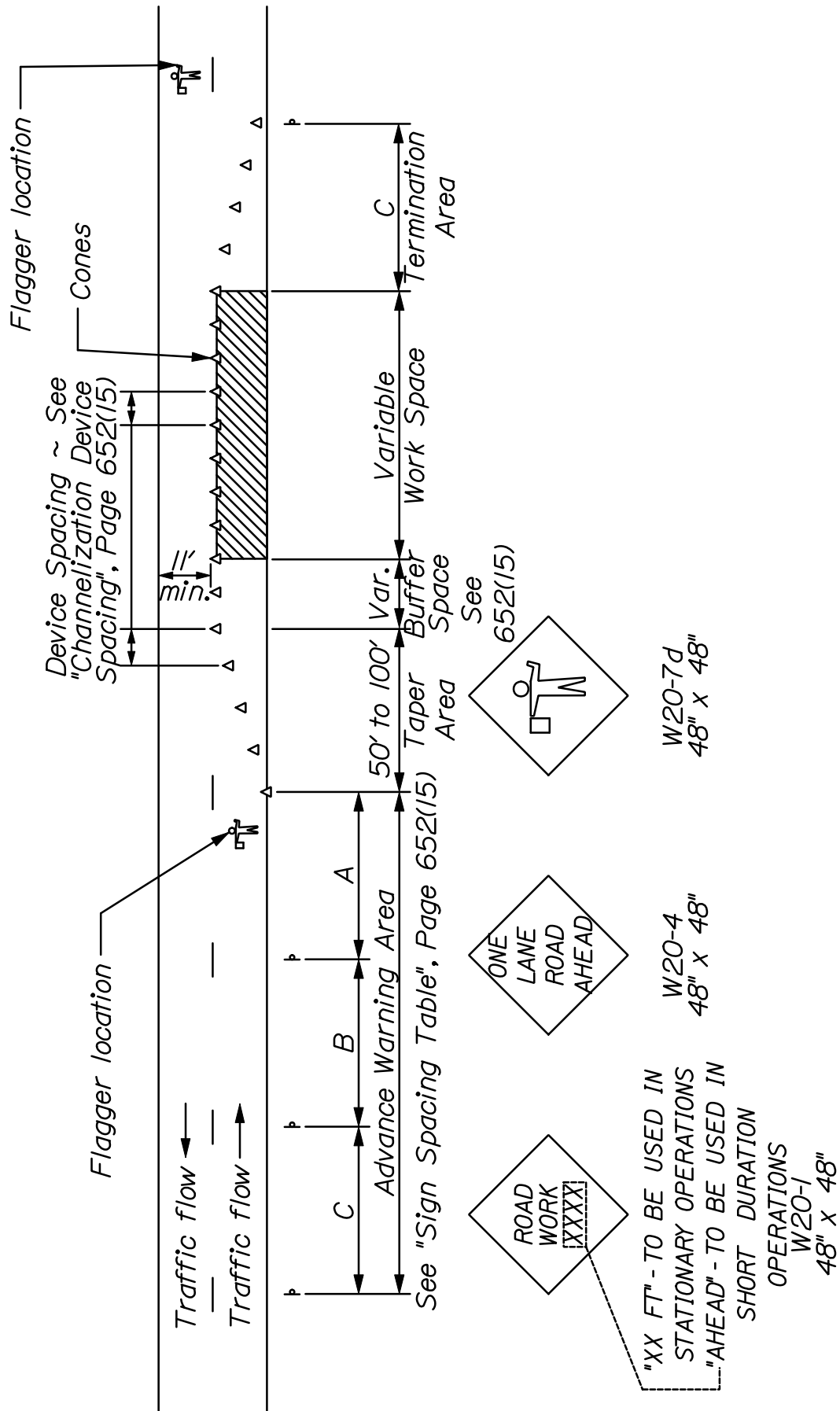
**Temporary Centerline** A temporary centerline shall be placed each day on all new pavement to be used by traffic. The temporary centerline, when specified of reflectorized traffic paint, shall conform to the standard marking patterns used for permanent markings. Failure to apply a temporary centerline daily will result in a Traffic Control Violation and suspension of paving operations until temporary markers are applied to all previously placed pavement.

<sup>1</sup> "Road Work Ahead" to be used in short duration operations and "Road Work xx feet" to be used in stationary operations as directed by the Resident.



\* Round to nearest mile.  
Do NOT use if project length  
is less than a 1 1/2 mile.

~ PROJECT APPROACH SIGNING ~  
TWO WAY TRAFFIC



~ TYPICAL APPLICATION: TWO -WAY, TWO LANE ROADWAY,  
CLOSING ONE LANE USING FLAGGERS ~

\* Formulas for L are as follows:

For speed limits of 40 mph or less:

$$L = \frac{WS^2}{60}$$

For speed limits of 45 mph or greater:

$$L = WS$$

\* Formulas for L are as follows:

A minimum of 5 channelization devices shall be used in the taper.

| TYPE OF TAPER                   | TAPER LENGTH (L)* |
|---------------------------------|-------------------|
| Merging Taper                   | at least L        |
| Shifting Taper                  | at least 0.5 L    |
| Shoulder Taper                  | at least 0.33 L   |
| One-Lane, Two-Way Traffic Taper | 100 ft maximum    |
| Downstream Taper                | 100 ft per lane   |

#### CHANNELIZATION DEVICE SPACING

The spacing of channelization devices shall not exceed a distance in feet equal to 1.0 times the speed limit in mph when used for taper channelization, and a distance in feet of 2.0 times the speed limit in mph when used for tangent channelization.

#### GENERAL NOTES;

1. Final placement of signs and devices may be changed to fit field conditions as approved by the Resident.

2. Maintain same number of lanes for a shifting taper.

3. Shoulder taper allowed when a minimum of 10 feet can be open from centerline for lane.

| SIGN SPACING TABLE         |                          |      |      |
|----------------------------|--------------------------|------|------|
| Road Type                  | Distance Between Signs** |      |      |
|                            | A                        | B    | C    |
| Urban 30 mph or less       | 100                      | 100  | 100  |
| Urban 35 mph and greater   | 350                      | 350  | 350  |
| Rural                      | 500                      | 500  | 500  |
| Expressway / Urban Parkway | 1000                     | 1500 | 2640 |

\*\*Distances are shown in feet.

#### SUGGESTED BUFFER ZONE LENGTHS

| Speed (mph) | Length (feet) | Speed (mph) | Length (feet) |
|-------------|---------------|-------------|---------------|
| 20          | 115           | 40          | 325           |
| 25          | 155           | 45          | 360           |
| 30          | 200           | 50          | 425           |
| 35          | 250           | 55          | 495           |

SUPPLEMENTAL SPECIFICATIONS  
(Corrections, Additions, & Revisions to Standard Specifications – March 2020)

SECTION 104  
GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way Revise the last sentence in the first paragraph by removing “105.4.5 – Special Detours” and replacing it with “**105.4.5 – Maintenance of Existing Structures.**”.

SECTION 502  
STRUCTURAL CONCRETE

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 ....”

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 ("butterfly"-type) delineators shall be mounted on all "w"-beam guardrail. The delineators shall be mounted within the guardrail beam at guardrail posts. Delineators shall be fabricated from high-impact, ultraviolet & weather resistant thermoplastic. Reflectorized beam guardrail delineators shall be placed at approximately 62.5 ft intervals or every tenth post on tangents and at approximately 31.25 ft intervals or every fifth post on curves. Exact locations of the delineators shall be as directed by the Resident. On divided highways, the left-hand delineators shall

be yellow, and the right-hand delineators shall be silver/white. On two directional highways, the right-hand side shall be silver/white, and no reflectorized delineator used on the left. All reflectors shall have reflective sheeting applied to only one side of the delineator facing the direction of traffic as shown in the Standard Details. Reflectorized sheeting for guardrail delineators shall meet the requirements of Section 719.01.

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.

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 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.

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        |
| 606.353  | 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        |
| 606.47   | 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 626**

### **FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY SIGNING, LIGHTING, AND SIGNALS**

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**."

## **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 703**

### **AGGREGATES**

Add the following to the beginning of 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 Passing Square Mesh Sieves |                    |                     |                    |
|---------------------|-------------------------------------------------|--------------------|---------------------|--------------------|
| Grading             | A                                               | AA                 | S                   | LATEX              |
| Aggregate Size      | 1 inch                                          | $\frac{3}{4}$ inch | $1\frac{1}{2}$ inch | $\frac{1}{2}$ inch |
| 2 inch              |                                                 |                    | 100                 |                    |
| $1\frac{1}{2}$ inch | 100                                             |                    | 95-100              |                    |
| 1 inch              | 95-100                                          | 100                | -                   |                    |
| $\frac{3}{4}$ inch  | -                                               | 90-100             | 35-70               | 100                |
| $\frac{1}{2}$ inch  | 25-60                                           | -                  | -                   | 90-100             |
| $\frac{3}{8}$ inch  | -                                               | 20-55              | 10-30               | 40-70              |
| No. 4               | 0-10                                            | 0-10               | 0-5                 | 0-15               |
| No. 8               | 0-5                                             | 0-5                | -                   | 0-5                |
| No. 16              | -                                               | -                  | -                   | -                  |
| No. 50              | -                                               | -                  | -                   | -                  |
| No. 200             | 0 - 1.5                                         | 0 - 1.5            | 0 - 1.5             | 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 the Department. Sampling will be performed by the Department from stockpiles located at the Contractor's/supplier's ready mixed concrete plants. Aggregate approvals will be performed on a 3-year cycle, unless the source or character of the aggregate in question has changed within 3 years from the last test date.

A list of pre-approved coarse aggregate and aggregate-cement/pozzolan blends is maintained by the Department and will determine the acceptability of concrete mix designs proposed for use.

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.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include the following:

- a. Class F Coal Fly Ash meeting the requirements of AASHTO M 295.
- b. Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.
- c. Densified Silica Fume meeting the requirements of AASHTO M 307.
- d. Lithium Hydroxide Monohydrate (LiOH-H<sub>2</sub>O).

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.

Aggregates classified as potentially reactive by the requirements of this specification may be used if certified test results from an accredited independent laboratory utilizing the current AASHTO T 303 (ASTM C 1260) Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, indicating an acceptable alkali-aggregate combination, are submitted to the Department.

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 Passing Square Mesh Sieves |
|--------------------|-------------------------------------------------|
| $\frac{3}{8}$ 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...” and replace with “The material shall have a minimum degradation value of 25.0 or less<sup>15</sup> as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T 113T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed), except that the test shall be performed on the reported degradation value will be the result of testing a single specimen from that portion of the sample that passes the  $\frac{1}{2}$  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, minus any reclaimed asphalt pavement 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. If AASHTO T 96 is used for acceptance of the material, the material shall be retested at intervals of 25%, 50% and 75% completion of the course.

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 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 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.

APPENDIX A TO DIVISION 100

SECTION 1 - BIDDING PROVISIONS

A. Federally Required Certifications By signing and delivering a Bid, the Bidder certifies as provided in all certifications set forth in this Appendix A - Federal Contract Provisions Supplement including:

- Certification Regarding No Kickbacks to Procure Contract as provided on this page 1 below.
- Certification Regarding Non-collusion as provided on page 1 below.
- Certification Regarding Non-segregated Facilities as provided by FHWA Form 1273, section III set forth on page 21 below.
- "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion" as provided by FHWA Form 1273, section XI set forth on page 32 below.
- "Certification Regarding Use of Contract Funds for Lobbying" as provided by FHWA Form 1273, section XII set forth on page 35 below.

Unless otherwise provided below, the term "Bidder", for the purposes of these certifications, includes the Bidder, its principals, and the person(s) signing the Bid. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above.

CERTIFICATION REGARDING NO KICKBACKS TO PROCURE CONTRACT Except expressly stated by the Bidder on sheets submitted with the Bid (if any), the Bidder hereby certifies, to the best of its knowledge and belief, that it has not:

(A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me) to solicit or secure this contract;

(B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or;

(C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract;

By signing and submitting a Bid, the Bidder acknowledges that this certification is to be furnished to the Maine Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this contract in anticipation of federal aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

CERTIFICATION REGARDING NONCOLLUSION Under penalty of perjury as provided by federal law (28 U.S.C. §1746), 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 the Contract.

For a related provisions, see Section 102.7.2 (C) of the Standard Specifications - "Effects of Signing and Delivery of Bids" - "Certifications", Section 3 of this Appendix A entitled "Other Federal Requirements" including section XI - "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" and section XII. - "Certification Regarding Use of Contract Funds for Lobbying."

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B. Bid Rigging Hotline To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

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## SECTION 2 - FEDERAL EEO AND CIVIL RIGHTS REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 2 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Nondiscrimination & Civil Rights - Title VI The Contractor and its subcontractors 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 Department deems appropriate. The Contractor and subcontractors shall comply with Title VI of the Civil Rights Act of 1964, as amended, and with all State of Maine and other Federal Civil Rights laws.

For related provisions, see Subsection B - "Nondiscrimination and Affirmative Action - Executive Order 11246" of this Section 2 and Section 3 - Other Federal Requirements of this "Federal Contract Provisions Supplement" including section II - "Nondiscrimination" of the "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273.

B. Nondiscrimination and Affirmative Action - Executive Order 11246 Pursuant to Executive Order 11246, which was issued by President Johnson in 1965 and amended in 1967 and 1978, this Contract provides as follows.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its efforts to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

Ensure and maintain a working environment free of harassment, intimidations, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and to maintain a record of the organization's responses.

Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

Provide immediate written notification to the Department's Civil Rights Office when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.

Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under B above.

Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligation; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Forepersons, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractor's and Subcontractors with whom the Contractor does or anticipates doing business.

Direct its recruitment efforts, both orally and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above describing the openings, screenings, procedures, and test to be used in the selection process.

Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth, both on the site and in other areas of a Contractor's workforce.

Validate all tests and other selection requirements.

Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor's and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.

Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

C. Goals for Employment of Women and Minorities Per Executive Order 11246, craft tradesperson goals are 6.9% women and .5% minorities employed. However, goals may be adjusted upward at the mutual agreement of the Contractor and the Department. Calculation of these percentages shall not include On-the-Job Training Program trainees, and shall not include clerical or field clerk position employees.

For a more complete presentation of requirements for such Goals, see the federally required document "Goals for Employment of Females and Minorities" set forth in the next 6 pages below.

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Start of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES  
Federally Required Contract Document

§60-4.2 Solicitations

- (d) The following notice shall be included in, and shall be part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part (see 41 CFR 60-4.2(a)):

Notice of Requirement for Affirmative Action to Ensure Equal Opportunity (Executive Order 11246)

1. The Offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

|                                                     |      |
|-----------------------------------------------------|------|
| <u>Goals for female participation in each trade</u> | 6.9% |
|-----------------------------------------------------|------|

Goals for minority participation for each trade

Maine

|                |      |
|----------------|------|
| 001 Bangor, ME | 0.8% |
|----------------|------|

Non-SMSA Counties (Aroostook, Hancock, Penobscot, Piscataquis, Waldo, Washington)

002 Portland-Lewiston, ME

|                                                           |      |
|-----------------------------------------------------------|------|
| SMSA Counties: 4243 Lewiston-Auburn, ME<br>(Androscoggin) | 0.5% |
|-----------------------------------------------------------|------|

|                                              |      |
|----------------------------------------------|------|
| 6403 Portland, ME<br>(Cumberland, Sagadahoc) | 0.6% |
|----------------------------------------------|------|

Non-SMSA Counties:  
(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be in violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated started and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

#### STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department form 941;
  - d. "Minority" includes:

- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of the North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the contractor, is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors for Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a. through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specific.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant, thereto.

6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as expensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, when possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment sources or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment, efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing prior to the date for the acceptance of applications for apprenticeship or the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on site and in other areas of a Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitation to minority and female contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 a through p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7 a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program and reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions take on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, specific minority group of women is underutilized.)
10. The Contractor shall not use the goals and timetables or affirmative action even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementation regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.6.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

End of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES  
Federally Required Contract Document

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D. Section '**D Disadvantaged Business Enterprise (DBE) Requirements**' is removed in its entirety. The DBE material is in:

**Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.**

**SECTION 3 - OTHER FEDERAL REQUIREMENTS**

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 3 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Buy America

If the cost of products purchased for permanent use in this project which are manufactured of steel, iron or the application of any coating to products of these materials exceeds 0.1 percent of the contract amount, or \$2,500.00, whichever is greater, the products shall have been manufactured and the coating applied in the United States. The coating materials are not subject to this clause, only the application of the coating. In computing that amount, only the cost of the product and coating application cost will be included.

Ore, for the manufacture of steel or iron, may be from outside the United States; however, all other manufacturing processes of steel or iron must be in the United States to qualify as having been manufactured in the United States.

United States includes the 50 United States and any place subject to the jurisdiction thereof.

Products of steel include, but are not limited to, such products as structural steel, piles, guardrail, steel culverts, reinforcing steel, structural plate and steel supports for signs, luminaries and signals.

Products of iron include, but are not limited to, such products as cast iron grates.

Application of coatings include, but are not limited to, such applications as epoxy, galvanized and paint.

To assure compliance with this section, the Contractor shall submit a certification letter on its letterhead to the Department stating the following:

“This is to certify that products made of steel, iron or the application of any coating to products of these materials whose costs are in excess of \$2,500.00 or 0.1 percent of the original contract amount, whichever is greater, were manufactured and the coating, if one was required, was applied in the United States.”

#### B. Materials

##### a. Convict Produced Materials References: 23 U.S.C. 114(b)(2), 23 CFR 635.417

Applicability: FHWA's prohibition against the use of convict material only applies to Federal-aid highways. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or 2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987.

Materials obtained from prison facilities (e.g., prison industries) are subject to the same requirements for Federal-aid participation that are imposed upon materials acquired from other sources. Materials manufactured or produced by convict labor will be given no preferential treatment.

The preferred method of obtaining materials for a project is through normal contracting procedures which require the contractor to furnish all materials to be incorporated in the work. The contractor selects the source, public or private, from which the materials are to be obtained (23 CFR 635.407). Prison industries are prohibited from bidding on projects directly (23 CFR 635.112e), but may act as material supplier to construction contractors.

Prison materials may also be approved as State-furnished material. However, since public agencies may not bid in competition with private firms, direct acquisition of materials from a

prison industry for use as State-furnished material is subject to a public interest finding with the Division Administrator's concurrence (23 CFR 635.407d). Selection of materials produced by convict labor as State-furnished materials for mandatory use should be cleared prior to the submittal of the Plans Specifications & Estimates (PS&E).

b. Patented/Proprietary Products References: 23 U.S.C. 112, 23 CFR 635.411

FHWA will not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

- the item is purchased or obtained through competitive bidding with equally suitable unpatented items,
- the STA certifies either that the proprietary or patented item is essential for synchronization with the existing highway facilities or that no equally suitable alternative exists, or
- the item is used for research or for a special type of construction on relatively short sections of road for experimental purposes. States should follow FHWA's procedures for "Construction Projects Incorporating Experimental Features" ([expermnt.htm](#)) for the submittal of work plans and evaluations.

The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. The policy further permits materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a reasonable number of, acceptable materials or products listed; and the Division Administrator may approve a single source if it can be found that its utilization is in the public interest.

Trade names are generally the key to identifying patented or proprietary materials. Trade name examples include 3M, Corten, etc. Generally, products identified by their brand or trade name are not to be specified without an "or equal" phrase, and, if trade names are used, all, or at least a reasonable number of acceptable "equal" materials or products should be listed. The licensing of several suppliers to produce a product does not change the fact that it is a single product and should not be specified to the exclusion of other equally suitable products.

c. State Preference References: 23 U.S.C. 112, 23 CFR 635.409

Materials produced within Maine shall not be favored to the exclusion of comparable materials produced outside of Maine. State preference clauses give particular advantage to the designated source and thus restrict competition. Therefore, State preference provisions shall not be used on any Federal-aid construction projects.

This policy also applies to State preference actions against materials of foreign origin, except as otherwise permitted by Federal law. Thus, States cannot give preference to in-State material sources over foreign material sources. Under the Buy America provisions, the States are

permitted to expand the Buy America restrictions provided that the STA is legally authorized under State law to impose more stringent requirements.

d. State Owned/Furnished/Designated Materials References: 23 U.S.C. 112, 23 CFR 635.407

Current FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding, by MaineDOT and concurred in by Federal Highway Administration's (FHWA) Division Administrator, that it is in the public interest to require the contractor to use materials furnished by the MaineDOT or from sources designated by MaineDOT. The exception policy can best be understood by separating State-furnished materials into the categories of manufactured materials and local natural materials.

Manufactured Materials When the use of State-furnished manufactured materials is approved based on a public interest finding, such use must be made mandatory. The optional use of State-furnished manufactured materials is in violation of our policy prohibiting public agencies from competing with private firms. Manufactured materials to be furnished by MaineDOT must be acquired through competitive bidding, unless there is a public interest finding for another method, and concurred in by FHWA's Division Administrator.

Local Natural Materials When MaineDOT owns or controls a local natural materials source such as a borrow pit or a stockpile of salvaged pavement material, etc., the materials may be designated for either optional or mandatory use; however, mandatory use will require a public interest finding (PIF) and FHWA's Division Administrator's concurrence.

In order to permit prospective bidders to properly prepare their bids, the location, cost, and any conditions to be met for obtaining materials that are made available to the contractor shall be stated in the bidding documents.

Mandatory Disposal Sites Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing; although, an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by MaineDOT, with the concurrence of the Division Administrator, that such placement is the most economical or that the environment would be substantially enhanced without excessive cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing FHWA policy for the mandatory use of borrow or disposal sites:

- mandatory use of either requires a public interest finding and FHWA's Division Administrator's concurrence,
- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and
- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.

C. Standard FHWA Contract Provisions - FHWA 1273

Unless expressly otherwise provided in the Bid Documents, the following “Required Contract Provisions, Federal Aid Construction Contracts”, FHWA-1273, are hereby incorporated into the Bid Documents and Contract.

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**Cargo Preference Act : Contractor and Subcontractor Clauses.** “Use of United States-flag vessels: The contractor 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.”(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 (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.”(Reorganization Plans No. 21 of 1950 (64 Stat. 1273) and No. 7 of 1961 (75 Stat. 840) as amended by Pub. L. 91-469 (84 Stat. 1036) and Department of Commerce Organization Order 10-8 (38 FR 19707, July 23, 1973)) [42 FR 57126, Nov. 1, 1977]

The Cargo Preference Act requirements apply to materials or equipment that are acquired for a specific Federal-aid highway project. In general, the requirements are not applicable to goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project. However, if materials or equipment are acquired solely for a Federal-aid project, then the Cargo Preference Act requirements apply.”

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Start of FHWA 1273 REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS (As revised through May 1, 2012)

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated 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. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

## 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 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.

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, 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 who 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.

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, national origin, age or disability.

The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure 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.

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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor 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 contracting agency deems appropriate.

**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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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**

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act),

daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. 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. 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 journeymen 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.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.

**9. Disputes concerning labor standards.** 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

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 watchmen 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.

**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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## **VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

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" 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:

- (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.

2. 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. 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.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## **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 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.

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 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).

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 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 1, 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**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **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.

### **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.
- 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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

## **2. 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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--  
Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR  
APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL  
ACCESS ROAD CONTRACTS**

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.

End of FHWA 1273

## **The United States Department of Transportation (USDOT)**

### **FHWA STANDARD TITLE VI/NONDISCRIMINATION 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 The Federal Highway Administration (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 *Nondiscrimination 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);

***FHWA may include additional Statutory/Regulatory Authorities here.***

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 FHWA..*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Nondiscrimination 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 nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

***FHWA may include additional General Assurances in this section, or reference an addendum here.***

#### **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 programs:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23 (b) and 21.23 (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 Federal Highway Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

*The (Agency), 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 insure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full 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.

***FHWA may include additional Specific Assurances in this section.***

By signing this ASSURANCE, Maine Department of Transportation also agrees to comply (and require any subrecipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FHWA 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 FHWA. You must keep records, reports, and submit the material for review upon request to FHWA, or their designees 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. This ASSURANCE is binding on Maine Department of Transportation, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in it programs. . The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

***Name of Recipient: Maine Department of Transportation***

A handwritten signature in blue ink, appearing to read "D. Bernhardt", is written over a horizontal line.

***David Bernhardt, Commissioner***

DATED: 9/18/14

## 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 Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** 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 as set forth in Appendix E, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration**, to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration**, may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.

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

**(APPENDIX C TO MAINEDOT TITLE VI ASSURANCE)**

**FEDERAL HIGHWAY ADMINISTRATION ASSISTED PROGRAMS**

The following clauses shall be included in all deeds, licenses, leases, permits, or similar instruments entered into

by the Maine Department of Transportation pursuant to the provisions of Assurance 7(a).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, 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 in the event facilities are constructed, maintained, or otherwise operated on the said property described in this (deed, license, lease, permit, etc.) for a purpose for which a Department of Transportation program or activity is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee lessee, permittee, etc.) shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination of Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [licenses, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said lands and facilities thereon, and the above described lands and facilities shall thereupon revert to and vest in and become the absolute property of Maine Department of Transportation and its assigns.

The following shall be included in all deeds, licenses, leases, permits, or similar agreements entered into by Maine Department of Transportation pursuant to the provisions of Assurance 7(b).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, his/her personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in case of deeds, and leases add "as a covenant running with the land") that (1) no person on the grounds of race, color, or national origin shall be excluded from participation in, be 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 services thereon, no person on the grounds of race, color, or national origin shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination, and (3) that the (grantee, licensee, lessee, permittee, etc.) shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [license, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said land and facilities thereon, and the above described lands and facilities shall thereupon 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 in order to effectuate the purpose of Title VI of the Civil Rights Act of 1964.

## 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 The 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 discriminations, (3) that the (grantee, licensees, 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, (**The 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, (**The Maine Department of Transportation**) 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 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 U.S.C. §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 of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).



## Environmental Summary Sheet

WIN: 24119.00\_24173.00\_23617.50\_23617.60

Date Submitted: 6/17/2020

Town: Old Town - Carmel, Interstate 95 SB, Carmel -Bangor, Interstate 95 NB

CPD Team Leader: Audie Arbo

ENV Field Contact: Rob Chester

**NEPA Complete:** 24119.00: Programmatic Categorical Exclusion per 23 CFR §771.117(c)(26) on 10/11/2019  
24173.00: Programmatic Categorical Exclusion per 23 CFR §771.117(c)(26) on 6/9/2020  
23617.50: Programmatic Categorical Exclusion per 23 CFR §771.117(c)(28) on 6/11/2020  
23617.60: Programmatic Categorical Exclusion per 23 CFR §771.117(c)(28) on 6/11/2020

|                                     |                                                                                                                                                                                                                                                    |                                         |                                                |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------|
| <input checked="" type="checkbox"/> | <b>Section 106</b><br>No Effect                                                                                                                                                                                                                    |                                         |                                                |
| <input checked="" type="checkbox"/> | <b>Section 4(f) and 6(f)</b><br><u>Complete- No use</u><br><u>Complete-No takes</u>                                                                                                                                                                |                                         |                                                |
| <input type="checkbox"/>            | <b>Maine Department of Inland Fisheries and Wildlife Essential Habitat</b><br><br>Not Applicable                                                                                                                                                   | Timing Window: Not Applicable           |                                                |
| <input checked="" type="checkbox"/> | <b>Section 7</b><br>No Effect based on scope.                                                                                                                                                                                                      |                                         |                                                |
| <input checked="" type="checkbox"/> | <b>Essential Fish Habitat</b><br>Not Applicable based on PIS                                                                                                                                                                                       |                                         |                                                |
| <input type="checkbox"/>            | <b>Maine Department of Conservation/Public Lands, Submerged Land Lease</b><br>Not Applicable                                                                                                                                                       |                                         |                                                |
| <input type="checkbox"/>            | <b>Maine Land Use Regulation Commission</b><br>Not Applicable<br><i>*Applicable Standards and Permits are included with the contract</i>                                                                                                           |                                         |                                                |
| <input type="checkbox"/>            | <b>Maine Department of Environmental Protection</b><br>Not Applicable-No work in jurisdictional resources.<br><i>*Applicable Standards and Permits are included with the contract</i>                                                              |                                         |                                                |
| <input type="checkbox"/>            | <b>Army Corps of Engineers, Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.</b><br>Not Applicable-No work in jurisdictional resources.<br><i>*Applicable Standards and Permits are included with the contract</i> |                                         |                                                |
| <input checked="" type="checkbox"/> | <b>Stormwater Review</b><br>Not Applicable – less than 1 acre of new impervious area, not MS4                                                                                                                                                      |                                         |                                                |
| <input checked="" type="checkbox"/> | <b>Special Provisions Required</b>                                                                                                                                                                                                                 |                                         |                                                |
|                                     | Special Provision 105-Timing of Work Restriction                                                                                                                                                                                                   | N/A <input checked="" type="checkbox"/> | Applicable <input type="checkbox"/>            |
|                                     | Special Provision 656-Minor Soil Disturbance                                                                                                                                                                                                       | N/A <input checked="" type="checkbox"/> | Applicable <input type="checkbox"/>            |
|                                     | <b>Standard Specification 656-Erosion Control Plan</b>                                                                                                                                                                                             | N/A <input type="checkbox"/>            | Applicable <input checked="" type="checkbox"/> |
|                                     | Special Provision 203-Dredge Spec                                                                                                                                                                                                                  | N/A <input checked="" type="checkbox"/> | Applicable <input type="checkbox"/>            |
|                                     | General Note for Hazardous Waste                                                                                                                                                                                                                   | N/A <input checked="" type="checkbox"/> | Applicable <input type="checkbox"/>            |
|                                     | Special Provision 203-Hazardous Waste                                                                                                                                                                                                              | N/A <input checked="" type="checkbox"/> | Applicable <input type="checkbox"/>            |

*\*All permits and approvals based on plans/scope as provided via email to ENV: 5/26/2020*