Updated 04/28/17

STATE PROJECT

Effective November 05, 2014
Supersedes January 19, 2012

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:

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, November 2014 Edition.

April 28, 2017
Supersedes October 15, 2015

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. 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 or Diane Barnes at 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, executers, 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:

_____

_____

_____

PRINCIPAL:

By_____

By:_____

By:_____

WITNESS

_____

_____

_____

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.

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.

State of Maine
Department of Transportation

RFI No: _____

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested for:

WIN(S): _____ Town(s): _____ Bid Date: _____

Question(s):_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Request by:

Company Name:_____**Phone:(_____)**_____

Email: _____ Fax: (_____)_____

Complete this form and fax to 207-624-3431, Attn: Project Manager (name listed on the "Notice to Contractors"), or Email questions to RFI-Contracts.MDOT@maine.gov, Please include the word "RFI" along with the Project Name and Identification Number in the Subject line, or electronically by using the RFI Tab located on the Individual Projects Detail page.

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 **Highway Reconstruction and Improvements** in the town of **Wiscasset**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on April 18, 2018 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 prequalification), or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.**

Description:. Highway Reconstruction and Improvements, WIN. 21843.00

Location: In Lincoln County, project is located on US. Rte.1 beginning at Fort Hill and extending to Creamery Wharf, including parking along Railroad Ave.

Outline of Work: Highway Reconstruction and Improvements with other incidental work.

The basis of award will be: Section 1 only. Section 2 must be bid as well.

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 **Project Manager** Ernie Martin at (207) 624-3431, use electronic RFI form or email questions to 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.

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine. 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. Full size plans $105.00 ($112.00 by mail). Half size plans $52.50 ($56.25 by mail), Bid Book $10 ($13 by mail), Single Sheets $2, payment in advance, all non-refundable.

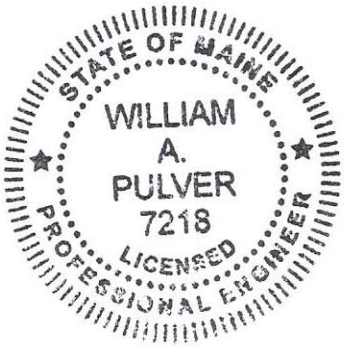
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of $115,000.00 payable to Treasurer, State 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 State Laws.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition", price $10 [$15 by mail], and Standard Details, November 2014 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 Maine DOT to reject any or all bids.

Augusta, Maine
March 28, 2018



WILLIAM A. PULVER P. E.
DEPUTY CHIEF ENGINEER

March 14, 2007
Supersedes March 3, 1966

Non-federal Projects Only

NOTICE TO CONTRACTORS - PREFERRED EMPLOYEES

Sec. 1303. Public Works; minimum wage

In the employment of laborers in the construction of public works, including state highways, by the State or by persons contracting for the construction, preference must first be given to citizens of the State who are qualified to perform the work to which the employment relates and, if they can not be obtained in sufficient numbers, then to citizens of the United States. Every contract for public works construction must contain a provision for employing citizens of this State or the United States. The hourly wage and benefit rate paid to laborers employed in the construction of public works, including state highways, may not be less than the fair minimum rate as determined in accordance with section 1308. Any contractor who knowingly and willfully violates this section is subject to a fine of not less than $250 per employee violation. Each day that any contractor employs a laborer at less than the wage and benefit minimum stipulated in this section constitutes a separate violation of this section. [1997, c. 757, §1 (amd).]

Wiscasset
21843.00
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)

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars Cents	Bid Amount Dollars Cents
0010	107.51 PROSECUTION OF WORK - INITIAL SCHEDULE	LUMP SUM	LUMP SUM	_____.____
0020	107.53 PROSECUTION OF WORK - BIWEEKLY UPDATES	25.000 EA	_____.____	_____.____
0030	201.23 REMOVING SINGLE TREE TOP ONLY	3.000 EA	_____.____	_____.____
0040	201.24 REMOVING STUMP	3.000 EA	_____.____	_____.____
0050	202.202 REMOVING PAVEMENT SURFACE	820.000 SY	_____.____	_____.____
0060	202.203 PAVEMENT BUTT JOINTS	18.000 SY	_____.____	_____.____
0070	203.20 COMMON EXCAVATION	8,300.000 CY	_____.____	_____.____
0080	203.21 ROCK EXCAVATION	83.000 CY	_____.____	_____.____
0090	203.25 GRANULAR BORROW	50.000 CY	_____.____	_____.____
0100	206.092 STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	100.000 CY	_____.____	_____.____
0110	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	5,900.000 CY	_____.____	_____.____
0120	403.207 HOT MIX ASPHALT 19.0 MM HMA	700.000 T	_____.____	_____.____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0130	403.2081 12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	850.000 T				
0140	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	150.000 T				
0150	403.211 HOT MIX ASPHALT (SHIMMING)	28.000 T				
0160	403.213 HOT MIX ASPHALT 12.5 MM BASE	470.000 T				
0170	403.2131 12.5 MM POLYMER MODIFIED HMA BASE	890.000 T				
0180	409.15 BITUMINOUS TACK COAT - APPLIED	510.000 G				
0190	461.131 TEMPORARY PAVEMENT	400.000 T				
0200	507.0842 ORNAMENTAL PEDESTRIAN RAILING	LUMP SUM	LUMP SUM			
0210	514.06 CURING BOX FOR CONCRETE CYLINDERS	1.000 EA				
0220	525.192 GRANITE SEATING BLOCKS WITH CAP - Wiscasset	LUMP SUM	LUMP SUM			
0230	525.26 REPOINTING GRANITE MASONRY	260.000 SF				
0240	525.3251 GRANITE MASONRY WORK	LUMP SUM	LUMP SUM			

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0250	526.301 TEMPORARY CONCRETE BARRIER TYPE I	LUMP SUM	LUMP SUM			
0260	603.155 12 INCH REINFORCED CONCRETE PIPE CLASS III	190.000 LF				
0270	603.165 15 INCH REINFORCED CONCRETE PIPE CLASS III	130.000 LF				
0280	603.169 15 INCH CULVERT PIPE OPTION III	12.000 LF				
0290	603.175 18 INCH REINFORCED CONCRETE PIPE CLASS III	12.000 LF				
0300	603.179 18 INCH CULVERT PIPE OPTION III	8.000 LF				
0310	603.199 24 INCH CULVERT PIPE OPTION III	24.000 LF				
0320	603.55 CONCRETE PIPE TIES	4.000 GP				
0330	604.072 CATCH BASIN TYPE A1-C	4.000 EA				
0340	604.09 CATCH BASIN TYPE B1	6.000 EA				
0350	604.092 CATCH BASIN TYPE B1-C	7.000 EA				
0360	604.161 ALTERING CATCH BASIN	8.000 EA				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0370	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	9.000 EA				
0380	604.2402 BEHIND CURB CATCH BASIN	4.000 EA				
0390	604.244 CATCH BASIN TYPE F4	1.000 EA				
0400	604.246 CATCH BASIN TYPE F5	3.000 EA				
0410	604.248 CATCH BASIN TYPE F6	1.000 EA				
0420	604.26 CATCH BASIN TYPE B5	1.000 EA				
0430	605.09 6 INCH UNDERDRAIN TYPE B	350.000 LF				
0440	605.10 6 INCH UNDERDRAIN OUTLET	20.000 LF				
0450	605.11 12 INCH UNDERDRAIN TYPE C	260.000 LF				
0460	605.12 15 INCH UNDERDRAIN TYPE C	170.000 LF				
0470	605.13 18 INCH UNDERDRAIN TYPE C	100.000 LF				
0480	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	2.000 EA				
0490	606.79 GUARDRAIL 350 FLARED TERMINAL	1.000 EA				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0500	607.16 CHAIN LINK FENCE - 4 FOOT	1,200.000 LF				
0510	608.08 REINFORCED CONCRETE SIDEWALK	15.000 SY				
0520	608.15 BRICK SIDEWALK WITH BITUMINOUS BASE	1,850.000 SY				
0530	608.26 CURB RAMP DETECTABLE WARNING FIELD	290.000 SF				
0540	609.11 VERTICAL CURB TYPE 1	1,350.000 LF				
0550	609.1111 SPECIAL GRANITE CURB - 39"	60.000 LF				
0560	609.12 VERTICAL CURB TYPE 1 - CIRCULAR	300.000 LF				
0570	609.234 TERMINAL CURB TYPE 1 - 4 FOOT	14.000 EA				
0580	609.2341 TERMINAL CURB TYPE 1 - 4 FOOT - CIRCULAR	7.000 EA				
0590	609.238 TERMINAL CURB TYPE 1 - 8 FOOT	31.000 EA				
0600	609.2381 TERMINAL CURB TYPE 1 - 8' CIRCULAR	12.000 EA				
0610	609.31 CURB TYPE 3	1,400.000 LF				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0620	609.34 CURB TYPE 5	51.000 LF				
0630	610.08 PLAIN RIPRAP	5.000 CY				
0640	615.07 LOAM	280.000 CY				
0650	618.13 SEEDING METHOD NUMBER 1	3.000 UN				
0660	619.12 MULCH	3.000 UN				
0670	620.58 EROSION CONTROL GEOTEXTILE	16.000 SY				
0680	621.037 EVERGREEN TREES (5 FOOT - 6 FOOT) GROUP A	6.000 EA				
0690	621.273 LARGE DECIDUOUS TREE (2 INCH - 2.50 INCH CALIPER) GROUP A	4.000 EA				
0700	621.389 DWARF EVERGREENS (15 INCH - 18 INCH) GROUP A	12.000 EA				
0710	621.396 DWARF EVERGREENS (18 INCH - 24 INCH) GROUP B	60.000 EA				
0720	621.51 HYBRID RHODODENDRON (15 INCH - 18 INCH)	12.000 EA				
0730	621.54 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP A	30.000 EA				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID / Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0740	621.546 DECIDUOUS SHRUBS (2 FOOT - 3 FOOT) GROUP A	20.000 EA				
0750	621.552 DECIDUOUS SHRUBS (3 FOOT - 4 FOOT) GROUP A	42.000 EA				
0760	621.711 HERBACEOUS PERENNIALS GROUP B	60.000 EA				
0770	626.11 PRECAST CONCRETE JUNCTION BOX	12.000 EA				
0780	626.21 METALLIC CONDUIT	75.000 LF				
0790	626.22 NON-METALLIC CONDUIT	2,970.000 LF				
0800	626.31 18 INCH FOUNDATION	19.000 EA				
0810	626.32 24 INCH FOUNDATION	24.000 EA				
0820	626.332 30 INCH DIAMATER GREATER THAN 8 FEET LONG & 36 INCH DIAMETER, 42 INCH DIAMETER FOUNDATION	38.000 CY				
0830	626.35 CONTROLLER CABINET FOUNDATION	2.000 EA				
0840	627.18 12 " SOLID WHITE PAVEMENT MARKING	230.000 LF				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0850	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	3,675.000 LF				
0860	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	2,650.000 SF				
0870	627.752 TEMPORARY WHITE OR YELLOW PAVEMENT & CURB MARKING	570.000 SF				
0880	627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	13,800.000 LF				
0890	627.781 TEMPORARY 6 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	3,100.000 LF				
0900	629.05 HAND LABOR, STRAIGHT TIME	150.000 HR				
0910	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	125.000 HR				
0920	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	250.000 HR				
0930	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	25.000 HR				
0940	634.160 HIGHWAY LIGHTING	 LUMP SUM	 LUMP SUM			
0950	634.70 ORNAMENTAL LIGHTING	15.000 EA				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0960	634.701 ORNAMENTAL LIGHTED BOLLARD	19.000 EA				
0970	639.18 FIELD OFFICE TYPE A	1.000 EA				
0980	643.80 TRAFFIC SIGNALS AT	LUMP SUM	LUMP SUM			
0990	643.81 TRAFFIC SIGNAL CONTROL SYSTEM	LUMP SUM	LUMP SUM			
1000	643.83 VIDEO DETECTION SYSTEM	LUMP SUM	LUMP SUM			
1010	643.91 MAST ARM POLE	8.000 EA				
1020	643.92 PEDESTAL POLE	9.000 EA				
1030	645.106 DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	142.000 EA				
1040	645.109 REMOVE AND SALVAGE HIGHWAY SIGNS	1.000 EA				
1050	645.116 REINSTALL REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	2.000 EA				
1060	645.271 REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS, TYPE I	457.000 SF				

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
1070	645.511 FLASHING WARNING SIGN	4.000 EA				
1080	645.512 LED BLANK-OUT SIGN, OVERHEAD MOUNT	4.000 EA				
1090	648.5205 RECONSTRUCT GRADE CROSSING	 LUMP SUM		 LUMP SUM		
1100	652.312 TYPE III BARRICADE	4.000 EA				
1110	652.33 DRUM	150.000 EA				
1120	652.34 CONE	200.000 EA				
1130	652.35 CONSTRUCTION SIGNS	1,092.000 SF				
1140	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	420.000 CD				
1150	652.38 FLAGGER	13,500.000 HR				
1160	652.381 TRAFFIC OFFICER	100.000 HR				
1170	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	4.000 EA				
1180	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	 LUMP SUM		 LUMP SUM		

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 1 Project Items

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID / Description	Approximate Quantity and Units	Unit Price Dollars	Unit Price Cents	Bid Amount Dollars	Bid Amount Cents
1190	659.10 MOBILIZATION	LUMP SUM	LUMP SUM			
1200	673.10 WET CAST SMALL LANDSCAPE BLOCK WALL	1,070.000 SF				
1210	801.03 TEST PITS	11.000 EA				
1220	801.141 4" PVC SANITARY SEWER (SDR-35)	20.000 LF				
1230	801.16 6 INCH PVC SANITARY SEWER (SDR-35)	20.000 LF				
1240	801.17 8 INCH PVC SANITARY SEWER (SDR-35)	145.000 LF				
1250	812.162 ADJUSTING SEWER MANHOLE TO GRADE	14.000 EA				
1260	841.48 BOLLARDS	42.000 EA				

Section: 1 **Total:**

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 021843.00 **Project(s):** 021843.00

SECTION: 2 Water Item

Alt Set ID: **Alt Mbr ID:**

Contractor: _____

Proposal Line Number	Item ID / Description	Approximate Quantity and Units	Unit Price Dollars	Unit Price Cents	Bid Amount Dollars	Bid Amount Cents
1270	823.332 GATE VALVE BOX, ADJUST TO GRADE	33.000 EA				
	Section: 2		**Total:**			
			Total Bid:			

CONTRACT AGREEMENT, OFFER & AWARD

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

_____

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

_____

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

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, WIN. **21843.00,** for **Highway Reconstruction and Improvements** in the town of **Wiscasset**, County of **Lincoln**, in the State of, 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 **October 18, 2019.** 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

Section 1 $_____

Section 2 $_____

Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

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 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 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 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN: - 21843.00 - Highway Reconstruction and Improvements - in the town of Wiscasset**, 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: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: 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 for (see checked boxes):

Section 1 ❑
Section 2 ❑

Contract Amount: _____

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: David Bernhardt, Commissioner
_____	
Witness	

CONTRACT AGREEMENT, OFFER & AWARD

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

_____

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

_____

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

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, WIN. **21843.00,** for **Highway Reconstruction and Improvements** in the town of **Wiscasset**, County of **Lincoln**, in the State of, 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 **October 18, 2019.** 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

Section 1 $_____

Section 2 $_____

Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

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 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 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 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN: - 21843.00 - Highway Reconstruction and Improvements - in the town of Wiscasset**, 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: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: 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 for (see checked boxes):

Section 1 ❑
Section 2 ❑

Contract Amount: _____

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: David Bernhardt, 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.

CONTRACTOR

_____	**(Sign Here)**
Date	(Signature of Legally Authorized Representative of the Contractor)
____(**Witness Sign Here)**	**(Print Name Here)**
Witness	(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)	

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

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

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

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

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

WITNESSES:	SIGNATURES:
	CONTRACTOR:
Signature.....	.....….....
Print Name Legibly	Print Name Legibly ...……....
	SURETY:
Signature	.....…….....
Print Name Legibly	Print Name Legibly .....
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
.....	ADDRESS .....
.....	...…….....
.....	.....…….....
TELEPHONE.....	.....…….....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

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

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

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

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

WITNESS:	SIGNATURES:
	CONTRACTOR:
Signature…….....	.....….....
Print Name Legibly .....……..	Print Name Legibly ….....….....
	SURETY:
Signature.....	...….....….....
Print Name Legibly	Print Name Legibly ….....….....
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
...….....….....	ADDRESS ….....….....
.....	…….....….....
TELEPHONE	…….....….....

THIS DOCUMENT MUST BE CLEARLY POSTED AT THE PERTAINING STATE FUNDED PREVAILING WAGE CONSTRUCTION SITE

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

Wage Determination - In accordance with 26 MRSA §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.

Title of Project --------21843.00-Highway Reconstruction-Region 2

Location of Project --Wiscasset, Lincoln County

2018 Fair Minimum Wage Rates
Highway & Earth Lincoln County

Occupation Title	Minimum Wage	Minimum Benefit	Total	Occupation Title	Minimum Wage	Minimum Benefit	Total
Asphalt Raker	$18.88	$0.30	$19.18	Ironworker – Ornamental	$23.13	$4.80	$27.93
Backhoe Loader Operator	$18.00	$1.67	$19.67	Ironworker - Reinforcing	$24.79	$10.60	$35.39
Boom Truck (Truck Crane) Operator	$21.66	$6.86	$28.52	Ironworker - Structural	$21.80	$4.88	$26.68
Bulldozer Operator	$21.50	$4.44	$25.94	Laborer (Includes Helper-Tender)	$14.80	$0.99	$15.79
Carpenter	$21.00	$2.36	$23.36	Laborer - Skilled	$17.28	$2.29	$19.57
Cement Mason/Finisher	$17.00	$0.56	$17.56	Line Erector-Power/Cable Splicer	$26.00	$7.59	$33.59
Crane Operator =>15 Tons)	$26.00	$5.97	$31.97	Loader Operator - Front-End	$20.45	$4.20	$24.65
Crusher Plant Operator	$18.00	$2.76	$20.76	Mechanic- Maintenance	$20.25	$3.79	$24.04
Diver	$28.50	$1.48	$29.98	Painter	$17.00	$0.00	$17.00
Driller -Rock	$18.38	$2.60	$20.98	Paver Operator	$19.88	$4.93	$24.81
Earth Auger Operator	$22.97	$6.17	$29.14	Pipelayer	$18.00	$3.16	$21.16
Electrician - Licensed	$26.00	$4.67	$30.67	Pump Installer	$21.00	$3.73	$24.73
Electrician Helper/Cable Puller (Licensed)	$17.00	$2.84	$19.84	Reclaimer Operator	$19.13	$2.98	$22.11
Elevator Constructor/Installer	$19.25	$1.62	$20.87	Roller Operator - Earth	$16.00	$1.89	$17.89
Excavator Operator	$21.25	$3.60	$24.85	Roller Operator - Pavement	$19.38	$1.65	$21.03
Fence Setter	$17.25	$1.72	$18.97	Screed/Wheelman	$18.60	$3.45	$22.05
Flagger	$11.50	$0.00	$11.50	Truck Driver - Light	$18.15	$4.31	$22.46
Grader/Scraper Operator	$21.66	$7.58	$29.24	Truck Driver - Medium	$18.00	$2.66	$20.66
Highway Worker/Guardrail Installer	$16.75	$0.80	$17.55	Truck Driver - Heavy	$16.00	$1.75	$17.75
Hot Top Plant Operator	$23.38	$5.55	$28.93	Truck Driver - Tractor Trailer	$16.75	$0.30	$17.05

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.

Posting of Schedule - Posting of this schedule is required in accordance with 26 MRSA §1301 et. seq., by any contractor holding a State contract for construction valued at $50,000 or more and any subcontractors to such a contractor.

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.

Determination No: **HI-082-2018** **A true copy**

Filing Date: **March 20, 2018** **Attest:** Scott R. Cotnoir

Scott A. Cotnoir
Wage & Hour Director

Expiration Date: **12-31-2018**

BLS(Highway & Earth Lincoln)

Town: **Wiscasset**
Project: **21843.00**
Date: **March 20, 2018**

SPECIAL PROVISIONS
SECTION 104
Utilities

UTILITY COORDINATION

The contractor has primary responsibility for coordinating their work with utilities after contract award. The contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the contractor's schedule and prevent project construction delays. The contractor shall notify the 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 have been notified and will be furnished a copy of the specification.

Overview:

Utility/Railroad	Aerial	Underground	Railroad
Central Maine & Quebec Railway			X
Central Maine Power Company	X		
Charter Communications	X		
Fairpoint Communications - Northern New England Telephone Operations LLC	X	X	
Gwi / Biddeford Internet Corp.		X	
Maine DOT Railroad			X
Maine Fiber Company	X		
Wiscasset Water District		X	
Town of Wiscasset		X	

Central Maine & Quebec Railway	Tom Tardif	(207)848-4246
Central Maine Power Company	Thomas Sansouci	(207)629-6905
Charter Communications	Nate Trask	(207)620-3405
Fairpoint Communications	Jim Scheid	(207)626-2031
Fairpoint Communications	George Woods	(207)784-4909
Gwi / Biddeford Internet Corp.	Keith Ellis	(207)494-2136
Maine DOT Railroad	Greg Gay	(207)592-1766
Maine Fiber Company	Tim LaBreck	(207)956-6657
Wiscasset Water District	Chris W. Cossette	(207)882-6402
Town of Wiscasset	William (Buck) Rines	(207)882-8222
Town of Wiscasset	Doug Fowler	(207)882-8200

Temporary Aerial utility adjustments are not anticipated on this project however, should the contractor choose to have any poles temporarily relocated, all work will be done by Pole owner at the contractor's request and expense at no additional cost to the Department.

Aerial Utility adjustments are anticipated at this time for the project.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein. Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

It is the responsibility of the Contractor with the Utility Pole owner, to layout all of the proposed pole locations in the field prior to the start of utility relocations. Should any adjustments be needed, the Utility will document adjustments and inform the Department prior to utility relocations.

** **Specific information regarding the line voltage can be requested from Central Maine Power Company**

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. Utility working days are Monday through Friday, conditions permitting. Times are estimated on the basis of a single crew for each utility.

The contractor shall give all Utilities **10 working days notice** prior to beginning any work on this project.

Town: **Wiscasset**
Project: **21843.00**
Date: **March 20, 2018**

AERIAL

Summary:

Utility	POLE SET	New Wires/ Cables	Trans. Wires/ Cables	Remove Poles	Estimate of Working Days
Central Maine Power Company	5		X	7	15
Fairpoint Communications			X		22
Charter Communications			X		12
Maine Fiber Company			X		2
				Total:	**51**

Central Maine Power Company (CMP)
CMP will be installing **6** poles as part of this project and CMP intends to run new cables to the new poles. CMP estimates **3** working days to complete the installation of the new poles. CMP estimates **10** working days to transfer their conductors or place new wire after the poles are set. CMP will also be removing the old poles once all transfers are done. It is estimated **2** working days will be required to remove the old poles. CMP also requires **10 working days advance notice** prior to any operations involving the relocation of their lines.

Maine Fiber Company
Following CMP completion of running new cables, Maine Fiber intends to relocate their existing cable or place new wire to the new poles. Maine Fiber estimates **2** working days to complete the relocation to the new poles. Maine Fiber requires **10 working days advance notice** prior to any operations involving the relocation of their lines.

Charter Communications
Following Maine Fiber completion of running new cables, Charter intends to relocate their existing cable or place new wire to the new poles. Charter estimates **12** working days to complete the relocation to the new poles. Charter requires **10 working days advance notice** prior to any operations involving the relocation of their lines.

Fairpoint Communications - Northern New England Telephone Operations LLC (FP)
Following Charter completion of transferring conductors FP estimates **22** working days for cable placement and splicing. FP also requires **10 working days advance notice** prior to any operations involving the relocation of their lines.

** POLE LIST **

Station	Lt. Off	Rt. Off	NAME	NEW	LT.	RT.	

				STA.	OFF	OFF	
Route1							
1314+50.49		167.313					
1315+37.15		76.7376					
1316+16.20		47.0505					
1317+29.45		41.19					
1317+35.48	-38.853						
1318+18.71		38.984					
1319+58.07	-30.3043		7.1				
1319+66.55		37.3806	7/7				
1320+50.13		33.0484	6				S.W. guy change
1321+29.97	-45.8736		05	1321+28	43'		REM. LAMP
1321+65.97		36.8367	5/5	1321+67		33.5'	REM. LAMP
1322+16.72	-49.1372		04				REM. LAMP
1322+54.66		32.3536	4/4				REM. LAMP
1323+40.39		32.4911	3/3				REM. LAMP
1323+42.80	-57.3579		03	1323+39	47'		REM. LAMP
1323+90.61		29.2019	02				
1324+73.37		27.822	1/45				
1324+73.62	-42.8282						
1324+84.57		25.47					
1325+09.31	-28.82						
1326+24.27		26.317					
1328+30.31		25.9287					
Railroad Ave.							
200+42.40		28.3552					
207+45.22		24.4684	METER				REMOVE
207+53.14		15.8841	8/17	207+50.5		26'	
207+62.57		94.6884		207+63		95'	

Utility Specific Issues:

The utilities requires **5 working days advance notice** prior to any operations involving the relocation of their lines.

SUBSURFACE

		Estimate

Town: **Wiscasset**
Project: **21843.00**
Date: **March 20, 2018**

Utility	Summary of Work	of Working Days
Fairpoint Communications		2
	Total:	2

Utility Specific Issues

Fairpoint Communications has an underground conduit and **1** T.M.H. located within the limits of the project. As a result of this project **FP** will be adjusting **1** manhole to grade. Fairpoint Communications requires **5 days notification** to have a person onsite while the contractor is digging near their facilities or to make any adjustments to them.

Wiscasset Water District has a drinking water system located within the limits of the project. As a result of this project WWD will be entering into an agreement with Maine DOT. Maine DOT's contractor will be adjusting **33** Water Gates Valves in the project. Items have been included in the schedule of items for the Contractor to bid on. WWD requires **48 hrs. notification** to have a person onsite while the contractor is digging near their facilities or to make any adjustments to them.

Town of Wiscasset has a sanitary sewer system located within the limits of the project. As a result of this project Town of Wiscasset will be entering into an agreement with Maine DOT. As a result of this project Maine DOT's contractor will be adjusting 14 Sewer Manholes to grade and installing 90' of Sewer pipe within the project. Town of Wiscasset requires **48 hrs. notification** to have a person onsite while the contractor is digging near their facilities or to make any adjustments to them.

RAILROAD

Maine DOT has rail crossings within the limits of the project, these rails are being operated by **Central Maine & Quebec Railway.** They do anticipate doing work including flagging and/or inspection. **Maine DOT** will be providing materials for construction of the panel at the Rte.1 crossing. An agreement has been entered into, between **Central Maine & Quebec Railway** and the **Maine Department of Transportation** for railroad flagging purposes. The contractor will be required to contact **Maine DOT - Rail office** and **Central Maine & Quebec Railway** prior to working within **30'** of the track to schedule Rail Protection. The Contractor must keep equipment off the rail crossing at all times. The contact for **Central Maine & Quebec Railway** is Tom Tardif. He can be reached at (207)848-4246 and **Maine DOT - Rail** contact is Greg Gay at (207)592-1766 to coordinate Railroad flagging/ inspection. **Central Maine & Quebec Railway and Maine DOT - Rail** requires 10 working days advance notice prior to any operations involving work around their rail lines.

For further information and/or details on what is required within the area around or adjacent to the railroad, please see the **"Protection of Railroad and Traffic Structure Special Provisions"** at the end of this special provision.

It is the **Contractor's** responsibility to provide roadway traffic control for work in the vicinity of the railroad.

It is the **Contractor's** responsibility to coordinate and schedule work in this area with the Railroad. The **Contractor** shall contact **Central Maine & Quebec Railway 2 weeks prior** to paving near the railroad crossing to discuss the work, match points and Rail Protection.

The **Contractor** will excavate between the rails and outside the rails down to the ties and as directed to allow the replacement of panel by the contractor, and then replace pavement up to and between the tracks or rubber rail seal gaskets located within the Railroad right-of-way as directed by **Maine DOT - Rail** and/or **Central Maine & Quebec Railway**. The **Contractor** shall keep all men, equipment and materials out of the railroad right-of-way (30 feet from the tracks) unless authorized by the railroad. **Maine DOT - Rail** and/or **Central Maine & Quebec Railway** will determine if a railroad flagger is required during the work.

All road work in this area must be coordinated in advance with the **Central Maine & Quebec Railway** to assure that proper safety procedures are in place.

BUY AMERICA

Utility construction work performed as part this federal-aid project is subject to the requirements of Buy America in accordance with Federal Regulation 23 CFR 635.410 Section 1518. Specific requirements are presented in Maine DOT Standard Specification Section 100, Appendix A, Section 3.A., Buy America.

MAINTAINING UTILITY LOCATION MARKINGS

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

UTILITY SIGNING

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

Town: **Wiscasset**
WIN: **021843.00**
Date: **January 24, 2018**

APPENDIX E

PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES SPECIAL PROVISIONS

Town(s): Wiscasset
Federal Project No.: *NIA*
Location: Central Maine & Quebec Railway
WIN: 021843.00
Date: 2/14/2018

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 feet) of the track of the **Central Maine & Quebec Railway is 2%** of the contract.

3. NUMBER OF TRAINS AND TRAIN SPEED

The Contractor is notified that a maximum speed of 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. 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 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 1 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 *QQ* 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 *QQ* 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 Q!! 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 perfonning work under, across or adjacent to a track, or when operations involve swinging booms or chutes that could in any way come nearer then 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 mi.nimum vertical clearance of (ll feet) above the top of high rail and a minimum side clearance of (lifeet) 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 week(s) to perform such review and approval and issue a written permission to proceed with the excavation. No excavation shall proceed without such pennission.

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 obtg 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 20 man days of said flagging or inspection. If, in the opinion of the Railroad's Chief Engineer, further 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) Tenns. 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 Z calendar day(s) before beginning, resuming or suspending work within (fil! 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 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 2/14/18

Estimated daily rate for Monday-Friday (straight time): $875.00 with a minimum charge of four (4) hours or $437.50.

Estimated daily rate for Monday-Friday (straight time) $953.00 for a 10 hour day.

Estimated daily rate for four (4) consecutive hours Saturday, Sunday, Holiday (overtime): $690.00.

Estimated rate for hours worked in excess of ten (10) hours in any one day (Monday-Friday): $135.00/hour.

Estimated rate for hours worked in excess of eight (8) hours in any one day (Saturday, Sunday, Holiday): $155.00/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.

Standard Man day - Eight (8) consecutive hour, Monday - Friday between the hours of 6:30 a.m. to 2:30 p.m . unless otherwise noted and agre'ed 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 detennining 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 $3,000,000 per single occurrence and $6,000,000 per aggregate total occurrences.

(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 $3,000,000 per single occurrence and $6.000,000 per aggregate total occurrences. Railroad exclusions shall be removed by policy endorsement.

(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 fonnal 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 Insrirance 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: Wiscasset
WIN: 021843.00
Date: January 24, 2018

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) 'N/R
Railroad Official (Flagger/lnspector) Name Signature	Date
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 Il - Critical: May cause severe injury, severe occupational illness, or major property damage.

(3) Category m - 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
	m	2	3	4	5	4 - Minor
	N	3	4	5	5	5 - Negligible

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

1. The Contractor shall perform their work in the following sequence:

    a. Railroad Avenue including parking lot
    b. Water Street from station 325+50 to station 329+00
    c. All remaining work

2. Railroad Avenue (including the new parking lot) and Water Street (from station 325+50 to station 329+00) must be completed to the satisfaction of the Resident before any work commences on Water Street (from Station 325+50 to Route 1). Contractor must keep two-way traffic on Route 1 at all times while work is being performed on Railroad Avenue and/or Water Street. Complete is defined as all retaining walls, utility, drainage, curb, bollards, fencing, lighting, base paving, signage, and temporary striping work are complete and operational.

3. The Contractor will be allowed to close Route 1 between Water Street and the Donald E. Davey Bridge for one eight hour period for the installation of a new railroad panel.

    - Closure shall occur during the hours of 9:00pm and 5:00am.
    - Closure shall not be allowed Friday or Saturday nights
    - Closure shall occur between September 23rd and October 21st of 2018
    - A detour route shall be implemented as shown on the plan sheets
    - The 6,000lbs. weight restriction on Federal Street will be waived during the closure

4. Only one paving operation will be allowed, excluding hand placed paving and milling, unless otherwise approved by Resident.

5. Trucking of project related construction materials and equipment on Route 1 in Wiscasset, from June 15 to September 15, will only be allowed after 9:00 pm and before 6:00 am.

6. All trenches & patches will be paved daily

7. The Route 1 travel way shall be paved before the end of each night shift from June 15 to September 15. At all other times, the Route 1 travel way shall be paved weekly, prior to the end of shift Friday morning

8. The Contractor shall verify and receive approval from the Resident that the railroad signals interconnect is operational prior to activating the traffic signals at the intersections of Route

1/Middle Street and Route 1/Water Street.

9. Once operations commence, for every weekday not worked the Contractor will be charged supplemental liquidated damages per Section 107.7.2 of the Standard Specifications, excluding days lost to inclement weather, holidays, and approved absences.

10. Absences must be requested at least 72 hours in advance and are subject to Department approval based on existing roadway condition, paving deadlines, adherence to schedule, traffic restrictions, detours, etc. The Contractor must assure that the roadway surface and signage are maintained for safe passage of the traveling public during any approved absences. The Contract Completion Date will not be modified due to approved absences.

11. The Contractor shall provide weekly updates to the Resident Engineer so the Department and Town of Wiscasset can update the public on construction activities. Payment shall be made under item number *107.51 Prosecution of Work – Initial Schedule* and item number *107.53 Prosecution of Work – Biweekly Updates*.

12. Under any circumstance where the Contractor fails to meet the requirements described in this Special Provision, the Contractor shall be charged a traffic control violation and maintenance of traffic control devices will not be paid for that day.

SPECIAL PROVISION 105
CONSTRUCTION AREA

A Construction Area located in the **Town of Wiscasset** has been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

(a) (US. Rte.1) The section of highway under construction beginning at Sta. 1318+50 and ending at Sta. 1326+25 of the construction centerline plus approaches.

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 **Town of Wiscasset** 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. The MDOT 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 105
OVERLIMIT PERMITS

Title 29-A § 2382 MRSA Overlimit Movement Permits.

1. Overlimit movement permits issued by State. The Secretary of State, acting under guidelines and advice of the Commissioner of Transportation, may grant permits to move nondivisible objects having a length, width, height or weight greater than specified in this Title over a way or bridge maintained by the Department of Transportation

2. Permit fee. The Secretary of State, with the advice of the Commissioner of Transportation, may set the fee for single trip permits, at not less than $6, nor more than $30, based on weight, height, length and width. The Secretary of State may, by rule, implement fees that have been set by the Commissioner of Transportation for multiple trip, long-term overweight movement permits. Rules established pursuant to this section are routine technical rules pursuant to Title 5, chapter 375, subchapter II-A.

3. County and municipal permits. A county commissioner or municipal officer may grant a permit, for a reasonable fee, for travel over a way or bridge maintained by that county or municipality

4. Permits for weight. A vehicle granted a permit for excess weight must first be registered for the maximum gross vehicle weight allowed for that vehicle.

5. Special mobile equipment. The Secretary of State may grant a permit, for no more than one year, to move pneumatic-tire equipment under its own power, including Class A and Class B special mobile equipment, over ways and bridges maintained by the Department of Transportation. The fee for that permit is $15 for each 30-day period.

6. Scope of permit. A permit is limited to the particular vehicle or object to be moved, the trailer or semitrailer hauling the overlimit object and particular ways and bridges.

7. Construction permits. A permit for a stated period of time may be issued 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.

8. Gross vehicle weight permits. The following may grant permits to operate a vehicle having a gross vehicle weight exceeding the prescribed limit:

A. The Secretary of State, with the consent of the Department of Transportation, for state and state aid highways and bridges within city or compact village limits;

B. Municipal officers, for all other ways and bridges within that city and compact village limits; and

C. The county commissioners, for county roads and bridges located in unorganized territory.

9. Pilot vehicles. The following restrictions apply to pilot vehicles.

A. Pilot vehicles required by a permit must be equipped with warning lights and signs as required by the Secretary of State with the advice of the Department of Transportation.

B. Warning lights may be operated and lettering on the signs may be visible on a pilot vehicle only while it is escorting a vehicle with a permit on a public way.

With the advice of the Commissioner of Transportation and the Chief of the State Police, the Secretary of State shall establish rules for the operation of pilot vehicles.

9-A. Police escort. A person may not operate a single vehicle or a combination of vehicles of 125 feet or more in length or 16 feet or more in width on a public way unless the vehicle or combination of vehicles is accompanied by a police escort. The Secretary of State, with the advice of the Commissioner of Transportation, may require a police escort for vehicles of lesser dimensions.

A. The Bureau of State Police shall establish a fee for state police escorts to defray the costs of providing a police escort. A county sheriff or municipal police department may establish a fee to defray the costs of providing police escorts.

B. The Bureau of State Police shall provide a police escort if a request is made by a permittee. A county sheriff or municipal police department may refuse a permittee's request for a police escort.

C. A vehicle or combination of vehicles for which a police escort is required must be accompanied by a state police escort when operating on the interstate highway system.

10. Taxes paid. A permit for a mobile home may not be granted unless the applicant provides reasonable assurance that all property taxes, sewage disposal charges and drain and sewer assessments applicable to the mobile home, including those for the current tax year, have been paid or that the mobile home is exempt from those taxes. A municipality may waive the requirement that those taxes be paid before the issuance of a permit if the mobile home is to be moved from one location in the municipality to another location in the same municipality for purposes not related to the sale of the mobile home.

11. Violation. A person who moves an object over the public way in violation of this section commits a traffic infraction.

Section History:
PL 1993, Ch. 683, §A2 (NEW).
PL 1993, Ch. 683, §B5 (AFF).
PL 1997, Ch. 144, §1,2 (AMD).
PL 1999, Ch. 117, §2 (AMD).
PL 1999, Ch. 125, §1 (AMD).
PL 1999, Ch. 580, §13 (AMD).
PL 2001, Ch. 671, §30 (AMD).
PL 2003, Ch. 166, §13 (AMD).
PL 2003, Ch. 452, §Q73,74 (AMD).
PL 2003, Ch. 452, §X2 (AFF).

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

General: A disincentive will be made against the Contractor for each 15 minute period there are lane obstructions of the Route 1 Corridor 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 107 note 2. The charge will be assessed for each lane obstruction as follows:

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

These charges will be ~~ac~~cumulative in nature. Example: 0 to 15 minutes, the contractor shall be assessed $2,500.00. From 16 minutes to 30 minutes the charges will be $5,000.00 + $2,500.00 = $7,500.00, and so on. Times above 60 minutes shall receive an additional assessment of $15,000.00 for each portion of a 15 minute time period.

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.

SPECIAL PROVISION
SECTION 107
PROSECUTION AND PROGRESS
(Contract Time)

1. The contractor will be allowed to commence work on this project as long as all applicable plans as required under this contract have been submitted and approved.

2. **The Contractor will only be allowed to work nights, from 8:00 pm to 6:00 am Sunday night through Friday morning.**

3. The completion date for this contract is **October 18, 2019.**

4. All work schedule changes must be submitted for approval to the Department a minimum of 48 hours prior to the requested change.

5. The Contractor shall not work Fridays after 6:00 am, Saturdays or Holidays. Other work time restrictions for holidays and special events will be as follows:
    - No work will be allowed from 6:00 am Friday, May 25, 2018, to 8:00 pm Tuesday, May 29, 2018 (Memorial Day weekend)
    - No work will be allowed from 6:00 am Tuesday, July 3, 2018, to 8:00 pm Thursday, July 5, 2018 (Independence Day)
    - No work will be allowed from 6:00 am Friday, August 31, 2018, to 8:00 pm Tuesday, Sept. 4, 2018 (Labor Day weekend)
    - No work will be allowed from 6:00 am Friday, October 5th, 2018 to 8:00pm Tuesday, October 9th, 2018 (Columbus Day)
    - No work will be allowed from 6:00 am Friday, May 24, 2019, to 8:00 pm Tuesday, May 28, 2019 (Memorial Day weekend)
    - No work will be allowed from 6:00 am Wednesday, July 3, 2019, to 8:00 pm Sunday, July 7, 2019 (Independence Day)
    - No work will be allowed from 6:00 am Friday, August 30, 2019, to 8:00 pm Tuesday, Sept. 3, 2019 (Labor Day weekend)
    - No work will be allowed from 6:00 am Friday, October 11th, 2019 to 8:00pm Tuesday, October 15th, 2019 (Columbus Day)

SPECIAL PROVISIONS
SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS
(Removing Pavement Surface)

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 it's 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 by the use of 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 grade wire, or from the existing pavement surface using a 30 foot minimum contact ski (floating beam), or 24 foot non-contact grade control beam.

The Contractor shall locate and remove all objects in the pavement through the work area that would be detrimental to the planing 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 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 3/8 inch under a 10 foot string line or straightedge placed transversely to centerline will be corrected. All corrections will be made with approved methods and materials. Any areas that require corrective measures will be subject to the same acceptance tolerances. Excess material that becomes bonded to the milled surface will be removed to the Resident's satisfaction before the area is accepted.

On highways or expressways with directional traffic, the Contractor will be required to remove the pavement surface on the adjacent sections of travel lane and designated portions of adjacent shoulder before the end of the following calendar day unless the centerline edge is tapered to a 12:1. Failure to remove the centerline vertical edge by milling, using the approved taper, or matching the adjacent course the following day will constitute a traffic control violation unless an excusable delay is granted by the Department. The Contractor will be required to remove the specified pavement course over the full width of the mainline traveled ways prior to opening the sections to weekend or holiday traffic.

On roadways with two-way traffic, the Contractor will be required to remove the specified pavement course over the full width of the mainline traveled ways prior to opening the sections to weekend or holiday traffic.

During any period that a centerline vertical or tapered edge exists, the Contractor will be responsible for installing additional warning signage that clearly defines the centerline vertical or tapered edge and elevation differential hazard, as well as additional centerline delineation such as double RPM application, or temporary painted line. The Traffic Control Plan shall include 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 the effected roadway section. All additional signing, labor, traffic control devices, or incidentals will not be paid for directly, but will be considered incidental to the appropriate 652 bid items.

When pavement milling operations leave a 2 inch or less exposed vertical face at the edge of the traveled way, 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 pavement milling operations leave an exposed vertical face at the edge of travelway.

When pavement milling operations on directional or bi-directional traffic roadways leave an exposed vertical face greater than 2 inches at the edge of the traveled way the edge shall be either;

1. 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. Have 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. Payment will be made under the pavement removal item.
3. A pavement layer will be placed to reduce the vertical edge to 2 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. 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.

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** 7 calendar days after being milled will be the responsibility of the MaineDOT unless otherwise noted in Special Provision Section 105 – Limitations Of Operations. Issues that arise after 7 calendar days will be the responsibility of the Contractor unless otherwise noted in Special Provision Section 105 – Limitations Of Operations.

SPECIAL PROVISION
SECTION 401 - HOT MIX ASPHALT PAVEMENT

The Standard Specification 401 – Hot Mix Asphalt Pavement, has been modified with the following revisions. All sections not revised by this Supplemental Specification shall be as outlined in Section 401 of the Standard Specifications.

401.07 Hot Mix Asphalt Plant

401.071 General Requirements HMA plants shall conform to AASHTO M156-97.

a. Truck Scales When the hot mix asphalt is to be weighed on scales meeting the requirements of Section 108 - Payment, the scales shall be inspected and sealed by the State Sealer as often as the Department deems necessary to verify their accuracy.

Plant scales shall be checked prior to the start of the paving season, and each time a plant is moved to a new location. Subsequent checks will be made as determined by the Resident. The Contractor will have at least ten 50 pound masses for scale testing.

b. Additives Additives (WMA, anti-strip, etc.) not directly introduced into the binder at the terminal shall be introduced into the HMA plant per the supplier's recommendations and shall be approved by the Asphalt Pavement Engineer, Pavement Quality Manager, or their authorized representative. The system for introducing additives shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. Additive introduction systems shall be controlled by a proportioning device to the amount required on the JMF plus or minus 0.1% of the target. Additive introduction systems shall be interlocked with the plant and the recordation (batch tickets or drum recordation) shall display the additive and the weight and percentage added.

c. Stockpiles HMA plants shall have sufficient space for stockpiles, with a minimum of supply for 2 days production of all aggregate products used in MaineDOT approved mix designs currently under production for the facility at all times. A minimum stockpile supply of 100 ton (70 yards) shall be maintained at all times no matter the production rate for the HMA plant. Stockpiles shall be separated and built to minimize segregation.

401.18 Quality Control Method A, B & C The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.6 - Acceptance and this Section. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

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

a. JMF(s)
b. Hot mix asphalt plant details
c. Stockpile Management (to include provisions for how the requirements of 401.071c will be met)
d. Make and type of paver(s)
e. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers
f. Name of QCP Administrator, and certification number
g. Name of Process Control Technician(s) and certification number(s)
h. Name of Quality Control Technicians(s) and certification number(s)
i. Mixing & transportation including process for ensuring that truck bodies are clean and free of debris or contamination that could adversely affect the finished pavement
j. Testing Plan
k. Laydown operations including longitudinal joint construction, procedures for avoiding paving in inclement weather, type of release agent to be used on trucks tools and rollers, compaction of shoulders, tacking of all joints, methods to ensure that segregation is minimized, procedures to determine the maximum rolling and paving speeds based on best engineering practices as well as past experience in achieving the best possible smoothness of the pavement. Solvent based agents developed to strip asphalts from aggregates will not be allowed as release agents.
l. Examples of Quality Control forms including a daily plant report, daily paving report, and delivery slip template for any plant to be utilized.
m. Silo management and details (can show storage for use on project of up to 36 hours)
n. Provisions for varying mix temperature due to extraordinary conditions or production limitations. If a warm-mix technology is utilized, a proposed target production temperature range (not to exceed 50°F) will be provided for each mix design.
o. Name and responsibilities of the Responsible onsite Paving Supervisor.
p. Method for calibration/verification of Density Gauge
q. A note that all testing will be done in accordance with AASHTO and the MaineDOT Policies and Procedures for HMA Sampling and Testing.
r. A detailed description of RAP processing, stockpiling and introduction into the plant as well as a note detailing conditions under which the percent of RAP will vary from that specified on the JMF.
s. A detailed procedure outlining when production will be halted due to QC or Acceptance testing results.
t. A plan to address the change in PGAB source or supplier and the potential co-mingling of differing PGAB's.
u. A procedure to take immediate possession of acceptance samples once released by MaineDOT and deliver said samples to the designated acceptance laboratory.
v. Provisions for how the QCP will be communicated to the Contractor's field personnel

The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

a. Method A: The Pay Factor for VMA, Voids @ N_d, Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and s = 0.
b. Method B: The Pay Factor for VMA, Voids @ N_d, Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.90. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and s = 0.
c. Method C: The Pay Factor for Percent PGAB, percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, percent passing 0.075 mm sieve or density using all Acceptance or all available Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, or percent passing 0.075 mm sieve if the mean test value is equal to the LSL or USL and s = 0.
d. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Table 3: Aggregate Consensus Properties Criteria in Section 703.07 for the design traffic level.
e. Each of the first 2 control tests for a Method A or B lot fall outside the upper or lower limits for VMA, Voids @ Nd, or Percent PGAB; or under Method C, each of the first 2 control tests for the lot fall outside the upper or lower limits for the nominal maximum, 2.36 mm, 0.300 mm or 0.075 mm sieves, or percent PGAB.
f. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.
g. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
h. The Contractor fails to follow the approved QCP.

401.203 Method C Lot Size will be the entire production per JMF for the project, or if so agreed at the Pre-paving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 750 ton for mixture properties, 500 ton for base or binder densities and 250 ton for surface densities. The minimum number of sublots for mixture properties shall be 4, and the minimum number of sublots for density shall be five.

TABLE 7: METHOD C ACCEPTANCE LIMITS

Property	USL and LSL
Passing 4.75 mm and larger sieves	Target +/-7%
Passing 2.36 mm to 1.18 mm sieves	Target +/-5%
Passing 0.60 mm	Target +/-4%
Passing 0.30 mm to 0.075 mm sieve	Target +/-2%
PGAB Content	Target +/-0.4%
% TMD (In place density)	95.0% +/- 2.5%

Pay Adjustment Method C

The Department will use density, Performance Graded Asphalt Binder content, and the percent passing the nominal maximum, 2.36 mm, 0.300 mm and 0.075 mm sieves for the type of HMA represented in the JMF. If the PGAB content falls below 0.80, then the PGAB pay factor shall be 0.55.

Density: For mixes having a density requirement, the Department will determine a pay factor using Table 7: Method C Acceptance Limits:

PA = (density PF- 1.0)(Q)(P)x0.50

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

PA = (% Passing Nom. Max PF-1.0)(Q)(P)X0.05+(% passing 2.36 mm PF-1.0)(Q)(P)X0.05+(%passing 0.30 mm PF-1.0)(Q)(P)X0.05+(%passing 0.075 mm PF-1.0)(Q)(P)X0.10+(PGAB PF-1.0)(Q)(P)X0.25

401.223 Process for Dispute Resolution (Methods A B & C only)

TABLE 10: DISPUTE RESOLUTION VARIANCE LIMITS

PGAB Content	+/-0.4%
G_{mb}	+/-0.030
G_{mm}	+/-0.020
Voids @ N_d	+/-0.8%
VMA	+/-0.8%
Passing 4.75 mm and larger sieves	+/- 4.0%
Passing 2.36 mm to 0.60 mm sieves	+/- 3.0%
Passing 0.30 mm to 0.15	+/- 2.0 %
0.075 mm sieve	+/- 0.8%

SPECIAL PROVISION
DIVISION 400
PAVEMENTS

SECTION 401 - HOT MIX ASPHALT PAVEMENT
(Hot Mix Asphalt Aggregates)

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 furnish and place one or more courses of Hot Mix Asphalt Pavement (HMA) on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the Maine DOT Policies and Procedures for HMA Sampling and Testing.

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

Asphalt Cement	702.01
Aggregates for HMA Pavement	703.07
HMA Mixture Composition	703.09

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 shall meet a Micro-Deval (AASHTO T 327) value of 14 or less.
2. Individual coarse aggregates shall have a maximum LA Abrasion (AASHTO T96) of 30.
3. Individual fine aggregates shall meet a Fine Micro-Deval (ASTM D7428) of 15 or less.
4. Absorption by AAHSTO T 84 shall be less than 2.0% for fine aggregate blends.
5. Absorption by AAHSTO T 85 shall be less than 2.0% for coarse aggregate blends.
6. Aggregates shall have a minimum sand equivalent of 45, (AASHTO T 176), and the fine aggregate shall be 100% crushed.
7. 95 % of the aggregate shall have at least a single face crushed and 85% shall have 2 or more crushed.
8. Percent by weight of Flat and Elongated particles shall be (5:1 ratio) with 10% maximum.

401.03 Composition of Mixtures The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. HMA shall be designed and tested according to AASHTO R35 and the volumetric criteria in Table 1. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF). The JMF target for the percent passing the No. 200 sieve shall not exceed 4%. The Contractor may not use RAP in the HMA mixture at any percentage.

TABLE 1: VOLUMETRIC DESIGN CRITERIA

Design ESAL's (Millions)	Required Density (Percent of G_{mm})			Voids in the Mineral Aggregate (VMA)(Minimum Percent) Nominal Maximum Aggregate Size (mm)					Voids Filled with Binder (VFB) (Minimum %)	Fines/Eff. Binder Ratio
	$N_{initial}$	N_{design}	N_{max}	25	19	12.5	9.5	4.75		
<0.3	≤91.5	96.0	≤98.0	13.0	14.0	15.0	16.0	16.0	70-80	0.6-0.9
0.3 to <3	≤90.5								65-80	
3 to <10	≤89.0								65-80	
10 to <30										
≥ 30										

Basis of Payment The accepted quantities of hot bituminous pavement will be paid for at the contract unit price per Ton for the bituminous mixtures, including bituminous material.

Method A, Method B, Method C and Method D shall be used for acceptance as specified in Section 401 - Hot Mix Asphalt Pavements. (See Complementary Notes, Section 403 - Hot Bituminous Pavement, for Method location).

Payment will be made under the appropriate mix type as denoted in Special Provision 403.

SPECIAL PROVISION SECTION 401
HOT MIX ASPHALT
(Special Seasonal Limitations)

The following section of Section 400 has been revised as follows:

401.06 Weather and Seasonal Limitations The following language has been added to Section 401.06:

The Contractor may place Hot Mix Asphalt Pavement as traveled way wearing course between the Saturday following October 15th and November 1st, provided that the air temperature as determined by an approved thermometer (placed in the shade at the paving location) is 50°F or higher, and the HMA is produced with one of the WMA technologies listed below and approved for use by the Department.

a. The use of organic WMA additives

b. The use of powdered or pelletized WMA additives

c. The use of manufactured liquid chemical WMA additives

The WMA additives shall be mixed with the aggregate or asphalt in the HMA plant at a rate recommended by the manufacturer. The additives shall be introduced into the hot mix plant mixing chamber by mechanical means that can be controlled and tied directly to the hot mix asphalt plants rate of production. The WMA additives may be mixed with the asphalt at the asphalt terminal a rate recommended by the manufacturer in a manner to assure complete dispersion throughout the load. Should the WMA additives be added at the terminal, additive type, and total additive amounts shall be listed on the loading invoice.

The use of a controlled asphalt foaming system, utilizing an injection system to introduce water to the asphalt stream and "expand" the asphalt prior to mixing with the aggregate in asphalt mixture plant, will not be permitted to produce mix past the normal deadline. The WMA must be produced at the normal production temperatures specified in section 401.04.

SPECIAL PROVISION
SECTION 403
HOT MIX ASPHALT

Desc. Of Course	Grad Design.	Item Number	Total Thick	No. Of Layers	Comp. Notes
8" HMA Overlay Areas					
Route 1 - Mainline Travelway and Shoulders					
Approach Roads (As indicated in the Plans)					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,21,26,27,30
Intermediate	12.5 mm	403.2131	1½"	1	5,7,21,26,27,30
Base	12.5 mm	403.213	2"	1	1,5,7,15,21
Base	19.0 mm	403.207	3"	1	1,4,7,15,21
4" HMA in Mill and Overlay or Reconstruction Areas					
Water Street North and South, Railroad Ave., Approach Roads					
(As indicated in the Plans)					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,21,27,30
Base	12.5 mm	403.2131	2 ½"	1	5,7,21,27,30
Spot Shims (As Directed by Resident)					
Shim	9.5 mm	403.211	variable	1/more	1,2,4,10,11,14
Sidewalks, Drives, Islands, Misc.					
Wearing	9.5 mm	403.209	2" - 3"	2/more	2,3,10,11,14,16

COMPLEMENTARY NOTES

1. The required PGAB for this mixture will meet a **PG 64-28** grading.
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.
3. The design traffic level for mix placed shall be <0.3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
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 **75 gyrations**.
7. Section 106.6 Acceptance, (1) Method A.
10. Section 106.6 Acceptance, (2) Method D.
11. The combined aggregate gradation required for this item shall be classified as a 9.5mm "**fine graded "** mixture, (using the Primary Control Sieve control point) as defined in 703.09.
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.

15. The 3 inch 19.0mm and 2 inch 12.5mm base layers of HMA on the Route 1 travelway and shoulders, and the 2.5 inch 12.5mm base layer on approach roads, shall be completed before winter suspension. Any base or intermediate HMA layers placed after the standard seasonal limitations shall be considered temporary and removed and replaced the following construction season. The Department will not be responsible for cost or time related to the removal or replacement of pavements considered to be temporary. Any wearing course shall be placed during the Standard 400 section seasonal limitations useless a warm mix additive is utilized as outlined in Special Provision 401 - Special Seasonal Limitations.
16. Compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **3-5 ton** vibratory roller. Areas less than 2 feet wide shall be compacted with a minimum of a **150 pound** plate compactor. An approved release agent is required to ensure the mixture does not adhere to hand tools, rollers, pavers, and truck bodies. The use of petroleum based fuel oils, or asphalt stripping solvents will not be permitted.
21. At the discretion of the Contractor, the use of concrete fill will be allowed in lieu of pavement. If this option is utilized at least 3" of HMA shall be placed on top of any concrete fill used for curb backfill.
26. Centerline joint density testing shall be applied to the specified HMA layer. See Special Provision 401 – Hot Mix Asphalt Longitudinal Joint Density for project specifics.
27. See Special Provision 401 – HMA Aggregate requirements for project specifics.
30. The required PGAB shall be a storage-stable, homogeneous, polymer modified asphalt binder that meets PG 70E-28 grading requirements in AASHTO M 332. All polymer modified asphalt grades utilized on the Project shall be treated with an approved liquid anti-strip. PG binders shall be treated with a minimum 0.50 percent anti-strip by weight of asphalt binder used unless otherwise recommended by the anti-strip manufacturer. The PGAB and anti-strip blend shall meet the PG 70E-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/yd², and on milled pavement approximately 0.05 gal/yd² 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/yd². Tack used will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

SPECIAL PROVISION
SECTION 461.131

TEMPORARY PAVEMENT

Description: This work shall consist of furnishing all labor, materials and equipment, for the manufacturing, installation and removal of all Temporary Pavement in accordance with these specifications, Special Provision 403 Hot Mix Asphalt, and the Plans. Temporary pavement shall meet the gradation and asphalt requirements of a current MDOT approved 9.5 mm Thin Lift Mixture (TLM) JMF. The mixture will not be evaluated for PGAB content, gradation, or volumetrics. The Department will accept the mixture based upon visual acceptance. All mixtures placed as temporary pavement will be removed in its entirety and replaced as required with mixtures that meet contract requirements.

Temporary pavement shall be placed at depths directed by the Resident.

Method of Measurement: This work will be measured for payment by the Ton, complete in place and accepted.

Basis of Payment: The work shall be paid for at the contract Ton price for the manufacturing, installation and removal of all Temporary Pavement.

Payment will be made under:

Item No.	Description	Pay Unit
461.131	Temporary Pavement	Ton

Wiscasset
WIN 21843.00
March 12, 2018

SPECIAL PROVISIONS
SECTION 502
STRUCTURAL CONCRETE
(QC/QA Acceptance Methods)

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
A	608.45	Construct Sidewalk	-	C
LP	626.31	18 Inch Diameter Foundation	-	C
LP	626.32	24 Inch Diameter Foundation	-	C
LP	626.35	Controller Cabinet Foundation	-	C
LP	626.332	30 Inch Dia. > 8 Foot Foundation	-	C
A	608.08	Reinforced Concrete Sidewalk	-	C
A	608.26	Curb Ramp Detectable Warning Field	-	C

SPECIAL PROVISION
SECTION 507
RAILINGS
(Ornamental Pedestrian Railing)

Description: This work shall consist of designing, furnishing and installing galvanized and powder coated ornamental "wrought iron" pedestrian railing, including rail posts and footers. The contractor shall be responsible for coordinating working drawings required to fabricate the railing system at locations indicated in the plan drawings or as directed by the Resident. This railing should be fabricated to match the existing railings on adjacent businesses and comply with ADA and Life Safety Codes.

Material:
All steel shall be ASTM A36
After Fabrication, the Railings shall be hot dipped galvanized in accordance with Section 506 of the MaineDOT Standard Specification and ASTM A123
Posts: Posts shall HR ASTM A36 1 ½" x 1 ½" solid
Balusters/Lower sub-rail: ¾" x ¾" HR ASTM A36
Upper Sub-rail/upper Guardrail sub-rail" 3/8" x 1" HR ASTM A36
Handrail/Guardrail: 3/8" x 2" HR ASTM A36
Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
Fasteners: Provide fasteners as indicated on the drawings. Provide Type 304 or 316 stainless-steel fasteners for exterior use. Select fasteners for type, grade, and class required.
Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with hex nuts, ASTM A 563 (ASTM A 563M); and, where indicated, flat washers.
Plain Washers: Round, carbon steel, ASME B18.22.1 (ASME B18.22M).

For metal fabrications exposed to view in the completed work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

Drawings: The Contractor shall coordinate field verification of shop dimensions, for fabrication of railing to conform to final as built conditions for new sidewalk and stairs, erection and other necessary working drawings in accordance with the requirement of Section 105.7-Working Drawings: Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items, and coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to project site in time for installation.

Where metal fabrications are indicated to fit walls and other construction, verify dimensions by field measurements before fabrication. Coordinate construction to ensure that actual dimensions correspond to established dimensions and field elevations.

Construction Requirements:

Fabricator Qualifications: The fabricator/installer shall be an experienced “wrought iron” railing production shop with a documented track record of successful production and installation of railings and handrails.
Welding: Qualify procedures and personnel according to the following:
AWS D1.1, “Structural Welding Code-Steel.”
AWS D1.3, “Structural Welding Code-Sheet Steel.”

Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

Railing system shall be capable of withstanding structural loads required by ASCE 7 without exceeding the allowable design working stress of materials for handrails, railings, anchors, and connections.

Fabricate handrails and railings to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of tube, post spacings, and anchorage. Coordinate fabrication schedule with construction progress to avoid delaying the work. Configuration of ornamental railing shall be as shown on the drawings or as directed by the Resident Engineer.

All welding will be at the production shop for final delivery and installation. Interconnect members by butt-welding or welding with internal connectors. At tee and cross intersections, cope ends of intersecting members to fit contour of tube to which end is joined, and weld all around.

Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

All bolts in rails shall be well lubricated and tightened to a snug condition to allow for expansion within the completed railing system, threads on the bolts in Rails shall be disrupted upon final installation.

Finishing:
Steel components of the railing system shall be sandblasted, hot dip zinc-galvanized and powder coated with duplex powder coating over galvanizing coating or color galvanized. The finish color of the railing shall be semi-gloss black as as approved by the Resident to match existing railings.

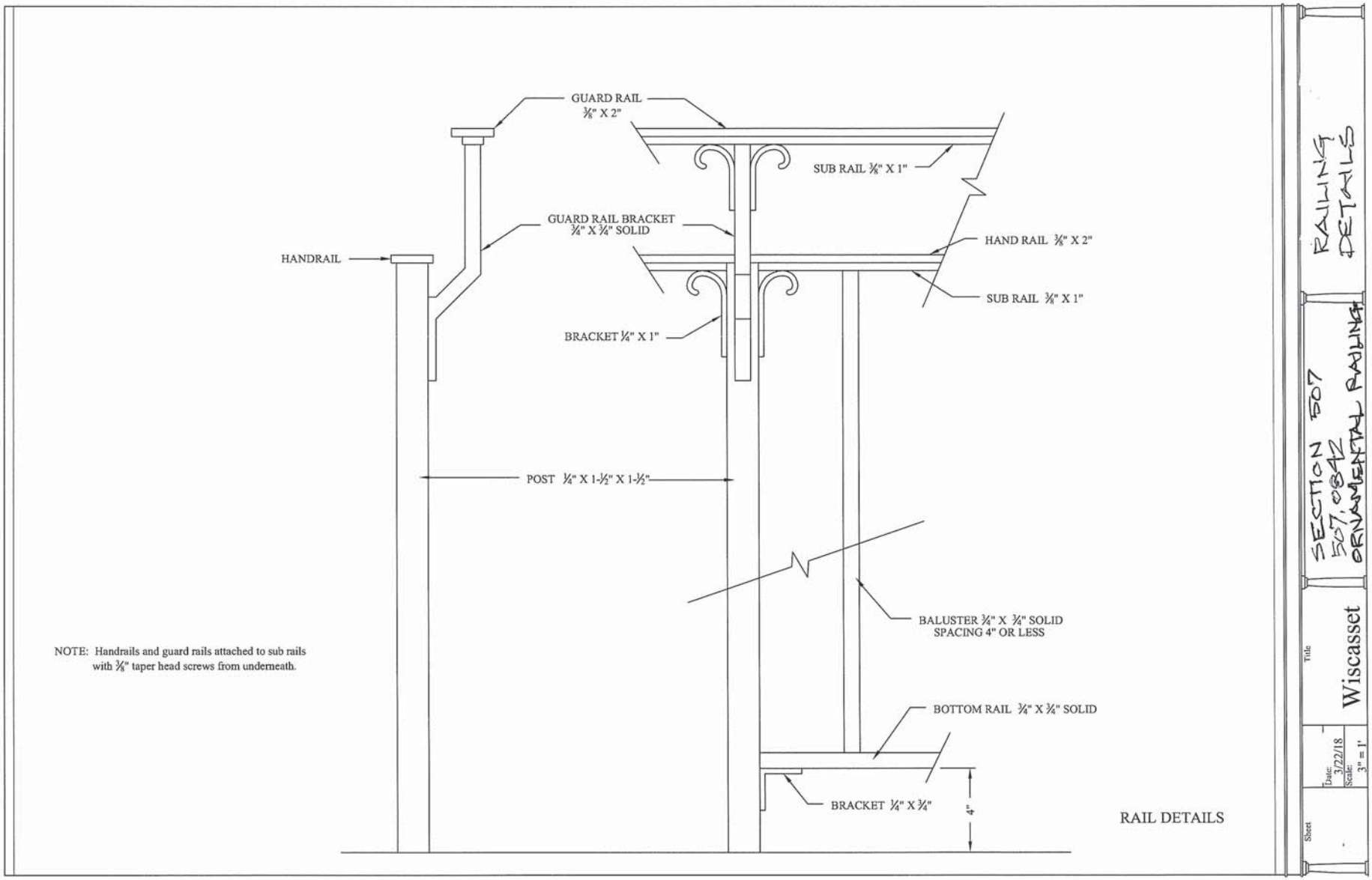
Method of Measurement: Ornamental Pedestrian Railing shall be measured by the lump sum .

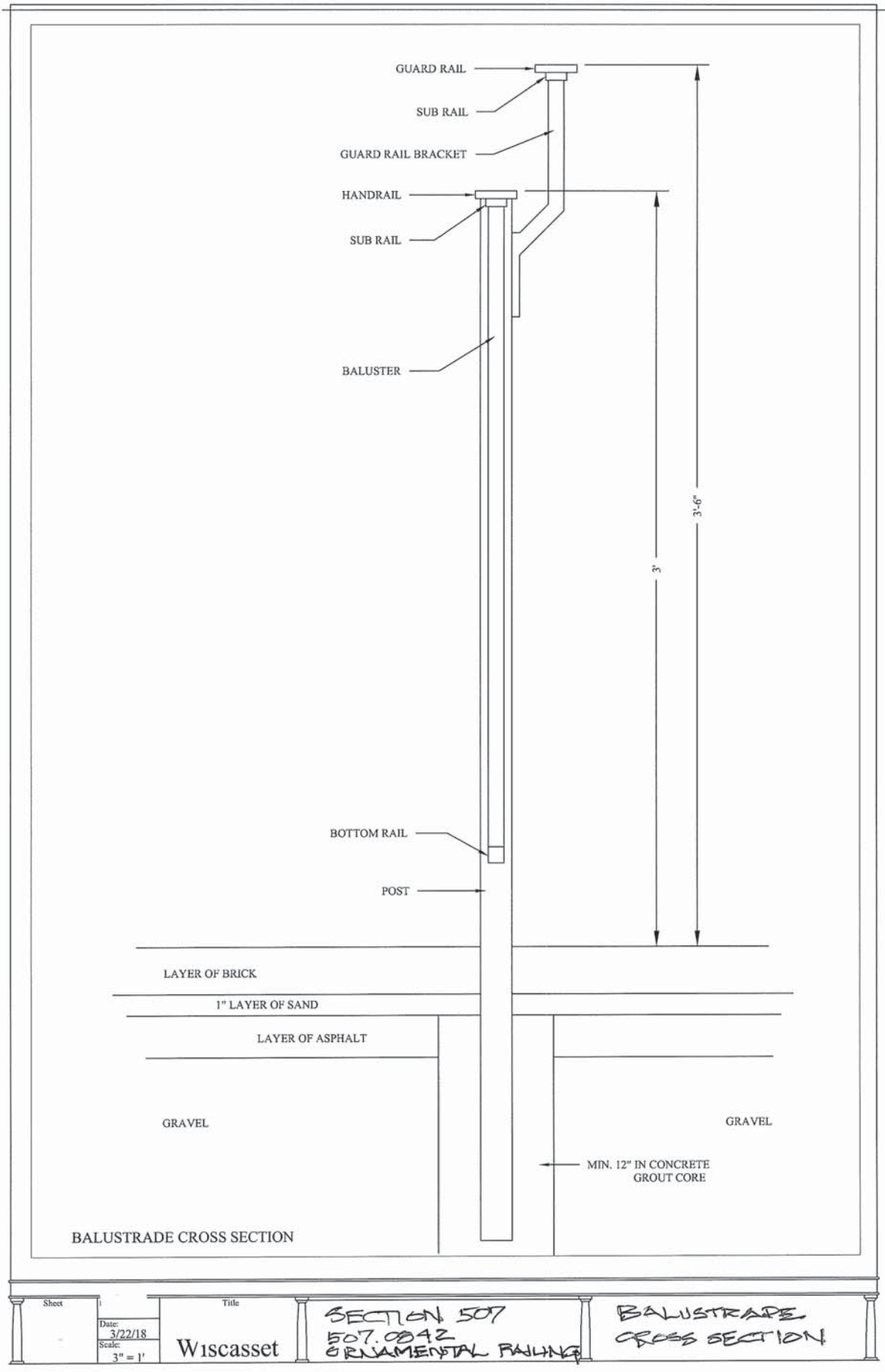
Basis of Payment Ornamental Pedestrian Railing will be paid for at the contract unit price. Such payment will be complete compensation for fabrication and delivery of the required quantity of new ornamental railing (including galvanizing and top coating), installation of the railing and railing components as shown on the plans, circular concrete shaft foundation(s) for drilling and anchoring as shown on the plans, and any labor, equipment, material, incidentals or consumables required to satisfactorily complete the work.

Payment will be made under:

Pay Item	Pay Unit
507.0842 Ornamental Pedestrian Railing	LS

Sheet	Date: 3-19-18 Scale: 1/2" = 1'	Title: Wiscasset	SECTION 507.0812 ORNAMENTAL RAILING	ELEVATION TYPICAL


GUARD RAIL
⅜" X 2"
SUB RAIL ⅜" X 1"
GUARD RAIL BRACKET
¾" X ¾" SOLID
HANDRAIL
HAND RAIL ⅜" X 2"
SUB RAIL ⅜" X 1"
BRACKET ¼" X 1"
POST ¼" X 1-½" X 1-½"
BALUSTER ¾" X ¾" SOLID
SPACING 4" OR LESS
BOTTOM RAIL ¾" X ¾" SOLID
BRACKET ¼" X ¾"
4"
NOTE: Handrails and guard rails attached to sub rails
with ⅜" taper head screws from underneath.
RAIL DETAILS
RAILING DETAILS
SECTION 507
507.0842 ORNAMENTAL RAILING
Title
Wiscasset
Date: 3/22/18
Scale: 3" = 1'
Sheet



Sheet	Title		
1	Wiscasset	SECTION 507 507.0842 ORNAMENTAL RAILING	BALUSTRADE CROSS SECTION
Date: 3/22/18			
Scale: 3" = 1'			

SPECIAL PROVISIONS
SECTION 525
GRANITE MASONRY
(Repair and Resurface Existing Stairs and Walls)

525.01 Description. This work shall consist of repairing and resurfacing existing stairs and walls as noted in the plans and as Directed by the Resident. This work will be performed by an experienced stone mason proficient in granite masonry and concrete work. This work will include but is not limited to:

a. Provide Contractor's Shop Drawing detailing field methods for approval 10 day in advance.
b. Remove and adjust existing concrete stairs per Demo Drawings to adjust stair/riser grades.
c. Install new 2" full width granite treads with Woodbury granite or equal per approval.
d. Reset existing cobble cap stones pointed masonry to match existing to meet new grades.
e. All pointed masonry construction pointed joints uniform and to match existing.
f. Finish stairs shall have consistent uniform Riser/Tread dimensions to meet ADA and Life Safety Codes.
g. Repair and Repoint existing cobble walls to correct existing cracks/joints per Resident.

MATERIALS: Contractor to provide detailed Shop drawings indicating methods of construction and appropriate methodology and masonry supplies as Approved from the MaineDOT Approved products list for review at least 10 days prior to beginning this work for approval by the Resident Engineer.

Contractor is to reuse existing cobbles and/or provide sample of additional products for approval as necessary.

Provide new Swenson Woodbury Granite Treads 2" x 13" x full width approx. 8' - 6", 8'- 9" widths split face with max ½" top face edge radius, flame finished tread surface per Drawings and plans and as detailed.

CONSTRUCTION REQUIREMENTS

525.031 General. Granite Masonry work shall be constructed by a skilled craftsperson thoroughly experienced with this type of work. The granite masonry work shall be constructed as shown on the plans, special details, and shall match the existing structures, as directed by the Resident. All masonry work shall be cleaned within five days of completion using previously approved methods. The site shall also be cleaned of all excess materials, debris, tools and equipment.

525.05 Basis of Payment. The accepted quantity of Granite Masonry will be paid for Lump Sum. This includes, repairing and resurfacing existing stairs and setting granite treads, re-pointing granite cobble walls as shown on the plans, and as directed by the Resident, all labor, equipment and other incidentals necessary to complete the work. Payment will be made under:

Pay Item		**Pay Unit**
525.3251	Granite Masonry Work	Lump sum [LS]

SPECIAL PROVISION
SECTION 525
GRANITE SEATING BLOCKS WITH CAP

Description: This work shall consist of furnishing all materials and labor for granite seating blocks with cap to conform with the plans and as directed by the Resident Engineer.

525.02 Materials: Granite Seating Blocks with Cap
All Granite will be uniform, consistent, smooth grained medium gray granite Swenson Woodbury or similar as approved by the Resident Engineer.

Granite seating blocks will be 14" width x 30" height x 6' – 0" length, thermal finish all four sides.

Granite Cap will be 2" thickness x 15" width, lengths adjusted to maintain a ¾" reveal on all Exposed sides, 1'4" radius top edge, thermal finish all exposed edges, anticipated sizing:

(1) 6' – ¾"
(1) 6' - 1 ½"
(16) 6' - 0"

525.192 Granite Seating blocks with Cap:

Excavate to undisturbed or tamped subgrade and backfill in 6" levels tamped 12" all around to 100% compaction with compacted crushed stone to grade to ensure secure finished placement. Install 6" minimum levelling pad as shown in the plans and as directed by the Resident. Granite seating blocks shall be set level and plumb and parallel to the curb in 6" levels to accommodate finish side walk grades. Blocks shall be set to provide a level finish surface with minimum 6" embedment in brick with asphalt base sidewalk system.
Finish cap shall be set by an experienced stone mason with masonry cement grout Typ. ½" concave joints. Masonry shall be washed clean.

Basis of Payment :

All Items described herein are incidental to the following pay item:

Pay Item		Pay Unit
525.192	Granite Seating Blocks with Cap	LUMP SUM [LS]

SPECIAL PROVISION
SECTION 603
PIPE CULVERTS AND STORM DRAINS

603.12 Basis of Payment: This section shall be amended with the addition of the following:

Pay Item		Pay Unit
603.155	12 inch Reinforced Concrete Pipe Class III	Linear Foot
603.165	15 inch Reinforced Concrete Pipe Class III	Linear Foot
603.175	18 inch Reinforced Concrete Pipe Class III	Linear Foot

SPECIAL PROVISION SECTION 604
MANHOLES AND CATCH BASINS
(Behind Curb Catch Basin)

This section is amended by addition of the following:

Description: This work shall consist of constructing catch basins and manholes in accordance with the requirements of Section 604 of the Standard Specifications and Standard Details, revision of November 2014 for Construction. The catch basin frame and lid shall conform to Neenah Foundry Item R-3303 or an approved equal.

Method of Measurement: Measurement shall be in accordance with Subsection 604.05.

Basis of Payment: Payment shall be in accordance with Subsection 604.06.

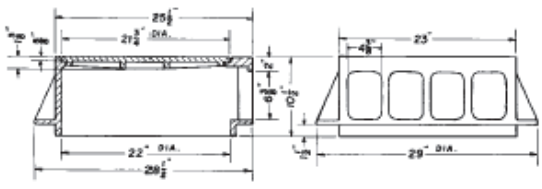
Payment shall be made under:

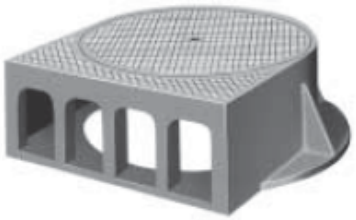
Pay Items		Pay Unit
604.2402	Behind Curb Catch Basin	Each

BEHIND THE CURB INLETS

R-3303
Catch Basin Frame and Lid

Heavy Duty
For behind-the-curb construction.
Furnished standard with as-cast bearing surfaces.





Wiscasset
WIN 021843.00
March 5, 2018

SPECIAL PROVISION
Section 608
Brick Sidewalk with Bituminous Base

Section 608 of the Standard Specifications is amended for this project by addition of the following:

Description: This work shall consist of furnishing all materials and labor for Brick Sidewalk with Bituminous Base to conform with the plans and as directed by the Resident Engineer.

608.02 Materials: Brick for Brick Sidewalk with Bituminous Base shall meet requirements of Section 704.02 and ASTM C-902: Morin Brick BOSTONIAN Artisan Flashed Extruded Paving Brick by Morin Brick, Auburn Me. Prior to ordering a final sample strap demonstrating full color range shall be submitted to the Resident Engineer for final approval.

Morin Brick Artisan Flashed 'Bostonian Blend Paver Brick
Nominal 3 3/4" x 7 1/2" x 2 ¼" thick

608.411 Brick Sidewalk Construction: Subgrade shall be shaped parallel to the proposed surface of the walk and shall be thoroughly compacted. All depressions occurring shall be filled with a suitable material and again compacted until the surface is smooth and hard.

After the subgrade has been prepared, a foundation of Aggregate Base Course Gravel shall be placed to the specified compacted thickness.

A layer of hot mix asphalt (HMA) with minimum compacted thickness of two inches (2") shall be placed on the completed aggregate foundation course. The HMA surface shall be parallel to the proposed finish grade.

A sand-cement base course 1" thick made of thoroughly blended washed concrete sand 6:1 mixed with 1 part Portland Cement shall be placed on the HMA base course and thoroughly compacted to a hard, smooth surface parallel to the proposed finish slope and grade of the walk.

After the sand-cement base course has been installed brick shall be placed in running bond pattern detailed with a single running edge course at the back side of the walkway, adjusted to full brick dimension as shown on the plan. The brick shall be set per pattern with a narrow hand set joint typical 1/16" width [min 1/32- 3/32"]. Brick shall be saw cut to fit spaces requiring less than a whole brick; no cut shall be less than 2" in [two inches] length, and no open spaces will be allowed. Final patterns shall be running bond per plan or as directed by the Resident Engineer or *MaineDOT* Landscape Architect.

Individual bricks shall be hand placed with joints, and then set by hammering with a heavy rubber masonry mallet until the bricks reach a firm, unyielding bedded set course. After this tamping a sufficient amount of sand-cement mix shall be spread over the surface and thoroughly swept to fill all joints

After filling the joints the brick surface shall be covered by plywood and mechanically compacted with a plate vibrator with rubber pad to ensure filling of all the joints. Care shall be taken to avoid raking out the joints during removal of excess sand.

A final application of sand only shall be applied and wet with clean potable water and left on the surface for several days before final sweeping. At the completion of the project a final sand/sweeping operation will be overseen by the Resident.

Basis of Payment: All items described herein are incidental to the following pay item:

Pay Item		Pay Unit
608.15	Brick Sidewalk with Bituminous Base	SY

SPECIAL PROVISION
SECTION 608
SIDEWALKS
(Curb Ramp Detectable Warning Field)

This section is amended by addition of the following:

Description This work shall consist of furnishing and installing curb ramp detectable warning plates with truncated domes in brick sidewalk in accordance with the requirements of Section 608 of the Standard Specifications and the Standard Details as applicable at the locations shown on the plans or as established by the Resident.

Materials The curb ramp detectable warning plates with truncated domes standard detail shall be modified for placement within the limits of brick sidewalk per the following amended standard detail.

Method of Measurement Measurement shall be in accordance with Section 608 of the Standard Specifications.

Basis of Payment: The accepted quantity of Curb Ramp Detectable Warning Field will be paid for at the contract unit price per square foot. Payment will include all materials and labor required to install the detectable warning plates, complete and in place.

Payment will be made under:

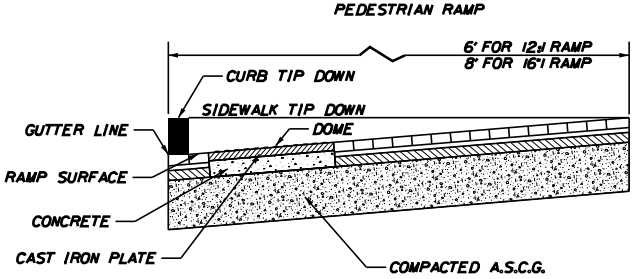
Pay Item		Pay Unit
608.26	Curb Ramp Detectable Warning Field	Square Foot

DETECTABLE WARNINGS

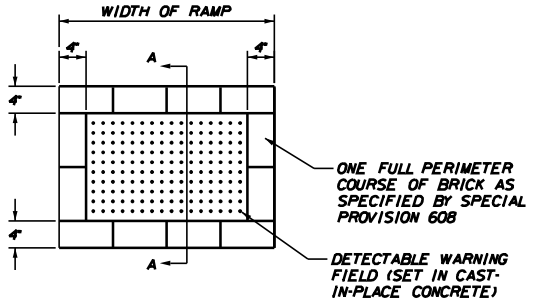
SPECIAL PROVISION 608

VIEWS AND DETAILS OF THE DETECTABLE WARNING BRICK SIDEWALK LOCATIONS

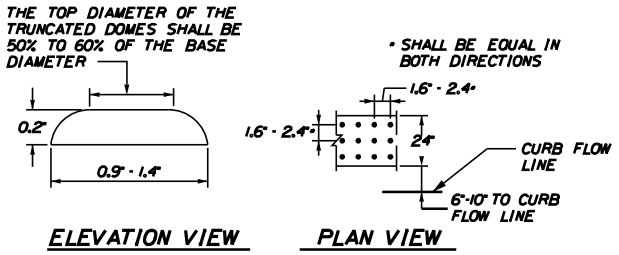
(NOT TO SCALE)

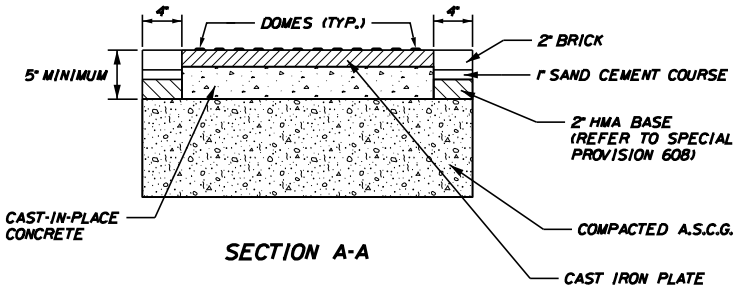


SIDE SECTION VIEW OF DETECTABLE WARNING, CURB, AND GUTTER



PLAN VIEW OF DETECTABLE WARNING FIELD





DOME AND DETECTABLE WARNING DETAILS

NOTES:

1. ALL DETECTABLE WARNING AREAS SHALL START 6'-10" FROM THE FLOW LINE OF THE CURB, BE 24" IN DEPTH, AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY.

2. THE DETECTABLE WARNING PANEL SHALL HAVE ONE FULL COURSE OF BRICK PAVERS AROUND THE FULL PERIMETER OF THE PANELS. THIS PERIMETER SHALL BE SET TO CREATE A FLUSH SURFACE BETWEEN THE BRICK AND THE PANEL.

SPECIAL PROVISION
SECTION 609
CURB
(Special Granite Curb – 39 Inch)

Standard Specification Section 609 shall be amended as follows:

Description: Construct granite curb as directed by the Resident or as shown on the plans, to the height and embedment depth shown on the details and cross sections, to function as a low retaining wall.

Materials: Special Granite Curb shall meet the requirements of Division 700, Section 712.04, except as indicated on the plans. Height of the units shall be as indicated on the plans.

Backfill for one foot behind Special Granite Curb shall meet the requirements of Section 304, Aggregate Subbase Course - Gravel.

Installation: Curb shall be set to follow the profile or as shown on the plans. All other sections of Section 609 shall apply to this item. Special Granite Curb may be set in flowable concrete at the Contractor's option. Cutting or fitting necessary to install curb in the locations directed shall be done by the Contractor as needed.

Acceptance: Special Granite Curb may be accepted or rejected based on appearance concerning texture, alignment, or both. All damaged or otherwise unacceptable curb shall be removed and replaced at the Contractor's expense.

Method of Measurement: Special Granite Curb will be measured by the length in linear feet along the front face of the curb at the elevation of the finished ground, complete in place and accepted.

Basis of Payment: The accepted quantities of Special Granite Curb will be paid for at the contract unit price per linear foot. There will be no separate payment for cutting, bedding, or backfill, but these will be considered incidental to the work.

Pay Item		Pay Unit
609.1111	Special Granite Curb - 39 Inch	Linear Foot

SPECIAL PROVISION
SECTION 609
Curb

609.10 Basis of Payment: This section shall be amended with the addition of the following:

Pay Item		Pay Unit
609.2341	Terminal Curb Type I – 4ft. - Circular	Each
609.2381	Terminal Curb Type I – 8ft. – Circular	Each

SPECIAL PROVISIONS
SECTION 621
LANDSCAPE

(Plant Species Specification and Quantities List)

The following list of items provides the estimated quantities for use on this project. The scientific name of the plant material is provided along with the common name.

The contractor shall follow ***Standard Specifications*** Rev. November, 2014 for landscape materials and installation procedures (sec. 621).

The ***MaineDOT*** Landscape Architect or designee will flag the location of all plant materials, and inspect plant materials and inspect planting at that time.

No Landscape Warranty Bond will be required; a two-year warrantee on all plant materials will be considered incidental to the planting.

PLANT MATERIALS

ITEM	Description	Unit	Quant.	Total
621.037	Evergreen Trees Gr. A 5'- 6' B&B	Ea.		6
	Thuja 'Nigra' (Dark Green American Arborvitae)		6	
621.273	Deciduous Trees Gr A 2" - 2 1/2" B&B	Ea.		4
	Acer rubrum 'Red Sunset'('Red Sunset' Red Maple)		1	
	Syringa reticulata 'Ivory Silk'		3	
621.389	Evergreen Shrubs Gr A 15"– 18" Cont.	Ea.		12
	Buxus 'Green Mound'		6	
	Ilex meserveae 'China Girl'		6	
621.396	Evergreen Shrubs Group B 18" – 24" Gr. B Cont.			60
	Juniperus 'Blueberry Delight' (B.D. Shore Juniper)		30	
	Juniperus 'Bar Harbor' *B.H.* Native juniper		30	
621.51	Deciduous Shrubs Gr. A 15" – 18" Cont.	Ea.		12
	Potentilla 'Buttercup'		6	
	Spiraea japonica 'Little Princess'		6	
621.54	Deciduous Shrubs Gr. A Cont. 18" – 24"	Ea.		30
	Rosa rugose (Beach Rose)		30	
621.546	Deciduous Shrubs Gr. A Cont. 2' – 3'	Ea.		20
	Myrica pensylvanica (Bayberry)		20	
621.552	Deciduous Shrubs Gr.A 3' – 4' Cont.	Ea.		42
	Forsythia suspensa (Weeping Forsythia)		36	
	Syringa x. hybrid 'President Lincoln'(Hybrid Lilac)		6	
621.711	Herbaceous Perennials Group A 1 gal. Cont.	Ea.		60
	Hemerocallis flava (Native Yellow Daylily)		24	
	Iberis sempervirens (Candytuft)		12	
	Lavandula 'Hidcote' (Perennial Lavendar)		12	
	Nepeta fascinii 'Walker's Low' (Catmint)		12	

SPECIAL PROVISION
SECTION 627
PAVEMENT MARKINGS

627.04 General. The subsection is revised by the addition of the following:

Add: "Temporary pavement marking lines - center lines, shall be painted on all matched pavement within one week.

Temporary pavement marking lines - edge lines, shall be painted on all pavement layers within four weeks.

All Temporary pavement marking lines shall be painted prior to final striping.

Multilane sections, truck lanes, and milled surfaces shall have temporary pavement marking lines striped daily on all matched pavement layers.

Temporary Object Markers, TOMs, shall be used on all pavement layers until temporary pavement marking lines are applied.

TOMs, shall be removed prior to final striping.

TOMs, removal shall be addressed in the Traffic Control Plan."

627.09 Method of Measurement. The Subsection is revised by the deletion of and replacement with the following:

Delete: "Temporary pavement marking lines shall be measured as one lump sum for work accepted."

And replace with: "Temporary pavement marking lines shall be measured by the number of feet for work accepted."

627.10 Basis of Payment. The last paragraph is amended as follows:

Remove the following: "The accepted quantity of temporary pavement marking lines will be paid for at the contract lump sum price and will include as many applications as required and removal when required."

And replace with: "The accepted quantity of temporary pavement marking lines will be paid for at the contract unit price bid, per linear foot of temporary pavement markings installed and approved.

Temporary Object Markers, TOMs, will be considered incidental to Item No. 627.78.

Once Construction is Complete: Maintenance of Traffic Control Devices (652.36) will not be paid while waiting to final stripe. Liquidated Damages will not be charged while waiting to final stripe."

Pay Item		Pay Unit
627.733	4" White or Yellow Painted Pavement Marking Line	LF
627.78	Temporary 4" Paint Pavement marking Line W Or Y	LF

Wiscasset
WIN 21843.00
March 12, 2018

SPECIAL PROVISIONS
SECTION 634
HIGHWAY LIGHTING
(Ornamental Lighting)

Description. The Contractor shall furnish and install all materials and equipment required for complete, functioning and accepted ornamental light standards with post-top light emitting diode luminaires and for ornamental lighted bollards, as shown on the plans and as directed.

General. Ornamental light standards with LED luminaires for highway lighting and sidewalk lighting on this project and ornamental lighted bollards with metal halide fixtures for sidewalk lighting shall be as manufactured by Holophane Lighting and specified on the plans and in this special provision. Contact:

Acuity Brands Lighting, Inc.
Northeast Sales Support Team
Attention: Jim Bailey
West Gardiner, Maine 04345
Tel.: 1-207-582-5106
E-mail: JBailey@holophane.com

All materials and installation requirements for Ornamental Lighting and Ornamental Lighted Bollard shall comply with Section 634 of the Standard Specifications except as modified on the project plans or in this Special Provision.

Method of Measurement. Ornamental Lighting and Ornamental Lighted Bollard, satisfactorily installed and accepted, will be measured for payment by the single unit each.

Basis of Payment. The accepted quantity of Ornamental Lighting and Ornamental Lighted Bollard will be paid for at the contract unit price each. Payment for each unit of Ornamental Lighting shall be full compensation for the ornamental light standard, ornamental pole base, ornamental fixture housing, light emitting diode luminaire fixture, accessories specified on the plans, and incidentals necessary for installation of the pole and fixture. Payment for each unit of Ornamental Lighted Bollard shall be full compensation for the ornamental bollard stem, metal halide fixture, reflector, lens, dome top, and incidentals necessary for installation of the bollard and fixture. Conduit for power to Ornamental Lighting and Ornamental Lighted Bollard, foundations, and junction boxes will be paid separately under applicable Section 626 pay items of the contract. All other work and materials necessary to provide the highway and sidewalk lighting system shown on the plans will be paid by lump sum payment under Item 634.160 Highway Lighting.

Payment will be made under:

Pay Item		Pay Unit
634.70	Ornamental Lighting	Each
634.701	Ornamental Lighted Bollard	Each

Highway Lighting Quality Control Checklist

Subsection 634.09 Field Testing

Project Pin # _____

Location (if multiple services, please be specific)- _____

Grounding Electrode Resistance at service _____

Number of Circuits _____

Hand-Off-Auto Switch? _____

Circuit #1

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

Circuit #2

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

I, _____, certify that this work was done in accordance with subsection 643.14 and current NEC _____ guidelines, and when tested, was functioning as intended.

(YEAR)

Electrician's Signature _____

Electrician's License # _____

Highway Lighting Quality Control Checklist

Subsection 634.09 Field Testing

Project Pin # _____

Location (if multiple services, please be specific)- _____

Grounding Electrode Resistance at service _____

Number of Circuits _____

Hand-Off-Auto Switch? _____

Circuit #3

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

Circuit #4

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

I, _____, certify that this work was done in accordance with subsection 643.14 and current NEC _____ guidelines, and when tested, was functioning as intended.

(YEAR)

Electrician's Signature _____

Electrician's License # _____

Traffic Signal Quality Control Checklist

Subsection 643.14 Field Testing

Project Pin # ______________________

Grounding Electrode Resistance at service ______________________

ID tags on loop amps / detector cards? ______________________

Location ______________________

Street Approach ______________________
Loop # ________ **Resistance** ________
Phase # ________ **Meg to ground** ________
L,C, or R Lane ________ **Amount of bondo covering loop** ________
Pulse or Presence ________

Street Approach ______________________
Loop # ________ **Resistance** ________
Phase # ________ **Meg to ground** ________
L,C, or R Lane ________ **Amount of bondo covering loop** ________
Pulse or Presence ________

Street Approach ______________________
Loop # ________ **Resistance** ________
Phase # ________ **Meg to ground** ________
L,C, or R Lane ________ **Amount of bondo covering loop** ________
Pulse or Presence ________

I, ______________________, certify that this work was done in accordance with subsection 643.14 and current NEC ______________ (YEAR) guidelines, and when tested, was functioning as intended.

Electrician's Signature ______________________

Electricain's License # ______________________

SPECIAL PROVISION
SECTION 643
TRAFFIC SIGNALS

The provisions of Section 643 of the Standard Specifications shall apply with the following additions and modifications:

643.01 Description The project will result in the provision of traffic control signals and pedestrian crossing system within the Town of Wiscasset. Equipment includes, but is not limited to traffic cabinet, controllers, malfunction monitor unit, ornamental mast arm poles, ornamental pedestal poles, vehicular and pedestrian signal heads with countdown timers, retroreflective backplates, astro-brackets, accessible pedestrian signal (APS) buttons, wiring, signal cable, overhead mast arm mounted signs (subsidiary to Traffic Signals), thermal based vehicle and bike detection, emergency vehicle preemption, railroad preemption connection and all appurtenances and incidentals required for complete functioning installations. In addition, the project will provide the means for remote communications to the traffic signals by cellular modem with cloud-based system functionality.

All traffic signal controller timing parameters shall be programmed to provide optimized free on-demand operations. Traffic signals shall not be placed into colors until functionality for railroad preemption has been connected, tested, and accepted by MaineDOT.

643.0211 Additional Materials Materials shall also meet the requirements in the following Special Provision to Section of Division 700 - Materials:

Traffic Signal Control System	718.13
Emergency Vehicle Preemption System	718.14
Pedestrian Crossing System	718.15
Structural Supports for Traffic Signals (Ornamental)	720.01 c1, 720.03 a1, & 720.04 a1

643.12 Painting Unless otherwise directed by the MaineDOT through the Resident Engineer, all exterior parts of the listed equipment shall be delivered to the project finished as follows:

Vehicular Signal Heads – all parts black.
Pedestrian Signal Heads – all parts black.
Signal Backplates – black and louvered w/ fluorescent yellow retroreflective strip.
Controller Cabinets – black / aluminum.
Ornamental Mast Arms, Uprights, and Bases – black / galvanized steel.
Ornamental Pedestal Posts and Bases – black / aluminum.

643.19 Basis of Payment Traffic signals (Item 643.80) will be paid for at the contract lump sum price, which payment will be full compensation for furnishing and installing all materials, including, but not limited to controller, malfunction monitor units, vehicular and pedestrian signal heads with countdown timers, retroreflective backplates, cabinets, generator transfer switches, astro-brackets, APS buttons, wiring, signal cable, LED lamps, overhead mast arm mounted signs

(in accordance with Section 645 and 719 but paid as subsidiary to 643.80), and all appurtenances and incidentals required for complete functioning installations and for furnishing all tools and labor necessary for completing the installations.

The on-street high intensity light based fire pre-emption system (see Special Provision 718.14 of Division 700 – Materials for more information) will be paid for under pay item 643.80 traffic signals, which price will be full compensation for furnishing and installing all materials, appurtenances, and incidentals required for a complete functioning installation and for furnishing all tools and labor necessary for completing the installation.

Connections to the railroad pre-emption system will be paid for under pay item 643.80 traffic signals, which price will be full compensation for furnishing and installing all materials, appurtenances, and incidentals required for a complete functioning installation and for furnishing all tools and labor necessary for completing the installation.

The cloud-based traffic signal control system (Item 643.81) will be paid for at the contract lump sum price, which payment will be full compensation for furnishing and installing all materials, including, but not limited to supervisory cloud-based software installation, control cabinet switches for cloud based monitoring and adjustment, training, and all appurtenances and incidentals required for a complete functioning installation with remote access by MaineDOT personnel and the Engineer. See Special Provision 718.13 of Division 700 – Materials for more information. In addition, payment for signal system start-up, system loading and acceptance testing shall be considered incidental to the traffic signal control system.

Video detection system (Item 643.83) will be paid for at the contract lump sum price combined for both intersections, which payment will be full compensation for furnishing and installing all materials, including, but not limited to thermal-based spectrum camera units, video detector rack, video processing unit (for vehicle and bike detection), ancillary interface boards and cabling, and all appurtenances and incidentals required for a complete functioning installation with abilities for remote monitoring and adjustment.

Mast Arms (Item 643.91) will be paid for at the contract unit price each which payment shall be full compensation for furnishing and installing all black ornamental mast arms, uprights, and bases, anchor bolts to be supplied by the manufacturer of the mast arm poles, ancillary materials, tools and labor necessary to erect and install the structures.

Pedestal poles (Item 643.92) will be paid for at the contract unit price each which payment shall be full compensation for furnishing and installing all ornamental pedestal posts and bases, ancillary materials, tools and labor necessary to erect and install the structures.

Payment will be made under the following:

Pay Item	Pay Unit
643.80 TRAFFIC SIGNAL: US 1 @ WATER/MIDDLE ST	LS
643.81 TRAFFIC CONTROL SYSTEM: CLOUD-BASED	LS
643.83 VIDEO DETECTION SYSTEM: US 1 @ WATER/MIDDLE ST	LS

SPECIAL PROVISION
SECTION 643
TRAFFIC SIGNALS

Under 643.023 Design and Fabrication, add the following to the end of the first paragraph:

Cantilevered signal support structures with mast arms shall be classified as Fatigue Category III with Fatigue Importance Factors (I_f) of 0.59 for Natural Wind Gusts and 0.68 for Truck-Induced Gusts unless specified otherwise on the contract plans.

If Category II is specified on the contract plans, the Fatigue Importance Factors (I_f) shall be 0.80 for Natural Wind Gusts and 0.84 for Truck-Induced Gusts. If Category I is specified on the contract plans, the Fatigue Importance Factors (I_f) shall be 1.0 for Natural Wind Gusts and 1.0 for Truck-Induced Gusts.

Designing for fatigue induced by Galloping or Vortex Shedding is not required for traffic signal structures with mast or bracket arms.

643.09 Service Connection, add the following after the last paragraph:

"All meter mounting devices shall be installed so that the meters will be upright (plumb). They shall be installed with the top of the meter not less than 1.2 M [48 in] nor more than 1.5 M [60 in] from the floor to the final grade. Exceptions to this height requirement will be made where special permission has been given to install group or modular metering, overall metering enclosures, or pole-mounted meters. Level grade shall be maintained for a minimum of 1.0 M [3 ft] in front of the meter enclosure to provide a safe working space. In order to meet this requirement on uneven terrain, as an option, the Contractor may install a pressure-treated wood platform.

For any non-residential (industrial or commercial) self-contained meter socket the by-pass requirements are single phase, 100 or 150 amp, single handle lever operated.

The Contractor shall meet all requirements and regulations of Utility Companies when installing equipment on their poles and for the service connection. It is the responsibility of the Contractor to contact the appropriate Utility to determine their specific requirements."

SPECIAL PROVISION
SECTION 645
HIGHWAY SIGNING

The provisions of Section 645 of the Standard Specifications shall apply with the following additions and modifications:

645.01 Description This work shall also consist of furnishing and installing new flashing warning signs and LED blank-out signs, overhead mounted in accordance with these specifications and in reasonably close conformity with the plans.

645.0211 Flashing Warning Sign The flashing warning signs shall be made of 0.080 inch sheet aluminum with Type IX or XI microprismatic retroreflective sheeting. The sign shall include the MUTCD W11-2 legend (Pedestrian Warning Sign) in non-reflective black sheeting on a fluorescent yellow-green retroreflective background. The sign shall include a series of not less than eight high intensity amber or white LED lights within the border of the sign. LEDs shall be spaced at a rate of at least 25 percent of the sign perimeter dimension. The LEDs shall be dimmable to adjust the LED brightness in accordance with ambient light conditions.

645.0212 LED Blank-Out Sign The LED blank-out signs shall be contained within an aluminum housing with a black powder coat finish. The housing shall be weatherproof conforming to NEMA 3R. Message shall be MUTCD R10-15 (Turning Vehicles Yield to Pedestrians) sign with arrows as shown in the Plans. Message legend and symbols shall be made up of discrete LEDs with a maximum pitch of 20 mm to cover the stroke width of the letters or symbol that simulate the static sign legend per the MUTCD. LED colors shall substantially conform to the color of the legend and symbols of the standard MUTCD sign. The LEDs shall be dimmable to adjust the LED brightness in accordance with ambient light conditions.

645.065 Installation of Flashing Warning Signs Flashing warning signs shall be installed in conformance with the current MUTCD. LEDs shall flash in unison, at a rate of more than 50 and less than 120 times per minute upon pedestrian button actuation with button locations meeting ADA requirements. Upon any actuation, the LEDs shall flash simultaneously on signs facing both directions of traffic and on each side of the street.

The control cabinet should be positioned on the side of the pole farthest from traffic as indicated in the Plans. The control cabinet shall be manufactured from steel or aluminum.

Connections to service shall be in accordance with section 643.09.

All exposed wiring shall be in accordance with section 715.11. All wiring shall be in accordance with section 718.01-c.

645.066 Installation of LED Blank-Out Signs LED blank-out signs shall be designed for overhead mounting on a horizontal mast arm. Signs shall be actuated in sequence from control logic provided at the traffic signal controller. Actuations shall turn the sign on; absence of actuation shall cause the sign to remain unlit.

All exposed wiring shall be in accordance with section 715.11. All wiring shall be in accordance with section 718.01-c.

645.08 Method of Measurement

Flashing Warning Signs will be measured by each unit sign, complete in place and accepted.

LED Blank-Out Signs, Overhead Mounted will be measured by each unit sign complete in place and accepted.

645.09 Basis of Payment

Flashing Warning Signs (Item 645.511) will be paid for at the contract unit price each which payment shall be full compensation for furnishing and installing all materials, including but not limited to the LED embedded signs, their control hardware, and all appurtenances and incidentals required for a complete and functional installation and for furnishing all tools and labor necessary for completing the installation.

LED Blank-Out Sign, Overhead Mounted (Item 645.512) will be paid for at the contract unit price each which payment shall be full compensation for furnishing and installing all materials, tools and labor necessary to erect and install the signs.

Payment will be made under the following:

Pay Item		Pay Unit
645.511	Flashing Warning Sign	Each
645.512	LED Blank-Out Sign, Overhead Mounted	Each

SPECIAL PROVISION
SECTION 645
HIGHWAY SIGNING

The provisions of Section 645 of the Standard Specifications shall apply with the following additions and modifications:

645.01 Description This work shall consist of furnishing and installing new business directional signs in accordance with the Town of Wiscasset Sign Ordinance and these specifications and in reasonably close conformity with the plans.

645.022 Sign Layout Drawings The Contractor shall submit four (4) sets of sign-face, layout-detail and scale drawings of the business directional signs. The drawings shall contain complete detailed information and dimensions that conform to the Town of Wiscasset Ordinances-Article III Sign Ordinance. One set of sign-face layout-detail and scale drawings of the business directional signs shall be provided to the Town of Wiscasset Sign Control Officer for courtesy review a minimum of two weeks prior to fabrication.

645.03 Classification of Signs

e. Business directional signs shall consist of sign panels constructed of ½ inch or ¾ inch overlaid plywood installed in accordance with the Town of Wiscasset Sign Ordinance and Title 23 MRSA Section 1901-1925.

645.043 Fabrication of Business Directional Signs

a. Panels Business directional sign panels shall be shop fabricated to 31 inches long by 7 inches wide including a top and bottom frame as shown on the plans. Panels shall be made from high-density, overlaid plywood. All fabrication, cutting, drilling and edge routing shall be completed prior to painting and application of the text. Panels shall be cut to size and shall be free of warping, open checks, open splits, open joints, open cracks, loose knots and any other defects resulting from fabrication. Corners shall be left square. The panel surfaces shall be flat. Panel faces that will not have text applied shall be painted with an exterior grade dark paint in accordance with the Town Sign Ordinance.

b. Text The design of the letters, numerals, and symbols for business directional signs shall be a minimum of one inch tall and a maximum of two inches tall in Block, Roman, or Old English font. All text shall be pre-cut, non-reflective black legend on a non-reflective white background. Other text applications methods may be submitted for review by the Town of Wiscasset Sign Control Officer.

645.0611 Installation of Business Directional Signs

Sign locations shall be staked out and approved by the Resident prior to installation of any sign supports. The exact sign locations will be determined in the field. Signs stockpiled prior to erection shall be stored in a vertical position and completely protected from damage to avoid staining, weathering, scratches, cuts, or dirt accumulation.

a. Sign Supports for Business Directional Signs Support posts for business directional signs shall be 4 inch by 4 inch wood posts for sign installations of less than 9 ft^2, 4 inch by 6 inch wood posts for sign installations of area 9 ft^2 to 16 ft^2, and 6 inch by 6 inch wood posts for sign installations of area over 16 ft^2. Wood posts shall be set to a depth of 4 feet. All wood posts with at least one dimension of 6 inches nominal shall be drilled to make the post breakaway in accordance with Section 720.12. Posts shall be set plumb and straight. Backfilling around the posts shall be with excavated material unless the excavated material is considered unsatisfactory, in which case the backfill shall be granular material conforming to Section 703.19 – Granular Borrow.

b. Mounting Business directional signs shall be mounted using assembly hardware specified in Section 719.07. For sign installations containing less than seven signs, the minimum mounting height above grade shall be 7 feet. For sign installations containing seven or more signs, the minimum mounting height shall be 6 feet. Signs mounted back-to-back shall be considered two signs.

645.08 Method of Measurement

The area of business directional signs will be measured by the area in square feet of each panel, computed to the nearest hundredth of a square foot, as determined by the overall height multiplied by the overall width.

645.09 Basis of Payment

The accepted business directional signs will be paid for at the contract unit price per square foot for Item 645.271 Regulatory, Warning, Confirmation and Route Assembly Signs, Type I. Such payment will be full compensation for furnishing and installing signs, sign supports, backfill, assembly hardware, and all incidentals necessary to complete the work.

SPECIAL PROVISION
SECTION 648
RECONSTRUCT GRADE CROSSING

Description:

This work shall consist of all labor, equipment, and materials required to remove the existing crossing and fabricate and install a new crossing panel at the intersection of Route 1 and the Rockland Branch. The crossing panel shall conform to and be installed, as detailed in this specification, to the lines, grades, and location as shown on plans or as authorized by the Resident. Work under this item shall also consist of any tamping, lining and surfacing specified by the Contract Plans and described in this specification

Materials:

Material shall meet the requirements of the following sections of Division 600, Miscellaneous Construction , and 700, Materials:

Underdrain Type B	605.03
Stone Ballast	703.33
Non-metallic conduit	715.03
Drainage geotextile	722.0

The Department shall provide all ties, double shoulder tie plates, spikes, rail anchors, insulated joint bars, weld kits, other track material (OTM), and 3-80’ section of 115 lb. rail required for the fabrication of the new 120 foot crossing panel

Procedures and Tolerances:

The Contractor shall remove the existing crossing panel between locations marked by the Department representative at each end. Removal shall include all track, OTM, and ties. The ground surface shall be brought to subgrade elevation 18 inches below finished grade for a width of 12 feet over the entire length of the crossing panel. Place geotextile, 4” schedule 80 conduit and underdrain type B prior to installation and compaction of stone ballast to an elevation of the bottom of new ties. Place the new crossing panel , bolting each end to the existing rail with insulated joint bars. Proceed to bring the crossing panel to finish grade by tamping, aligning and surfacing. Install new rail seal and repave crossing.

The crossing panel shall be built utilizing material provided by the Department. Ties shall be placed at 18 inches on center and track shall be spiked to standard gauge 56 ½ inches and checked with a standard track gauge. The Crossing shall be fabricated and installed in accordance with American Railway Engineering and Maintenance-of-Way Association (Chapter 5 Part 8 Highway/Railway Grade Crossings).

Method of Measurement:

Crossing Panel Replacement shall be measured as one lump sum unit, complete in place and accepted.

consisting of all removal, excavation, fabrication, installation, tamping, aligning and surfacing. The removal and reinstallation of the existing highway appurtenances to facilitate the work associated with the crossing panel will not be measured for payments, but will be considered incidental to the work under this specification.

Basis of Payment:

Crossing Panel Replacement will be paid for at the contract lump sum price which shall be full compensation for all materials, equipment, labor and incidentals necessary for dismantling the existing crossing and fabrication and installation of the new crossing in accordance with these specifications. The existing crossing panel components shall be the property of the contractor. No additional payment shall be made for removal and disposal of the existing crossing panel.

Pay Item		Pay Unit
648.5205	Reconstruct Grade Crossing	LS

February 4, 2011
Supersedes February 27, 2003

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC

Approaches Approach signing shall include the following signs as 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
End Road Work

Work Area At each work site, signs and channelizing devices shall be used as directed by the Resident. Signs include:

Road Work xxxx [1]
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.

The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 800 m [2,500 ft] at each work area. To encourage quality paving in warm-weather conditions, the length can be extended to 4,000 ft depending on the traffic impacts. Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 1.6 km [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.

[1] "Road Work Ahead" to be used in mobile operations and "Road Work xx ft" to be used in stationary operations as directed by the Resident.

SPECIAL PROVISION
SECTION 718
TRAFFIC SIGNALS MATERIAL

The provisions of Section 718 of the Standard Specifications shall apply with the following additions and modifications:

718.13 Traffic Signal Control System The traffic signal control system modifications shall meet the following minimum performance standards:

a. General The system must satisfy the following basic requirements:

1. The control system must be able to communicate with Ethernet based traffic controllers and provide multiple signal grouping operation.

2. All communications between a cloud based system and the local controllers shall comply with NTCIP protocol.

3. Cloud based signal system software shall be configured to communicate directly to NEMA TS2 Type 1 controllers. Remote interface units are unacceptable. The system shall provide a continuous once per second or less monitoring of all controllers.

4. The Wiscasset traffic signals must be able to be accessed remotely through a secure internet connection via web interface hardware and/or software.

5. Video detectors shall provide feedback of the video images for display via the cloud based interface. The display is to be both Microsoft Explorer hyperlink based and through compatible video detection software (Traficam PC or Traficon Configuration Tool as an example) to view live video detection returns.

6. The system shall be set up to remotely contact an individual or a group of users via email of user defined alarms. User defined alarms will be assigned during training (see d. Training).

b. Functional Requirements The system shall satisfy the following functional requirements:

- Timing plan data shall be stored locally at the intersection and selected in the time of day and manual modes based on local or remote commands.

- The Contractor shall produce computer graphic representations of the intersections for the purposes of monitoring system status. The Contractor shall also load them into the Central computer station as applicable and included in this project. When instructed by the computer operator, the computer graphic maps shall be linked to on-street or virtual masters or local controller units, and allow for a dynamic representation of

system status for the operator. Project plans may be used as the paper base for the maps.

- At a minimum, the maps shall contain the following information:

Intersection Maps:

- Graphical representation of the intersection (scaled maps are not required)
- Intersection ID
- Municipality (Town of Wiscasset)
- Street Names
- System Name
- North Arrow
- Lane Configuration
- Real Time Signal Display Status; Vehicle and Pedestrian
- Vehicle and System Detector Per Phase Call Status
- System Parameters Status (Cycle, Split, Offset)
- Intersection Operational Status (Flash, Coordinated, Free, On-line, Preemption)
- Controller Cabinet Location (static)
- Time/Date

System Map:

- Graphical representation of the system showing all inter-sections within the Subsystem (scaled maps are not required)
- Municipality (Town of Wiscasset)
- Street Names
- Subsystem Number, if applicable
- North Arrow
- Coordinated Phase Green at Each Location
- System Parameters Status (Cycle, Split, Offset)
- Intersection Operational Status (Flash, Coordinated, Free, On-line, Preemption)

c. Technical Support Telephone technical support shall be provided free for the life of the system. Support must be available Monday through Friday, during normal business hours of the manufacturer. Local technical support must be available for a period of three months after the "System Startup" project phase is completed.

d. Training The Contractor shall provide at a minimum two days of hands-on training class, which covers general operations and maintenance of the traffic signals. The training shall be designed for MaineDOT personnel and any other operators and technicians who may use and monitor the system. The Contractor should budget for up to 6 attendees. Training documentations shall include operating manuals for all system equipment and components (see Section e, Manuals/Documentation, for requirements). Documentation shall also be provided, explaining the operation of all cloud based system features. A quick start guide shall be provided which covers the operations of the basic system features for occasional users. Hard

copies of all handouts used during training shall be distributed. The Supplier is expected to present clear and organized instruction. The initial training shall consist minimally of the following:

- System operation, system performance analysis, and revision of system operating parameters based on the analysis.
- Explanation of the communication system and cloud based interface.
- How to enter commands.
- Operation of all devices.
- Generation and editing of intersection controllers.
- Uploading/downloading of intersection controller databases.
- Procedure for enabling dynamic displays.
- Basic troubleshooting procedures to isolate malfunctions.

A course syllabus for each proposed training day for approval by the Engineer at least 7 business days prior to the scheduled course. Each syllabus shall include a description of the topics covered, the level of detail to be covered in the class, and the number of teaching hours included in the class. The Supplier shall also supply a list of equipment, software, and manuals to be provided for the training at least 5 business days prior to the scheduled course. All training classes shall make use of the system data collected during the Start-up Phase of the project.

e. Manuals / Documentation Operating manuals shall be supplied for all equipment and components of the system. Hard copies of all training handouts and operational manuals shall also be supplied. Each set of operating manuals shall provide all necessary instructions for day-to-day use of the system by the end user. The manuals shall contain, as a minimum, the following information:

- Table of Contents
- System Overview (to include operation of all system features).
- Complete step-by-step instructions for performing each available function with sample screens, sample reports, and examples.
- Quick Start Guide with instructions for performing the basic and common functions.
- Updated manuals and system documentation must be provided as part of any system upgrade received by the Town of Wiscasset.

The controller cabinet shall contain a door sticker with laminated chart showing intersection layout and detection information. A print of the as-built intersection plan would be acceptable. The cabinet shall additionally be provided with operating manuals.

f. Acceptance Testing It is expected that the completed signal system shall operate fully functional at central control and at the remote locations for a period of 30 consecutive days without malfunction. Minor malfunctions of inoperability not the fault of the Supplier, as judged by the Engineer, are not included in the 30-day period. If the system fails to operate

as intended by this specification or the Supplier's claims, the malfunction shall be corrected by the Supplier at its cost and a new 30- day testing period shall begin. This process shall continue until a completely operable system is demonstrated for a consecutive 30-day period.

Acceptance testing must demonstrate to the Engineer's reasonable satisfaction that the hardware and licensed software function in accordance with the specifications, requirements, through-puts, functionalities, performance criteria or other benefits stated in documentation, promotional materials, proposals, and/or demonstrations given to the MaineDOT and the Town of Wiscasset.

g. System Maintenance The system must come with a minimum five (5) year software maintenance agreement to become effective when the proposed system has been accepted, in writing, by the MaineDOT.

Software updates shall be provided free of charge for at least five (5) years from date of system acceptance. Software corrections or required modifications for proper system operation per these specifications shall be furnished to the MaineDOT at no additional cost during the warranty period.

Hardware equipment shall be warranted for three years, effective when the installed and functional system has been accepted in writing by the MaineDOT.

Third party hardware and software licenses and warranties shall be passed to the MaineDOT.

h. License Agreement The supplier of any traffic signal software and other associated software shall provide a software license to the MaineDOT. If additional systems are installed and connected, any additional software licenses required shall be at the same cost as the remote licenses furnished for the initial project. Suppliers shall attach a copy of its standard Software License Agreement (SLA). The SLA, as negotiated, shall be made a part of the final equipment ordering contract. The licensing arrangement must address access to the system by agencies other than the MaineDOT.

The supplier shall carry out no work that will infringe on the licensing of third party hardware and software.

718.14 Emergency Vehicle Preemption System The emergency vehicle preemption systems shall be installed in the same cabinets as the controllers.

The emergency vehicle preemption control systems shall consist of a data-encoded phase selector to be installed within the traffic control cabinet. The unit will serve to validate, identify, classify, and record the signal from the optical detectors located on support structures at the intersections. Upon receiving a valid signal from the detectors, the phase selectors shall generate a preempt call to the controllers initiating preemption operations as shown on the plans. The phase selectors shall have full ID and logging capabilities and be a rack-mounted plug-in four channel, dual priority devices. The phase selectors shall plug into shelf-mounted single card chasses. Programming the phase selectors shall be via a PC-based computer utilizing unit specific software. One copy of the software, shall be supplied and licensed to the Town of Wiscasset. A hard copy of final programming data shall be left in the control cabinets. The Contractor shall supply a complete set of interface cables for phase selector to laptop connection in each controller cabinet. The phase selectors shall be connected to the Ethernet Switch in each cabinet, as shown in the Plans, such that the phase selector logs and configuration can be remotely accessed through the communications system. The Contractor shall supply and install any required converters, such as device servers or other devices, to interface the phase selector to the Ethernet switch in each cabinet. The Contractor shall also supply any required cables.

The optical detectors shall be single input, single output units used to control one approach. All traffic signal installations shall be supplied with a single optical detector for each approach to the intersection unless otherwise noted in the major items list or as shown on the plans.

The Contractor shall install the quantity of confirmation strobes at each traffic signal location as shown in the plans or as directed by the Engineer. The confirmation strobe shall serve to validate to the driver of the emergency vehicle that the traffic signal has recognized the preemption call and will initiate the proper preemption sequence. The confirmation strobe shall be illuminated whenever any emergency vehicle preemption green is on. The confirmation strobe shall be a red lens Whelan model 1500 or approved equivalent.

The Contractor shall be responsible for the proper programming of the phase selector, orientation of the optical detectors, and all other work necessary to provide a complete and operating emergency vehicle preemption system. The Contractor may be required to field adjust the location of the optical detectors in the presence of the Engineer, and the Town of Wiscasset Fire Department to properly detect preemption calls from approaching vehicles.

The emergency vehicle preemption installed under this project shall be functionally compatible with the proposed cloud based signal control system and allow remote access to the phase selectors.

718.15 Pedestrian Crossing System Pedestrian crossings must have 16-inch by 18-inch countdown pedestrian signals that count down during the pedestrian clearance interval. The pedestrian countdown modules shall be GE Lumination GT1 Series in 16 inch – McCain Model 1000 Series (black finish) housings or approved equal.

The Accessible Pedestrian Signal (APS) push buttons with locator tones shall be at a minimum Campbell Company Advisor Model A915 or approved equal. Signs shall be posted at each audible signal push button stating which street may be crossed based upon the related push button.

As all accessible pedestrian signals are proposed to be separated by a distance of at least 10 feet and in accordance with Section 4E.11.07 of the Manual on Uniform Traffic Control Devices (MUTCD), the audible walk indication shall be a percussive tone. When using Campbell buttons, MaineDOT has selected “Perc EW 30” for east/west concurrent PED crossings and “Perc NS 70” for north/south PED crossings.

All controllers are initially to have “Stop in Walk” set “On.”

SPECIAL PROVISION
SECTION 720
STRUCTURAL SUPPORTS FOR TRAFFIC SIGNALS

The provisions of Section 720 of the Standard Specifications shall apply with the following additions and modifications:

720.01 Aluminum Supports The supports for pedestrian signal heads and Accessible Pedestrian Signal (APS) buttons shall be modified as follows:

Delete reference to round poles and transformer type bases.

c1. Pedestal Poles The pedestal pole supports and bases shall be Holophase SiteLink SL5 (L5J) fluted shafts 8' or 10' in height per design plans, with 'North Yorkshire' aluminum bases. Bases are to be 25-inches high and 17-inches in diameter. SiteLink shafts and structural bases all shall be colored black. Non-Holophase SiteLink poles and bases may be accepted as an equal as long as the ornamental fabrication matches the black SL5 (L5J) fluted design and North Yorkshire architecture.

720.03 Steel Supports The supports for the ornamental mast arm pole (upright) shall be modified as follows:

Delete reference to round shafts.

a1. Mast Arm Poles The mast arm pole upright shall be Valmont galvanized steel semi-gloss black powder coated 16-flat flute with Enduro 'Huntington' (aluminum) base. Non-Valmont manufactured poles may be accepted as an equal as long as the ornamental fabrication matches the (Valmont) black Huntington design.

720.04 Steel Mast Arm The mast arm for overhead signal heads, lane use signs, and ancillary signal equipment shall be modified as follows:

Delete reference to round member.

a1. Mast Arms for Signals The mast arms shall be Valmont galvanized steel semi-gloss black powder coated 16-flat flute at the length specified on the plans. Non-Valmont manufactured poles may be accepted as an equal as long as the ornamental fabrication matches the ornamental steel upright.

SPECIAL PROVISION
SECTION 801
SANITARY SEWER

Description This work shall consist of constructing cellar drain inspection standpipes, in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans and as directed by the resident in the field.

Materials Meet Sections:

Sewer Line Bedding and Initial Backfilling	703.02 for class AA
Stone PVC Pipes & Fittings 4 in.	ASTM D3034 (SDR 35)

Construction Requirements

Excavation Trenches shall be excavated in accordance with the requirements of Section 206 - Structural Excavation and wide enough to allow joining the pipe and compacting the bedding and backfill material under and around the pipe. Unless otherwise designated, trench walls shall be as nearly vertical as possible and the trench width no greater than necessary for installation of the pipe.

Bedding The inspection standpipe and pipe line shall be bedded in original material.

Laying The Contractor shall not install nor backfill cellar drain inspection standpipes between December 15th and April 1st without written permission. Installing shall begin at the downhill end of the cellar drain line. Bell or groove ends shall be placed facing uphill.

Joining The pipe ends shall be thoroughly cleaned before the joint is made. Joints shall be made in accordance with the manufacturer's recommended procedures.

Backfilling After the inspection standpipe and pipe are installed, it will be inspected before any backfill material is placed. All pipe found to be out of alignment, unduly settled or damaged to the extent that full performance is impaired, shall be taken up and re-laid or replaced. One bag of concrete mix shall be installed around the foot of the standpipe, placement as per manufacturer’s recommendations.

Trenches shall be backfilled in accordance with Section 206.03 and as follows. The backfill shall be original excavation in 12 in. maximum lifts and shall be thoroughly compacted with power tampers or vibratory compactors or other approved equipment or combination of equipment.

Method of Measurement PVC pipe will be measured by the length in feet along the invert, horizontally and vertically, including fittings and caps, laid as directed, complete in place,

and accepted. Pipe laid in excess of the authorized length will not be included. Pipe installed inside a manhole will not be measured for payment.

Basis of Payment The accepted quantities of pipe will be paid for at the contract unit price per meter [linear foot], for the types and sizes specified, complete in place and shall be full compensation for all labor, materials, equipment, excavation, dewatering, bedding, furnishing and installing pipe, removal and disposal of existing pipes, connecting to manholes, connecting to existing cellar drain, concrete footing, backfill, compacting, cleaning, testing, maintaining existing flows, and all other incidental required.

No payment will be made for pipe ordered without written approval of the Resident when such pipe is not required to be installed for completion of the work.

Payment will be made under:

Pay Item		Pay Unit
801.141	4 in. PVC Sanitary Sewer (SDR-35)	Linear Foot
801.16	6 in. PVC Sanitary Sewer (SDR-35)	Linear Foot

Town: **Wiscasset**
Project: **021843.00**
Date: **March 22, 2018**

SPECIAL PROVISION
SECTION 801
SANITARY SEWER

Description: This work shall consist of constructing sewer lines, in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or established.

Materials: Meet Sections:

Sewer Line Bedding and Initial Backfilling Stone	703.02 for class AA
PVC Pipes & Fittings 8 in	ASTM D3034 (SDR 35)

Construction Requirements

Excavation: Trenches shall be excavated in accordance with the requirements of Section 206 - Structural Excavation and wide enough to allow joining the pipe and compacting the bedding and backfill material under and around the pipe. Unless otherwise designated, trench walls shall be as nearly vertical as possible and the trench width no greater than necessary for installation of the pipe.

Bedding: The sewer line shall be bedded in 6 in minimum of stone.

Laying: The Contractor shall not install nor backfill sewer pipes between December 15th and April 1st without written permission. Installing shall begin at the downhill end of the sewer line. Bell or groove ends shall be placed facing uphill.

Joining: The pipe ends shall be thoroughly cleaned before the joint is made. Joints shall be made in accordance with the manufacturer's recommended procedures.

Backfilling: After the sewer pipe is installed, it will be inspected before any backfill material is placed. All sewer pipe found to be out of alignment, unduly settled or damaged to the extent that full performance is impaired, shall be taken up and re-laid or replaced.

Trenches shall be backfilled in accordance with Section 206.03 and as follows. The initial layer of backfill material shall cover the pipe by a minimum of 6 in of stone. The remainder of the backfill shall be original excavation in 12 in maximum lifts and shall be thoroughly compacted with power tampers or vibratory compactors or other approved equipment or combination of equipment.

Testing: Deflection tests shall not be performed until at least 30 days after completion of installation and compaction of backfill. The pipe shall be cleaned and inspected for offsets and obstructions before testing.

For all pipes 24 in and smaller, a mandrel shall be pulled through the pipe by hand to ensure the maximum allowable deflections have not been exceeded. The mandrel shall be certified

by the Department prior to use. If the mandrel fails to pass through the pipe, the pipe will be deemed overdeflected.

Any overdeflected pipe shall be uncovered and if not damaged as determined by the Department shall be allowed for reinstallation. Damaged pipe shall not be reinstalled and shall be removed from the work site.

The mandrel shall be a rigid non-adjustable, odd numbered-leg (9 legs minimum) mandrel having an effective length not less than its nominal diameter and having a minimum diameter at any point along the full length as follows:

Nominal Size	Minimum Mandrel Diameter
8 in.	7.48 min.

The completed installed sewer line will be pressure tested using normal approved industry standards.

Method of Measurement: Sanitary sewer pipe will be measured by the length in meter [foot] along the invert including fittings, laid as directed, complete in place, and accepted. Pipe laid in excess of the authorized length will not be included. Pipe installed inside a manhole will not be measured for payment.

Basis of Payment: The accepted quantities of Sanitary sewer pipe will be paid for at the contract unit price per linear foot, for the types and sizes specified, complete in place and shall be full compensation for all labor, materials, equipment, excavation, dewatering, bedding, furnishing and installing pipe, removal and disposal of existing pipes, connecting to manholes, backfill, compacting, cleaning, testing, maintaining existing flows, and all other incidental required.

No payment will be made for pipe ordered without written approval of the Resident when such pipe is not required to be installed for completion of the work.

Payment will be made under:

	Pay Item	Pay Unit
801.17	8 in PVC Sanitary Sewer (SDR-35)	Linear Foot

August 25, 2011

SPECIAL PROVISION
SECTION 803
TEST PITS

Description. This work shall consist of excavating test pits for buried site features. At least 10 CY of material must be excavated to qualify as a test pit. Only one test pit payment per specific site will be made.

Method of Measurement. Test Pits will be measured by the unit each, complete.

Basis of Payment. Payment for test pits shall include clearing, excavation, dewatering, backfill and compaction in locations as shown on the plans or as directed.

Pay Item		Pay Unit
801.03	Test Pits	Each

Town: **Wiscasset**
Project: **021843.00**
Date: **February 28, 2018**

SPECIAL PROVISION
SECTION 812
SEWER MANHOLE

Adjusting Sewer Manhole Frame and Cover to Grade

Description This work shall consist of adjusting sewer manhole frame and cover to grade as indicated in the Bid Book, Plans, or as directed by the Resident.

Adjusting Sewer Manhole shall consist of removing the frame and cover, removing and re-installing concrete rings, and adjusting a manhole frame to the required final grade, slope and height including any temporary lowering for milling and any other adjustments that may be necessary prior to setting the final grade and in accordance with this Section, Standard Specification Section 604 - Manholes, Inlets, and Catch Basins, and Standard Details Section 604.

Method of Adjustment

The Contractor shall saw cut the existing pavement for the patch at least two feet away from the nearest edge of the structure.

The existing sewer frame/cover, and courses of brick shall be removed and structure thoroughly cleaned. The surface between the remaining structure and the new masonry work shall be scarified, washed and cleaned before constructing the new masonry work. Then add new concrete rings as necessary to reset to the new grade using Portland Type II cement mortar, concrete rings or other materials approved by the Resident. Bricks may be used for adjusting and shimming only.

The exterior face of the concrete grade rings and manhole frames shall be protected with by applying 1 heavy coat of asphalt sealant.

Unless otherwise provided, mortar for these structures shall meet the requirements of Section 705.02 – Joint Mortar.

Protection from traffic shall be maintained until the mortar is properly cured.

All HMA for patching around adjusted, altered, or rebuilt utility structures shall meet the gradation requirements of a 9.5 mm or 12.5 mm mixture. The Contractor shall place HMA in lifts of 1” or less, as directed by the resident, and compact the HMA using a minimum of a 150 pound plate compactor. HMA for patching around adjusted, altered, or rebuilt utility structures is considered incidental to the respective pay item for adjust, alter, or rebuild utility structure.

Each manhole that is adjusted shall be cleaned of all accumulated silt, debris and other foreign matter before final acceptance of the work and such cleaning shall be considered incidental to the adjust item.

Manhole frame finish grade tolerance shall be 0" above and ¼" below finished pavement grade.

Method of Measurement Adjusted Sewer manhole will be measured by the unit price each, complete and in place.

Basis of Payment Adjusted Sewer Manhole item shall be full compensation for all equipment, labor, concrete rings, brick and incidental materials (including pavement) necessary to adjust the sewer manhole frame and cover to grade as specified above.

Pay Item		Pay Unit
812.162	Adjusted Sewer Manhole Frame and Cover to Grade	Each

Town: Wiscasset
Project: **021843.00**
Date: **February 26, 2018**

SPECIAL PROVISION
SECTION 823
GATE VALVE BOXES

Description: This work shall consist of the adjustment or installation of gate valve boxes as indicated in the Bid Book or as directed by the Resident.

Gate Valve Box, Adjust to Grade shall consist of adjusting a gate valve box to the required final grade, including any lowering and any other adjustments that may be necessary prior to setting the final grade.

Gate Valve Box, Install Only shall consist of removing an existing gate valve box, installing a replacement gate valve box, and adjusting the replacement gate valve box as specified above.

Material: The municipality or utility company owning or operating the existing water main system will provide all replacement gate valve boxes necessary for the Gate Valve Box, Install Only item. Any gate valve boxes damaged by improper construction methods or handling by the Contractor, as determined by the Department, shall be replaced at the Contractor's expense.

BUY AMERICA

Utility construction work performed as part this federal-aid project is subject to the requirements of Buy America in accordance with Federal Regulation 23 CFR 635.410 Section 1518. Specific requirements are presented in Maine DOT Standard Specification Section 100, Appendix A, Section 3.A., Buy America.

Method of Measurement: Gate Valve Box, Adjust to Grade and Gate Valve Box, Install Only will be measured by the unit each, complete and in place.

Basis of Payment: Payment for Gate Valve Box, Adjust to Grade shall be full compensation for all equipment, labor, and incidental materials necessary to adjust a gate valve box as specified above.

Payment for Gate Valve Box, Install Only shall be full compensation for all equipment, labor, and incidental materials necessary to replace and adjust a gate valve box as specified above.

Pay Item		Pay Unit
823.011	Gate Valve Box, Install Only	Each
823.332	Gate Valve Box, Adjust to Grade	Each

SPECIAL PROVISION
SECTION 841
GRANITE BOLLARDS WITH CHAIN

Description: This work shall consist of furnishing all materials and labor for granite bollards with chain to conform with the plans and as directed by the Resident Engineer.

841.02 Materials: Granite Posts with Chain

Granite posts will be uniform, consistent smooth grained medium gray granite Swenson Woodbury or similar as approved by the Resident. Granite Posts will be 6" x 6" x 6'-0" length thermal finish all surfaces.

Chain will be black powder coated finish over hot dipped galvanized steel, size 3/8" wire diameter 2.24" length x 1.39" (57 mm x 35mm), color to be Jet Black (RAL 9005).
Finish shall be Polyester thermosetting powder coating 2-3 mils typical over hot dip galvanized steel.

Rings to be screw-mounted 2 piece hitching rings Black powder coated ½" diameter, 2 ½" inside diameter, 3 ½" outside diameter. Rings to be furnished and installed properly by factory/quarry supplier, with single or double rings for chain attachment per plan location as directed by the Resident.

841.48 Granite Bollard with Chain:

All posts will be set to true level and plumb dimension per plan and set square and true as directed by the Resident. Excavate to undisturbed or tamped subgrade and backfill in 6" levels tamped 12" all around to 100% compaction with compacted crushed stone to grade to ensure secure finished placement.

Chain installation per plan with appropriate length and dip determined by full links with clean-cut and polished welds retouched with touch-up paint to match chain finish. Installation of chain per plan will be incidental to payment for posts.

Basis of Payment :

All Items described herein are incidental to the following pay item:

Pay Item	Pay Unit
841.48	EA [EACH]

September 06, 2017
Supersedes January 03, 2017

STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:
http://maine.gov/mdot/contractors/publications/standarddetail/

Detail #	Description	Revision Date
501(02)	Pipe Pile Splice	3/05/2015
501(03)	H – Pile Splice	3/05/2015
504(07)	Diaphragm & Crossframe Notes	10/13/2015
505(01)	Shear Connectors	10/24/2016
507(13)	Steel Bridge Railing	6/03/2015
507(14)	Steel Bridge Railing	6/03/2015
507(31)	Barrier – Mounted Steel Bridge	8/06/2015
526(02)	Temporary Concrete Barrier	8/06/2015
652(06)	Construction Signs	10/24/2016
652(12)	Construction Traffic Control	10/24/2016
802(05)	Roadway Culvert End Slope Treatment	1/03/2017
504(10)	Drip Bar Details	9/06/2017

SUPPLEMENTAL SPECIFICATIONS
(Corrections, Additions, & Revisions to Standard Specifications - November 2014)

SECTION 101
CONTRACT INTERPRETATION

101.1 Abbreviations Revise the definition of AWPA to "**American Wood Protection Association**".

101.2 Definitions
Page 1-5 – Remove the definition of Bridge in its entirety and replace with:
"**Bridge A structure that is erected over a depression or an obstruction, such as water, a highway or a railway, and has an opening measured along the centerline of the Roadway of more than 20 feet between: The faces of abutments; spring line of arches; extreme ends of openings of box culverts, pipes or pipe arches; or the extreme ends of openings for multiple box culverts, pipes or pipe arches**."

Page 1-12 – Remove the definition of Large Culvert in its entirety and replace with:
"**Large Culvert Any structure not defined as a Culvert or Bridge that provides a drainage or non-drainage opening under the Roadway or Approaches to the Roadway, with an opening that is 5 feet but less than 10 feet**."

Remove the definition of Minor Span in its entirety and replace with:
"**Minor Span Same definition as Bridge, except having an opening of between 10 feet and 20 feet, inclusive**."

SECTION 103
AWARD AND CONTRACTING

Amend this Section by adding the following:

"103.1a Tie Bids - In the case where two responsive bids from responsible bidders are equal monetarily, the Department shall determine the apparent low bidder by flipping a coin. The coin shall have sides clearly marked as heads and tails. The contractor whose first letter in their official company name that comes first in the alphabet shall be heads.

If there are three bids, each bidder will flip the coin and the bidder with the odd toss will be the winner. (i.e. if the results are two heads and a tails, the bidder who had tails is the winner). For a three way tie, bidders may flip their own coin or have the Contracts Engineer flip for them.

The coin flip will occur at the next bid opening by the Contracts and Specifications Engineer or a designee. The tied bidders may attend the coin flip in person or watch on the internet as they choose."

In 103.3.2 Notice of Determination Revise this section by removing sections A – M and replacing with the following A - K:

(A) Default(s) or termination(s) on past or current Contracts.

(B) Failure on past or current Contracts to pay or settle all bills for labor, Materials or services;
to comply with directives of the Department, to fulfill warranty obligations, or to provide Closeout Documentation.

(C) "Below Standard" performance as determined from the Department's Contractor's Performance Rating process.

(D) Insufficient bonding capability or Inability of the Contractor to obtain or retain performance or Payment Bonds meeting MDOT requirements, or a pattern of unsupported Claims.

(E) Failure to accept an Award of a Contract made by the Department.

(F) Failure to provide information requested by the Department in a timely manner.

(G) Debarment, suspension or a denial of prequalification or 'award of contract' by any federal, State, or local governmental procurement agency or the Contractor's Agreement to refrain from Bidding as part of the settlement with any such agencies or any of the reasons contained in Section 102.02 of the "Rules Regarding Debarment of Contractors", Maine Department of Transportation Register 17-229, Chapter 102 (October 2, 1985).

(H) Failure to demonstrate ability to do work to the satisfaction and at the sole discretion of the Department.

(I) Number of personnel working directly for the Contractor with applicable knowledge and experience is significantly below industry standards.

(J) Safety Record, Environmental Record, Civil Rights or Equal Opportunity Record significantly below industry standards.

(K) Serious misconduct that the Department reasonably determines will substantially and adversely affect the cost, quality or timeliness of Work, or the safety of Workers or the public, any deceptive, evasive or fraudulent statements or omissions contained in the Application, made or omitted at any interview or hearing, or otherwise made to or omitted from the Department; or any other substantial deficiencies in experience or conduct that are clearly below industry standards and that clearly demonstrate in the sole discretion of the Department, that the Contractor is "Not Qualified".

SECTION 104
GENERAL RIGHTS AND RESPONSIBILITES

This Section shall be amended by adding the following two sub-sections:

104.3.8.1 Electronic Payroll Submission **On federally funded projects the prime contractor, all subcontractors, and lower-tier subcontractors will submit their certified payrolls electronically utilizing the Elations system. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at** http://www.maine.gov/mdot/contractors/ **under the "Bidder Info" go to "Electronic Payroll System."**

104.3.8.2 Payment Tracking **On federally funded projects the prime contractor and all subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System**

104.4.10 Coordination of Road Closure / Bridge Closure / Bridge Width Restrictions
Revise the last sentence by adding a period after 'Resident'; remove the "and" after Resident; and adding "**not covered by Pay Items**" between 'costs' and 'will'. So that the last paragraph reads "**All Newspaper notices, radio announcements and any notifications will be subject to the approval of the Resident. All costs not covered by Pay Items will be considered incidental to the Contract**.".

104.5.5 Prompt Payment of Subcontractors Add the following paragraph to this subsection:

C. Payment Tracking Federal Projects **On federally funded projects, the prime contractor, subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System. They will be responsible for entering all payments to all sub and lower tier contractors. MaineDOT will run a query monthly to ensure that contractors are complying and generate an e-mail to contractors who have not responded to confirm receipt of MaineDOT payment or contractor payment to lower tier subcontractors.**

SECTION 105
GENERAL SCOPE OF WORK

105.2.5 Compliance with Health and Safety Laws Remove the second paragraph of this subsection in its entirety and replace with:

"**For related provisions, see Sections 105.2.3 – Project Specific Emergency Planning, 105.3 – Traffic Control and Management and 105.4 – Maintenance of work**."
105.4.5 Special Detours Remove this subsection in its entirety and replace with:

"105.4.5 Maintenance of Existing Structures When a new Bridge or Minor Span is being installed on a new alignment and the existing structure is to remain in service, the Department will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours, prior to removal of the existing structure. In this case, the Department will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but not limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others."

105.6.2.4 Department Verification Add the following to the end of the first sentence:
"**or other approved method, such as reference staking, to allow the Department to independently verify the accuracy of the work, as approved by the Department."**

SECTION 106
QUALITY

106.3.4 Storage Revise this Section by adding the following sentence after the first sentence:
"Materials shall not be stored under or in close proximity to Highway Structures unless the Contractor receives written permission from the Resident."

106.4.1 General - In the first sentence, remove "When required by Special Provision," and replace with **"When required elsewhere in the Contract, "**

Revise Subsection C by replacing the last sentence with the following:

Approval of both standard and project specific QCPs shall be as outlined in paragraph B above, with the exception that the initial 14 day review period for standard plans will begin on March 1, and that the supplemental project specific QCP for the project shall be submitted a minimum of 14 days prior to any related work being performed with an initial review period of 7 days.

SECTION 108
PAYMENT

108.3 Retainage - Remove the paragraph beginning with " The Contractor may withdraw…" in its entirety.

108.4.1 Price Adjustment for Hot Mix Asphalt:
Remove this section in its entirety and replace with the following

For all contracts with hot mix asphalt in excess of 500 tons total, a price adjustment for performance graded binder will be made for the following pay items:

Item 403.102	**Hot Mix Asphalt – Special Areas**
Item 403.206	**Hot Mix Asphalt - 25 mm**
Item 403.207	**Hot Mix Asphalt - 19 mm**
Item 403.2071	**Hot Mix Asphalt - 19 mm (Polymer Modified)**
Item 403.2072	**Hot Mix Asphalt - 19 mm (Asphalt Rich Base)**
Item 403.208	**Hot Mix Asphalt - 12.5 mm**
Item 403.2081	**Hot Mix Asphalt - 12.5 mm (Polymer Modified)**
Item 403.209	**Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)**
Item 403.210	**Hot Mix Asphalt - 9.5 mm**
Item 403.2101	**Hot Mix Asphalt - 9.5 mm (Polymer Modified)**
Item 403.2102	**Hot Mix Asphalt - 9.5 mm (Asphalt Rich Base)**
Item 403.2104	**Hot Mix Asphalt - 9.5 mm (Thin Lift Surface Treatment)**
Item 403.21041	**Hot Mix Asphalt - 9.5 mm (Polymer Modified Thin Lift Surface Treatment)**
Item 403.211	**Hot Mix Asphalt – Shim**
Item 403.2111	**Hot Mix Asphalt – Shim (Polymer Modified)**
Item 403.212	**Hot Mix Asphalt - 4.75 mm (Shim)**
Item 403.213	**Hot Mix Asphalt - 12.5 mm (base and intermediate course)**
Item 403.2131	**Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)**
Item 403.2132	**Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate course)**
Item 403.214	**Hot Mix Asphalt - 4.75 mm (Surface)**
Item 403.235	**Hot Mix Asphalt (High Performance Rubberized HMA)**
Item 403.301	**Hot Mix Asphalt (Asphalt Rubber Gap-Graded)**
Item 404.70	**Colored Hot Mix Asphalt – 9.5mm (Surface)**
Item 404.72	**Colored Hot Mix Asphalt – 9.5mm (Islands, sidewalks, & incidentals)**
Item 461.13	**Light Capital Pavement**
Item 461.210	**9.5 mm HMA - Paver Placed Surface**
Item 462.30	**Ultra-Thin Bonded Wearing Course**
Item 462.301	**Polymer Modified Ultra-Thin Bonded Wearing Course**

Price adjustments will be based on the variance in costs for the performance graded binder component of hot mix asphalt. They will be determined as follows:

The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.

Item 403.102–6.2%
Item 403.206–4.8%
Item 403.207–5.2%
Item 403.2071–5.2%
Item 403.2072–5.8%
Item 403.208–5.6%
Item 403.2081–5.6%
Item 403.209–6.2%
Item 403.210–6.2%
Item 403.2101–6.2%
Item 403.2102–6.8%
Item 403.2104–6.2%
Item 403.21041–6.2%
Item 403.211–6.2%
Item 403.2111–6.2%
Item 403.212–6.8%
Item 403.213–5.6%
Item 403.2131–5.6%
Item 403.2132–6.2%
Item 403.214–6.8%
Item 403.235–5.5%
Item 403.301–6.2%
Item 404.70–6.2%
Item 404.72–6.2%
Item 461.13–6.5%
Item 461.210 – 6.4%
Item 462.30–0.0021 tons/SY
Item 462.301–0.0021 tons/SY

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

<u>Base Price</u>: The base price of performance graded binder to be used is the price per standard ton current with the bid opening date. This price is determined by using the average New England Selling Price (Excluding the Connecticut market area), as listed in the Asphalt Weekly Monitor.

Period Price: The period price of performance graded binder will be determined by the Department by using the average New England Selling Price (Excluding the Connecticut market area), listed in the Asphalt Weekly Monitor current with the paving date. The maximum Period Price for paving after the adjusted Contract Completion Date will be the Period Price on the adjusted Contract Completion Date.

SECTION 109
CHANGES

109.5.1 Definitions - Types of Delays
Delete Paragraph 'A' in its entirety and replace with:

"**A. Excusable Delay Except as expressly provided otherwise by this Contract, an "Excusable Delay" is a Delay to the Critical Path that is directly and solely caused by (1) a weather related Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an adjustment of time if the Project falls within the geographic boundaries prescribed under the disaster declaration. or (2) a flooding event at the effected location of the Project that results in a Q25 headwater elevation, or greater, but less than a Q50 headwater elevation. Theoretical headwater elevations will be determined by the Department; actual headwater elevations will be determined by the Contractor and verified by the Department or (3) An Uncontrollable Event**."

APPENDIX A TO DIVISION 100

Remove Section D in its entirety as this is now covered in Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.

SECTION 203
EXCAVATION AND EMBANKMENT

203.02 Materials
At the bottom of page 2-12, add as the first item in the list:

Crushed Stone, ¾ inch 703.13

203.042 Rock Excavation and Blasting
On page 2-16, add the word "**No**" to the third sentence in Section 5 Submittals, Subsection V, 1 so that it reads:
"***No* blasting products will be allowed on the job site if the date codes are missing**."

SECTION 304
AGGREGATE BASE AND SUBBASE COURSE

304.02 – Aggregate Add the following sentence before the sentence starting with "When designated on the plans…": **"Aggregate Base Course – Type C will be capped with 2" of millings or Untreated Aggregate Surface Course – Type B. Payment for this material will be made under 304.16"**

Revise the sentence beginning "When designated on the Plans, Type E…" by removing "When designated on the Plans," so it reads "**Type E subbase may be used 9 inches below and lower beneath the pavement**."

SECTION 307
FULL DEPTH RECYCLED PAVEMENT

Remove this Section in its entirety and replace with:

SECTION 307
FULL DEPTH RECYCLING
(UNTREATED OR TREATED WITH EMULSIFIED ASPHALT STABILIZER)

307.01 Description This work shall consist of pulverizing a portion of the existing roadway structure into a homogenous mass, adding an emulsified asphalt stabilizer (if required) to the depth of the pulverized material specified in the contract, placing and compacting this material to the lines, grades, and dimensions shown on the plans or established by the Resident.

MATERIALS

307.02 Pulverized Material Pulverized material shall consist of the existing asphalt pavement layers and one inch or more as specified of the underlying gravel, pulverized and blended into a homogenous mass. Pulverized material will be processed to 100% passing a 2 inch square mesh sieve.

307.021 New Aggregate and Additional Recycled Material New aggregate, if required by the contract, shall meet the requirements of Subsection 703.10 - Aggregate for Untreated Surface Course and Leveling Course, Type A. Aggregate Subbase Course Gravel Type D processed to 100 percent passing a 2 inch square mesh sieve and meeting the requirements of 703.06 – Aggregate for Base and Subbase may be used in areas requiring depths greater than 2 inches. New aggregate, will be measured and paid for under the appropriate item.

Recycled material, if required, shall consist of salvaged asphalt material from the project or from off-site stockpiles that has been processed before use to 100 percent passing a 2 inch square mesh sieve. Recycled material shall be conditionally accepted at the source by the Resident. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

Recycled material generated and salvaged from the project shall be used within the roadway limits to the extent it is available as described in 307.09. No additional payment will be made for material salvaged from the project.

Recycled material supplied from off-site stockpiles shall be paid for as described in the contract, or by contract modification.

307.022 Emulsified Asphalt Stabilizer. If required, the emulsified asphalt stabilizer shall be grade MS-2, MS-4, SS-1, or CSS-1 meeting the requirements of Subsection 702.04 Emulsified Asphalt.

307.023 Water Water shall be clean and free from deleterious concentrations of acids, alkalis, salts or other organic or chemical substances.

307.024 Portland Cement If required, Portland Cement shall be Type I or II meeting the requirements of AASHTO M85.

307.025 Hydrated Lime If required, Hydrated Lime shall meet the requirements of AASHTO M216.

EQUIPMENT

307.03 Pulverizer The pulverizer shall be a self-propelled machine, specifically manufactured for full-depth recycling work and capable of reducing the required existing materials to a size that will pass a 2 inch square mesh sieve. The machine shall be equipped with standard automatic depth controls and must maintain a consistent cutting depth and width. The machine also shall be equipped with a gauge to show depth of material being processed.

307.04 Liquid Mixer Unit or Distributor. If treatment of the recycled layer with emulsified asphalt is required by the contract, a liquid mixing unit or distributor shall be used to introduce the emulsified asphalt stabilizer into the pulverized material. The mixing unit shall contain a liquid distribution and mixing system which has been specifically manufactured for full-depth recycling work, capable of mixing the pulverized material with an evenly metered distribution of emulsified asphalt into a homogeneous mixture, to the depth and width required.

The mixing unit shall be designed, equipped, maintained, and operated so that emulsified asphalt stabilizer at constant temperature may be applied uniformly on variable widths of pulverized material up to 6 feet at readily determined and controlled rates from 0.01 to 1.06 gal/yd^2 with uniform pressure and with an allowable variation from any specified rate not to exceed 0.01 gal/ yd^2. Mixing units shall include a tachometer, pressure gages, and accurate volume measuring devices or a calibrated tank and a thermometer for measuring temperatures of tank contents.

307.041 Cement or Lime Spreader If required by the contract, spreading of the Portland Cement or Hydrated Lime shall be done with a spreader truck designed to spread dry particulate (such as Portland Cement or Lime) or other approved means to insure a uniform distribution across the roadway and minimize fugitive dust. Pneumatic application, including through a slotted pipe, will not be permitted. Other systems that have been developed include fog systems, vacuum systems, etc. Slurry applications may also be accepted. The Department reserves the right to accept or reject the method of spreading cement. The Contractor shall provide a method for verifying that the correct amount of cement is being applied.

307.05 Placement Equipment Placement of the Full Depth recycled material to the required slope and grade shall be done with an approved highway grader or by another method approved by the Resident.

307.06 Rollers The full depth recycled material shall be rolled with a vibratory pad foot roller, a vibratory steel drum soil compactor and a pneumatic tire roller. The pad foot roller drum shall have a minimum of 112 tamping feet 3 inches in height, a minimum contact area per foot of 17 inch^2, and a minimum width of 84 inches. The vibratory steel drum roller shall have a minimum 84 inch width single drum. The pneumatic tire roller shall meet the requirements of Section 401.10 and the minimum allowable tire pressure shall be 85 psi.

MIX DESIGN

If treatment of the recycled layer with emulsified asphalt is required by the contract, the Department will supply a mix design for the emulsified asphalt stabilized material based on test results from pavement and soil analysis taken to the design depth. The Department will provide the following information prior to construction:

1. **Percent of emulsified asphalt to be used.**
2. **Quantity of lime or cement to be added.**
3. **Optimum moisture content for proper compaction.**
4. **Additional aggregate (if required).**

After a test strip has been completed or as the work progresses, it may be necessary for the Resident to make necessary adjustments to the mix design. Changes to compensation will be in accordance with the Mix Design Special Provision.

CONSTRUCTION REQUIREMENTS

307.06 Pulverizing **The entire depth of existing pavement shall be pulverized together with 1 inch or more of the underlying gravel into a homogenous mass. All pulverizing shall be done with equipment that will provide a homogenous mass of pulverized material, processed in-place, which will pass a 2 inch square mesh sieve.**

307.07 Weather Limitations **Full depth recycled work shall be performed when;**

A. Recycling operations will be allowed between May 15th and September 15th inclusive in Zone 1 - Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
B. The atmospheric temperature, as determined by an approved thermometer placed in the shade at the recycling location, is 50°F and rising.
C. When there is no standing water on the surface.
D. During generally dry conditions, or when weather conditions are such that proper pulverizing, mixing, grading, finishing and curing can be obtained using proper procedures, and when compaction can be accomplished as determined by the Resident.
E. When the surface is not frozen and when overnight temperatures are expected to be above 32°F.
F. Wind conditions are such that the spreading of lime or cement on the roadway ahead of the recycling machine will not adversely affect the operation.

307.08 Surface Tolerance **The complete surface of the Full Depth Recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of ⅜ inch.**

307.09 Full Depth Recycling Procedure **New aggregate or recycled material meeting the requirements of Section 307.021 - New Aggregate and Additional Recycled Material, shall be added as necessary to restore cross-slope and/or grade before pulverizing. Locations will be shown on the plans or described in the construction notes. The Resident may add other locations while construction of the project is in progress. The Contractor will use recycled material to the extent it is available, in lieu of new aggregate. The material shall then be pulverized, processed, and blended into a homogeneous mass passing a 2 inch square mesh sieve. Material found not pulverized down to a 2 inch size will be required to be reprocessed by the recycler with successive passes until approved by the Resident.**

Should the Contractor be required to add new aggregate or recycled material to restore cross-slope and/or grade after the initial pulverizing process, those areas will require re-processing to blend into a homogenous mass passing a 2 in square mesh sieve.

Sufficient water shall be added during the recycling process to maintain optimum moisture for compaction.

The resultant material from the initial pulverizing processes shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade. The completed surface of the full depth recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of ⅜ inch. Areas not meeting this tolerance will be repaired as described in Section 307.091. The initial pulverizing process density requirements will be the same as Section 307.101 unless otherwise directed by the Resident.

Additives, if required, shall be introduced following completion of the initial pulverizing and blending process. Emulsified asphalt stabilizer shall be incorporated into the top of the processed material as specified in section 307.04 to the depth specified in the contract by use of the liquid mixer unit or a distributor, at the rate specified in the mix design. The emulsified asphalt shall then be uniformly blended into a homogeneous mass until an apparent uniform distribution has occurred. The rate of application may be adjusted as necessary by the Resident. Cement or lime shall be introduced as described in section 307.041. The resultant material shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade.

After final compaction, the roadway surface shall be treated with a light application of water, and rolled with pneumatic-tired rollers to create a close-knit texture. The finished layer shall be free from:

A. Surface laminations.
B. Segregation of fine and coarse aggregate.
C. Corrugations, centerline differential, potholes, or any other defects that may adversely affect the performance of the layer, or any layers to be placed upon it.

The Contractor shall protect and maintain the recycled layer until a lift of pavement is applied. Any damage or defects in the layer shall be repaired immediately. An even and uniform surface shall be maintained. The recycled surface shall be swept prior to hot mix asphalt overlay placement.

307.091 Repairs Repairs and maintenance of the recycled layers, resulting from damage caused by traffic, weather or environmental conditions, or resulting from damage caused by the Contractor's operations or equipment, shall be completed at no additional cost to the Department.

For recycled layers stabilized with emulsified asphalt, low areas will be repaired using a hot mix asphalt shim. Areas up to 1 inch high can be repaired by milling or shimming with hot mix asphalt. Areas greater than 1 inch high will be repaired using a hot mix asphalt shim. All repair work will be done with the Resident's approval at the Contractor's expense.

TESTING REQUIREMENTS

307.10 Quality Control The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.4 - Quality Control and this Section. The Contractor shall not begin recycling operations until the Department approves the QCP in writing.
Prior to performing any recycling process, the Department and the Contractor shall hold a Pre-recycle conference to discuss the recycling schedule, type and amount of equipment to be used, sequence of operations, and traffic control. A copy of the QC random numbers to be used on the project shall be provided to the Resident. All field supervisors including the responsible onsite recycling process supervisor shall attend this meeting.

The QCP shall address any items that affect the quality of the Recycling Process including, but not limited to, the following:

- **A. Sources for all materials, including New Aggregate and Additional Recycled Material.**
- **B. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.**
- **C. Testing Plan.**
- **D. Recycling operations including recycling speed, methods to ensure that segregation is minimized, grading and compacting operations.**
- **E. Methods for protecting the finished product from damage and procedures for any necessary corrective action.**
- **F. Method of grade checks.**
- **G. Examples of Quality Control forms.**
- **H. Name, responsibilities, and qualifications of the Responsible onsite Recycling Supervisor experienced and knowledgeable with the process.**
- **I. A note that all testing will be done in accordance with AASHTO and MDOT/ACM procedures.**

The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The Contractor shall sample, test, and evaluate the full depth reclamation process in accordance with the following minimum frequencies:

MINIMUM QUALITY CONTROL FREQUENCIES

Test or Action	Frequency	Test Method
Density	**1 per 1000 feet / lane**	**AASHTO T 310**
Air Temperature	**4 per day at even intervals**	
Surface Temperature	**At the beginning and end of each days operation**	
Yield of all materials (Daily yield, yield since last test, and total project yield.)	**1 per 1000 ft/lane**	

The Department may view any QC test and request a QC test at any time. The Contractor shall submit all QC test reports and summaries in writing, signed by the appropriate technician, to the Department's onsite representative by 1:00 P.M. on the next working day, except when otherwise noted in the QCP due to local restrictions. The Contractor shall make all test results, including randomly sampled densities, available to the Department onsite.

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

A. The Contractor fails to follow the approved QCP.
B. The Contractor fails to achieve 98 percent density after corrective action has been taken.
C. The finished product is visually defective, as determined by the Resident.
D. The computed yield differs from the mix design by 10 percent or more.

Recycling operations shall not resume until the Department approves the corrective action to be taken.

307.101 Test Strip The contractor shall assemble all items of equipment for the recycling operation on the first day of the recycling work. The Contractor shall construct a test strip for the project at a location approved by the Resident. The Responsible onsite Recycling Supervisor will work with Department personnel to determine the suitability of the mixed material, moisture control within the mixed material, and compaction and surface finish. The test strip section is required to:

A. Demonstrate that the equipment and processes can produce recycled layers to meet the requirements specified in these special provisions.
B. Determine the effect on the gradation of the recycled material by varying the forward speed of the recycling machine and the rotation rate of the milling drum.

C. Determine the optimum moisture necessary to achieve proper compaction of the recycled layer.
D. Determine the sequence and manner of rolling necessary to obtain the compaction requirements and establish a target density. The Contractor and the Department will both conduct testing with their respective gauges at this time.

The test strip shall be at least 300 feet in length of a full lane-width (or a half-road width). Full recycling production will not start until a passing test strip has been accomplished. If a test strip fails to meet the requirements of this specification, the Contractor will be required to repair or replace the test strip to the satisfaction of the Resident. Any repairs, replacement, or duplication of the test strip will be at the Contractor's expense.

After the test strip has been pulverized, and the roadway brought to proper shape, the Contractor shall add water until it is determined that optimum moisture has been obtained. The test strip shall then be rolled using the specified compaction equipment as directed until the density readings show an increase in dry density of less than 1 pcf for the final four roller passes of each roller. The Contractor and Department will each determine a target density using their respective gauges by performing several additional density tests and averaging them. The average of these tests will be used as the target density of the recycled material for QC and Acceptance purposes.

Following completion of the test strip, compaction of the material shall continue until a density of not less than 98 percent of the test strip target density has been achieved for the full width and depth of the layer. During the construction and compaction of the Full Depth Recycled base, should three consecutive Acceptance test results for density fail to meet a minimum of 95 percent of the target density, or exceed 102 percent of target density, a new test strip shall be constructed.

ACCEPTANCE TEST FREQUENCY

Property	Frequency	Test Method
In-place Density	1 per 2000 ft / lane	AASHTO T 310

308.102 Curing. No new pavement shall be placed on the full depth recycled pavement until curing has reduced the moisture content to 1 percent or less by total weight of the mixture, or a curing period of 4 days has elapsed, whichever comes first.

307.11 Method of Measurement Full Depth Recycled Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be measured by the square yard.

307.12 Basis of Payment **The accepted quantity of Full Depth Recycled Asphalt Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) 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, materials and labor for pulverizing, blending, placing, grading, compacting, and for all incidentals necessary to complete the work.**

The addition of materials to restore profile grade and/or cross-slope in areas shown on the plans or described in the construction notes will be paid separately under designated pay items within the contract. No additional payment will be made for materials salvaged from the project.

Payments will be made under:

Pay Item	**Pay Unit**
307.331 Full Depth Recycled Pavement (Untreated)	**Square Yard**
307.332 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 5 in. depth	**Square Yard**
307.333 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 6 in. depth	**Square Yard**

SECTION 411
UNTREATED AGGREGATE SURFACE COURSE

411.02 – Aggregate Add the following to the end of the first sentence: **"- Type A"**

SECTION 501
FOUNDATION PILES

501.05 – Method of Measurement

b. Piles Furnished – After the second sentence, add the sentence **"Measurement will not include any pile tips"**.

c. Piles in Place – Add the sentence to the end of the second paragraph, **"Measurement will include the pile tips"**.

d. Pile Tips – Add the words "**on the Pile**" to the end of the sentence.

SECTION 502
STRUCTURAL CONCRETE

502.05 Composition and Proportioning

Replace Table 1 with

TABLE 1

Concrete CLASS	Minimum Compressive Strength (PSI)	Permeability as indicated by Surface Resistivity (KOhm-cm)	Entrained Air (%)		Notes
		LSL	LSL	USL	
S	3,000	N/A	N/A	N/A	4,5
A	4,000	14	6.0	9.0	1,4,5
P	-----	-----	5.5	7.5	1,2,3,4
LP	5,000	17	6.0	9.0	1,4,5
Fill	3,000	N/A	6.0	9.0	4,5

In the list of information submitted by the contractor for a mix design:

Item J Replace "Target Coulomb Value." with "Target KOhm-cm Value."

Note #1 - Remove, **"…Standard Specification Section 711.05, Protective Coating for Concrete Surfaces, and per the manufacturer's recommendations, at no additional cost to the Department."** and replace with, **"…Standard Specification Section 515, Protective Coating for Concrete Surfaces, at no additional cost to the Department."**

502.1703 Acceptance Methods A and B

In the paragraph that starts with "The Department will take Acceptance…" Remove the word chloride from chloride permeability in the last sentence.

Replace the paragraph starting with "Rapid Chloride Permeability specimens…" With the following:

"Surface Resistivity specimens will be tested by the Department in accordance with AASHTO TP-95 at an age ≥ 56 days. Four 4 inch x 8 inch cylinders will be cast per sublot placed. The average of three concrete specimens per sublot will constitute a test result and this average will be used to determine the permeability for pay adjustment computations."

502.1706 Acceptance Method C

Remove in its entirety and Replace with:

502.1706 Acceptance Method C The Department will determine the acceptability of the concrete through Acceptance testing. Acceptance tests will include compressive strength, air content and permeability. Method C concrete not meeting the requirements listed in Table 1 shall be removed and replaced at no cost to the Department. At the Department's sole discretion, material not meeting requirements may be left in place and paid for at a reduced price as described in Section 502.195.

502.1707 Resolution of Disputed Acceptance Test Results

Section B

Remove "Rapid Chloride" from the section heading.

In paragraph 4 replace T-277 with TP-95

502.192 Pay Adjustment for Chloride Permeability

Remove "Chloride" from the heading and from the first sentence.

Replace the sentence that starts with "values greater than…" and replace with "values less than 10 KOhms-cm for Class A concrete or 11 KOhms-cm for Class LP concrete shall be subject to rejection and replacement, at no additional cost to the Department."

502.194 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content, Methods A and B

Remove the word "Chloride" from the section heading and from the equation for CPF.

502.195 Pay Adjustment Method C

In Table 6: Method C Pay Reductions (page 5-53)
Under "Entrained Air" for "Class Fill", in the first line,
change from "< 4.0 (Removal)" to **"< 4.5 (Removal)**"

In Table 6: Method C PAY REDUCTIONS, revise the Chloride Permeability section by removing it in its entirety and replacing it with:

Surface Resistivity {Permeability in Kohm-cms and Pay Reduction per CY}			
15-16 ($50)	13 ($25)	N/A	N/A
13-14 ($75)	12($50)	N/A	N/A
12 ($100)	11 ($75)	N/A	N/A
11 ($125)	10 ($100)	N/A	N/A
< 11 (Removal)	< 10 (Removal)	N/A	N/A

SECTION 503
REINFORCING STEEL

503.06 Placing and Fastening Revise this Subsection by removing, in its entirety, the paragraph which begins, "Stainless steel reinforcement shall not be tied to any other type of reinforcement……"

SECTION 504
STRUCTURAL STEEL

504.26 Welding Remove the second paragraph beginning with "The range of heat…." in its entirety.

504.29 Welding ASTM A 709 HPS 70W Steel. Remove the third paragraph beginning with "Make Weld runoff tabs…" in its entirety.

SECTION 510
SPECIAL DETOURS

510.032 Geometric and Approach Design a. Horizontal alignment
The third paragraph of this section is revised to read as follows:

"The roadway width shall be increased on curved portions of the Special Detour to account for the off tracking characteristics of WB-62 vehicle in accordance with **the AASHTO publication A Policy On Geometric Design of Highways and Streets (the Green Book), chapter 3 table entitled Design Widths of Pavements for Turning Roadways."**

SECTION 527
ENERGY ABSORBING UNIT

527.02 Materials This section is revised to read as follows.

527.02 Materials Work Zone Crash Cushions must comply with NCHRP Report 350. Work Zone Crash Cushions shall be selected from MaineDOT's Qualified Products List of Crash Cushions / Impact Attenuators, or an approved equal.

SECTION 534
PRECAST STRUCTURAL CONCRETE

534.14 Process Control Test Cylinders
Revise this subsection to read:

"**534.14 Acceptance and Quality Control Testing of Concrete Refer to Section 712.061**."

SECTION 535
PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

Section 535.08 – Quality Assurance

Revise the second paragraph to read:

"The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents."

Section 535.15 - Process Control Test Cylinders

Revise the first paragraph to read:

"535.15 Acceptance and Quality Control Testing of Concrete Acceptance of structural precast/prestressed units, for each day's production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results. At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All testing equipment required by the QAI to perform this testing shall be provided in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made."

Insert the following as the second paragraph of Section 535.15:

"Quality Control concrete test cylinders shall be made for each day's cast and each form bed used. Cylinders tested to determine strand release strength and design strength shall be field cured in accordance with AASHTO T23 (ASTM C31). 28 day cylinders shall be standard cured. Record unit identification, entrained air content, water-cement ratio, slump flow and temperature of the sampled concrete at the time of cylinder casting."

SECTION 604
MANHOLES, INLETS CATCH BASINS

604.04 Adjusting Catch Basins and Manholes**,**

Add the following paragraph to the end of 604.04 b:

The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.

Add the following paragraph after the first paragraph of 604.04 c:

The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.

Add the following sections to 604.04:

<u>d. Ring Insert Requirements</u> Ring inserts to adjust manhole top frame slope and grade will are allowed in accordance with the following requirements:

1) Materials

i. All ring inserts must be made of iron. *Multiple ring inserts will not be allowed.* The single ring insert may be any height up to a maximum of 2 inches tall.

ii. Ring inserts shall not be welded to the manhole frame to prevent brittle failure of the cast iron frame.

iii. Ring inserts shall be fastened to the manhole frame using liquid steel-filled epoxy such as Loctite Fixmaster Steel Liquid or equivalent. The epoxy shall be installed in accordance with the manufacturer's recommendations.

2) Where Ring Inserts May/May Not Be Used

i. MaineDOT will allow the use of a single manhole ring insert to raise manholes on state and state-aid highways.

ii. *Manhole ring inserts may not be used along state and state-aid highway sections where the speed limit is 40 miles per hour or more.* The standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.

3) Construction Requirements For The Use of Iron Manhole Ring Inserts

i. Wherever iron ring inserts are used to raise manhole top elevations, the rings shall be fastened to the existing manhole frame using liquid steel-filled epoxy. The liquid steel-filled epoxy shall be placed evenly around the entire manhole frame before placing the ring insert. *Unbonded ring inserts will not be allowed*. If the manufacturer's recommended construction practices result in loose or unacceptable manhole cover restraint, standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.

e. Composite Riser Requirements Flat or beveled, doughnut-shaped, composite risers placed beneath the manhole frame to adjust slope and grade are allowed. The composite riser shall be fastened to both the top of the concrete cone and bottom of the manhole frame with the manufacturer's recommended epoxy. Composite risers may be used at all locations on state and state-aid highways under any legal speed limit without restriction.

SECTION 606
GUARDRAIL

606.09 Basis of Payment Amend the first sentence of the eighth paragraph of this subsection by removing the word "meter" and replace it with "linear foot".

SECTION 608
SIDEWALKS

608.021 Sidewalk Materials Revise this section by removing the second paragraph which begins with "Portland cement concrete shall…" in its entirety and replace with **"Portland cement concrete shall be Class A and meet the requirements of Section 502, Structural Concrete."**

SECTION 609
CURB

609.03 Vertical Stone Curb, Terminal Section and Transition Sections and Portland Cement Concrete Curb, Terminal Sections and Transition Sections
Amend this section by adding the following paragraph to the end of it:
"The Contractor may elect to substitute concrete to backfill Stone Curbing or Stone Edging at their option. If the concrete backfill option is elected, the following is added to Standard Specification 609 – Curb"

609.02 Materials Amend this section by adding the following to it:

Portland cement and Portland Pozzolan Cement	**701.01**
Water	**701.02**
Fine Aggregate for Concrete	**703.01**
Coarse Aggregate for Concrete	**703.02**

The Contractor shall submit a concrete mix design for the Portland Cement Concrete to the Resident, with a minimum designed compressive strength of 4000 psi Class A concrete.

609.10 Basis of Payment Revise by changing the fifth paragraph which begins with "There will be no separate payment…" this section by removing the word "cement" and replacing it with "**concrete fill, mortar**".

SECTION 619
MULCH

619.07 Basis of Payment Amend this section by adding the words "**; Bark Mulch and Erosion Control Mix will be paid for by the Cubic Yard;**" into the first sentence so that it reads:

"The accepted areas mulched will be paid for at the contract price per unit**; Bark Mulch and Erosion Control Mix will be paid for by the Cubic Yard;** which shall be full compensation for furnishing and spreading the hay or straw and mulch binder, cellulose fiber mulch, bark mulch or erosion control mix.

Revise the second sentence by removing " **for pay item 619.1201"** So that it reads:

"When Mulch is measured in Bales, each bale will be paid for at 60% of the contract price per Unit".

Revise this section by removing all pay items and replace them with the following:

619.12 Mulch	**Unit**
619.13 Bark Mulch	**Cubic Yard**
619.14 Erosion Control Mix	**Cubic Yard**

SECTION 621
LANDSCAPING

621.0002 Materials - General
In the list of items change "Organic Humus" to "**Humus**".

621.0019 Plant Pits and Beds

c Class A Planting
In the third paragraph beginning with " The plant pit…" change "½ inch" to "**1 inch**"

SECTION 626
FOUNDATIONS, CONDUIT AND JUNCTION BOXES FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

626.02 General Amend the Material list by adding the following to the list:

Gravel Borrow	703.20

Revise the Material List by removing:

Prewired Conduit	715.04
Metallic Junction and Fuse Box	715.05

626.021 Miscellaneous Material Amend this section by adding the following to the end of it:

"**All concrete for concrete encasement of conduit shall be Fill Class concrete in accordance with the applicable requirements of Section 502 – Structural Concrete."**

Amend the third paragraph that begins with "If grouting is necessary…" by adding "**included on the Qualified Product List and**" after the word "material".

626.03 General Amend this section by adding the following section to the end of it

"626.0301 Electrical Supply Lines and Service Connections The following requirements shall apply to Electric Supply Lines and Service Connections feeding traffic signalization equipment control boxes and lighting breaker boxes.

Whenever possible, the meter and breaker panel feeding traffic signal control boxes or lighting control boxes shall be constructed within 30 feet of the service drop pole.

All service connections to MaineDOT traffic signal control boxes or lighting breaker boxes constructed in trenches shall be in steel conduit or concrete encased PVC conduit.

Where trenchless technologies are employed to install the service connection conduit, Schedule 120 PVC conduit shall be used for the trenchless bore section of conduit. In addition, concrete encasement shall be used for any conduit placed in trench sections more than 10 feet before or after the limits of the trenchless bore conduit.

The construction practices described above shall be used for service connections up to a maximum of 600 feet. There may be rare exceptional cases where the service connection must exceed 600 feet. In these cases, the power companies may require primary power be run over 600 feet for the purpose of power consumption and dependable service. These cases will be evaluated on a case-by-case basis for alternate power feed methods and/or the need for steel or concrete encased conduit."

626.031 Conduit Revise this section by removing the second paragraph which begins with "Trenches for conduits…" and replace it with the following:

"**Trenches for conduits shall be excavated to a width that will permit proper installation of the conduit and to a minimum depth of 3 feet below finish grade as measured from the top of the conduit. If deeper depths are required, the conduit shall be installed at the depth shown on the plans or as directed. Conduit shall not interfere with poles, guardrail posts, sign foundations or other objects."**

Amend the third paragraph which begins with "All junction or pull boxes…" by adding "**concrete, in accordance with the applicable requirements of Section 502 – Structural Concrete,**" after Class LP.

Revise the fifth paragraph which begins with "After the trench has been…" by adding the following to the end of it:

"**Where concrete encasement is required around the conduit, backfilling with approved material may begin adjacent to and above the encased conduit no sooner than 24 hours after concrete placement."**

Remove the following:

"**All underground conduit shall be placed to at least the depth shown on the plans and shall not interfere with poles, guardrail posts, sign foundations or other objects."**

Revise the paragraph beginning with "All conduit ends shall…" by removing "Prewired Conduit shall be sealed during construction to prevent entry of moisture, dirt, or rocks."

626.033 Polyvinylchloride Conduit Installation Amend the first paragraph of this section which begins with "Polyvinylchloride conduit and High Density…" by adding the following to the end of it:

"**In addition, PVC conduit used for Electrical Supply Lines and Services feeding control cabinets for traffic signalization equipment or highway lighting breaker boxes shall be concrete encased. When trenchless technologies are used to install PVC conduit, concrete encasement shall not be required.**

Concrete encasement shall consist of a minimum of 4 inches of concrete above, below and on both sides of the conduit that shall have a minimum compressive strength of 3000 psi and a maximum aggregate size of 1-inch (Fill Class concrete). The concrete encasement may be backfilled no sooner than 24 hours after placement. "

"NON-METALLIC UNDER PAVEMENT CONDUIT INSTALLATION

Where noted on the drawings, non-metallic under pavement conduit of schedule 80 or greater rating shall be provided to facilitate conduit crossing of the existing highway and ramps without disruption to the existing highway and ramp pavement surface. The non-metallic under pavement conduit shall be hydraulically jacked or directional bored below the highway and ramp at a depth of not less than (36 inches). Under pavement conduit shall extend for a distance of (10 feet) beyond the highway or ramp edge at each side."

Amend the sixth paragraph which begins with "Where PVC conduit runs are…" by changing "3 inch minimum bedding" to "**6 inch minimum bedding**".

626.034 Concrete Foundations

Revise this section by removing the third paragraph which begins with "In the absence of Design Requirements…" in its entirety and replace with the following:

"In the absence of design requirements being provided on the plans, the Contractor shall prepare and submit the foundation design(s) to the Department for review. The Contractor may propose an alternate shallow spread footing or drilled shaft configuration/design than that set forth on the drawings. Design shall be in accordance with AASHTO LRFD Specifications for Structural Supports for Highway Sign, Luminaires and Traffic Signals, current edition; AASHTO LRFD Bridge Design Specifications, current edition; and FHWA-NHI-10-016 Drilled Shafts, Construction Procedures and Design Methods, current edition. Where conflicting requirements occur, the more stringent requirements shall govern. In addition to other design requirements, foundation design shall account for Torsion for which a minimum Factor of Safety equal to 1.2 shall be achieved. In evaluating axial capacity and torsional resistance in cohesionless soils, load transfer coefficient or side resistance coefficient (beta, β) will be used in accordance with Subsection 13.3.5.1 of FHWA-NHI-10-016, with beta determined in accordance with Equations 13-13 and 13-11 for silty sands to sandy silts (with varying amounts of gravel). The design criteria for the resistance of drilled shaft and spread footing foundations against overturning, sliding and bearing capacity failure shall meet the requirements of Section 4 of AASHTO LRFD Bridge Design Specifications, current edition. The structural design of foundations shall meet the requirements of AASHTO LRFD Bridge Design Specifications, current edition. The Contractor shall submit to the Department for review, three (3) copies of detailed plans and calculations of the proposed design. Design shall be prepared and sealed by a Professional Engineer licensed in the State of Maine. Construction of foundation(s) shall not commence until the Department has reviewed the foundation design."

On Page 6-85, add the following paragraph before the paragraph beginning with "Drilled shafts shall not be…".

" No foundation design will be required for 18- and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. A foundation design prepared by a Professional Engineer licensed in accordance with the laws of the State of Maine will be required for all other foundations Precast foundations will be permitted for 18 and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. Where precast foundations are permitted flowable concrete fill shall be used as backfill in the annular space, and placed from the bottom up. Construction of precast foundations shall conform to the Standard Details and all requirements of Section 712.061 except that the concrete shall have a minimum permeability of 17 kOhm-cm and the use of calcium nitrite will not be required. "

On Page 6-86, Revise the paragraph beginning with "Concrete for drilled shafts…" so that a portion of it reads as follows:

"….The Contractor shall provide temporary dewatering of excavations for foundations such that concrete is placed in the dry. **Concrete for drilled shafts shall be placed in accordance with Section 502.10 as temporary casing is withdrawn to prevent debris from contaminating the foundation and to ensure concrete is cast against the surrounding soil. Concrete for drilled shafts and spread footings shall be Class LP in accordance with Section 502 - Structural Concrete. Precast foundations will not be permitted except as specified above in this Section.** Backfill for spread footing foundations shall be Gravel Borrow meeting the requirements of Section 703.20 - Gravel Borrow….."

626.05 Basis of Payment Amend this section by removing the following paragraphs:
The one which starts with "Payment will be made for the total number of linear feet of prewired conduit…"
The one which starts with "Prewired conduit within the foundations…"

Amend this subsection by adding the following paragraph and Pay Items:

"**Payment will be made for the total number of linear feet of under pavement conduit actually furnished, installed and accepted at the contract price per linear foot. This price shall include the cost of: furnishing and installing the conduit; excavating; furnishing special backfilling materials, pull wire, fittings, grounding and bonding; test cleaning interiors of conduits and all materials, labor, equipment and incidentals necessary to complete the work**."

Pay Item		PayUnit
626.221	**Non-metallic Conduit, Concrete Encased**	**Linear Foot**
626.251	**Non-Metallic Under pavement Conduit (Schedule 80 or greater rating)**	**Linear Foot**

Remove the following Pay Items:

626.23	Prewired Conduit Secondary Wiring	Linear Foot
626.24	Prewired Conduit Primary Wiring	Linear Foot

SECTION 627
PAVEMENT MARKINGS

Revise this section by removing it in its entirety and replacing with the following:

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.

627.02 Materials Materials shall conform to the requirements specified in the following Sections of Division 700 - Materials.

Pavement Marking Paint	**708.03**
Reflectorized Plastic Pavement Marking	**712.05**

Temporary Bi-directional Yellow Delineators shall be Temporary Object Markers (T.O.M.) as manufactured by the Davidson Plastic Company, 18726 East Valley Highway, Kent, WA 98031 or an approved equal.

627.04 General All pavement lines and markings shall be applied in accordance with the latest edition of 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.

Unless otherwise shown on the plans, non-interstate lines shall be 4 inches wide and broken lines shall consist of alternate 10 foot painted line segments and 30 foot gaps. On controlled access divided highways and on the interstate system lines shall be 6 inches wide and broken lines shall consist of alternate 15 foot painted line segments and 25 foot gaps. Width tolerance shall be +/- ¼ inch.

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 by the use of cones, stationary vehicles or other approved methods until the paint is dry.

627.05 Preparation of Surface Immediately before applying the pavement marking paint to the pavement or curb, the surface shall be dry and entirely free from dirt, grease, oil, or other foreign matter.

Surface preparation for application of plastic markings shall conform to the manufacturer's recommendations.

627.06 Application Prior to applying paint for final pavement lines, the Contractor shall perform a test for paint thickness by furnishing and placing a piece of smooth, clean metal with an area of at least 144 in² in the path of the striping truck. The striping truck shall be passed over the piece of metal, painting the surface as it passes, without applying beads. The result of this test will be used to determine the pressure setting and speed of the truck when applying paint to obtain the specified thickness. Additional paint thickness testing may be required on the final paint markings. The wet thickness of paint without beads on final pavement lines shall be a minimum of 16 mils.

On other final pavement markings and on curb, where the paint is applied by hand painting or spraying, application shall be in two uniform covering coats, each at least 10 mils thick. Before the second coat of paint has dried, the glass beads shall be applied by a pressure system that will force the glass beads onto the undried paint as uniformly as possible.

Glass beads shall be applied to the final and temporary pavement lines, marking and curb at a sufficient rate and in sufficient quantity to assure complete and uniform coverage of hand painted surfaces and achieve proper reflectivity.

Permanent and temporary white lines and markings shall have a minimum final reflectivity value of 250 millicandelas per square meter per lux (mcd/m²/lux) and permanent and temporary yellow lines and markings shall have a minimum final reflectivity value of 150 millicandelas per square meter per lux (mcd/m²/lux), as measured by the Department. Measurements taken to determine reflectivity shall be done within 4 weeks after final placement.

If the final reflectivity values are less than the described minimums, the Contractor shall repaint those areas not meeting required reflectivity at no cost to the Department. If the final reflectivity values are less than the described minimums after the second attempt, the Contractor will submit in writing a plan of action to meet the reflectivity minimums prior to continuing any work. Once the plan has been reviewed and approved by the Department, the Contractor shall re apply at no cost to the Department.

Temporary painted lines and markings shall be applied as specified for permanent painted lines, except that the thickness shall be a minimum of 16 mils.

Temporary pliant polymer marking material shall be used for temporary markings on the final pavement and on pavements not to be resurfaced when such pavement markings do not conform to the final pavement markings pattern.

The plastic final pavement lines and markings shall be applied in accordance with the manufacturer's recommendations by the inlay method of application.

627.07 Establishment Period Inlaid plastic pavement lines and marking material furnished and installed under this contract for final pavement markings shall still be subject to a six-month period of establishment.

The period of establishment shall commence as soon as the plastic pavement lines and markings are complete and in place and shall continue for six months. At the end of the establishment period, a minimum of 95% of the plastic pavement lines and markings shall still be in place to be acceptable.

If less than 95% of the plastic pavement lines and markings are in place after six months, the Contractor shall replace all unsatisfactory plastic pavement lines and markings on the project without additional payment. Plastic pavement lines and markings designated for replacement shall be installed according to these specifications, unless otherwise directed. Plastic pavement lines and markings replaced at the end of the six month establishment period will not be subject to a further establishment period.

627.08 Removing Lines and Markings When it is necessary to remove pavement lines and markings, it shall be done by high pressure water, grinding or other approved acceptable means. The method chosen must be capable of completely eradicating the existing line or marking without excessive damage to the pavement. Burning and the use of solvents to remove temporary markings from final pavement or from existing pavement not to be resurfaced will not be permitted.

627.09 Method of Measurement **The quantity of pavement marking lines identified in the contract as a plan quantity pay item, the measurement of payment will be the number of feet shown in the Schedule of Items. This quantity will be considered final and no adjustments will be made except when changes resulting in increases or decreases are made by the Resident.**

The accepted quantity of temporary or permanent pavement marking lines when identified in the contract as a linear foot item shall be measured and paid for at the contract unit price per linear foot for the total amount applied and accepted.

Double yellow centerline, broken or solid, will be considered one line for measurement purposes. The measurement of broken lines will include the gaps when painted and will not include the gaps when plastic. Double Yellow Centerline, broken or solid shall not be paid through intersections or side roads and will be paid for the actual length of painted line.

Broken white lines will include the gaps when painted and will not include the gaps when plastic inlaid pavement lines are applied. Yellow or white solid edge lines and will not be paid through intersections or side roads and will be measured by the actual length of painted line.

Temporary pavement marking lines shall not be paid through intersections or side roads and will be measured per linear foot of actual length of painted and accepted.

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

The accepted quantity of removing existing pavement markings will be measured by the square foot.

Temporary Bi-directional Yellow Delineators will be measured by each unit, complete in place, maintained, and accepted.

627.10 Basis of Payment **The accepted quantity of pavement marking lines identified in the contract as a plan quantity pay item will be paid for at the contract unit price for plan quantity. No adjustment will be made to the quantity for payment, except as described 627.09 Method of Measurement**

The quantity of permanent or temporary pavement marking lines identified in the contract paid by the linear foot will be measured for payment as described under section 627.09 Method of Measurement.

All other permanent pavement markings will be paid for at the contract unit price per square foot in accordance with 627.09 Method of Measurement.

If allowed by Special Provision, the Contractor may utilize Temporary Bi-Directional Yellow and White (as required) Delineators. When utilized, payment will be made as temporary pavement marking lines, measured and paid at the contract unit price per linear foot. Such payment will include as many applications as required and removal.

Payment for final plastic pavement lines and markings will be made in two parts. The first payment of 75% will be made when plastic pavement lines and markings are placed. The payment of the remaining 25% will be made at the end of the establishment period for all plastic line and pavement markings accepted.

The accepted quantity of any pavement marking lines will be paid for at the contract unit price and will include as many applications as required and removal when required.

The accepted quantity of Temporary Bi-directional Yellow Delineators will be paid for at the contract unit price.

Payment will be made under:

Pay Item		Pay Unit
627.18	12 inch Solid White Pavement Marking Line	Linear Foot
627.711	White or Yellow Pavement Marking Line - Plan Quantity	Linear Foot
627.733	4" White or Yellow Painted Pavement Marking Line	Linear Foot
627.744	6" White or Yellow Painted Pavement Marking Line	Linear Foot
627.75	White or Yellow Pavement & Curb Marking	Square Foot
627.77	Removing Existing Pavement Marking	Square Foot
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	Linear Foot
627.781	Temporary 6" Painted Pavement Marking Line, White or Yellow	Linear Foot
627.407	Reflectorized Plastic, White or Yellow Pavement Marking	Square Foot
627.4071	Reflectorized Plastic, White or Yellow Pavement Marking Line - Plan Quantity	Linear Foot
627.811	Temporary Bi-directional Yellow Delineators	Each

SECTION 639
ENGINEERING FACILITIES

Revise this section by removing this section in its entirety and replace with the following:

639.01 Description **This work shall consist of providing, erecting, lighting, equipping and maintaining buildings to be solely used by the Resident and other assigned Department representatives as a field office. Upon completion of the work, the buildings and equipment shall remain the property of the Contractor.**

639.02 Materials **Materials for buildings shall be of good quality customarily used in standard frame house or office trailer construction.**

639.03 General **The building of the type called for shall be provided before the start of work, and shall remain until work is completed and accepted, unless earlier removal is authorized. The location shall be approved by the Resident and should be adjacent or virtually adjacent to the Project.**

A fire extinguisher shall be provided in each building or office trailer for electrical and chemical fires and effective on all solvents used in the building.

Walls, roof, floor, windows, and doors shall be tightly constructed to the required area.

Furnishings shall be supplied as called for. Doors shall be equipped with locks and all keys shall be in the possession of the Resident. Windows shall be equipped with latches so they may be locked on the inside. Window screens and screen doors shall be supplied when necessary. Adequate desk and desk space shall be provided. If a portable table is supplied, it should be adjustable to accommodate the various heights of employees. A 5-way adjustable office chair shall be provided in the quantities listed.

639.04 Field Offices **Field Offices are designated Type A, Type B, or Type C. Buildings, including trailers, may be provided if they substantially equal or exceed the following requirements. Air conditioning, appropriate to the building size, shall be provided in all field offices.**

The walls, roof, and floor of the building shall be completely insulated with a minimum insulation value of R-15. Office trailers shall be either new or in very good used condition. The interior walls shall be covered with suitable wall paneling. The entire office trailer shall be for the exclusive use of the Resident. The office trailer shall be winterized and completely enclosed at the bottom, if the trailer will be used in cold weather.

Other types of buildings and facilities may be furnished of equal or better quality.
A public work area will be provided in the field office that shall be designed and constructed so that individuals with disabilities can approach, enter, and exit this area.

At least one accessible route to the field office shall be provided from accessible parking. The accessible route shall comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and this specification.

The minimum clear width of an accessible route shall be 36 inches except at doors. The least possible slope shall be used for an accessible route. An accessible route with a running slope greater than 1:20 shall be considered a ramp. Maximum ramp slope is 1:12. The maximum rise for any run of a ramp shall be 30 inches and the minimum clear width shall be 36 inches. Nowhere shall the cross slope of an accessible route exceed 1:50. Changes in level up to ¼ inch may be vertical and without edge treatment. Changes in level between ¼ inch and ½ inch shall be beveled with a slope no greater than 1:2. Ramp floor surfaces shall be stable, firm, and slip-resistant.

Ground floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant.

The main door to the public work area shall have a minimum clear opening of 32 inches with the door opened 90 degrees, measured between the face of door and the opposite stop. Minimum maneuvering clearances at doors shall be provided. The floor or ground area within the required clearances shall be level and clear.

The handle and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping. Lever-operated mechanisms push type mechanisms, and U-shaped handles are acceptable designs. Hardware required for accessible door passage shall be mounted no higher than 48 inches above finished floor.
A minimum of 3 parking spaces will be supplied for Class B & C Field Offices and 6 for Class A. One wheelchair accessible parking space shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance.

Level landings shall be provided at bottom and top of each run. The landing shall be at least as wide as the ramp run leading to it with a minimum length of 60 inches.

If a ramp run has a rise greater than 6 inches or a horizontal projection greater than 72 inches, then it shall have handrails on both sides. Handrails shall have the following features:

1) Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback ramps shall always be continuous.

2) If handrails are not continuous, they shall extend at least 12 inches beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface.

3) The clear space between the handrail and the wall shall be 1½ inch.

4) Gripping surfaces shall be continuous.

5) Top of handrail gripping surfaces shall be mounted between 34 and 38 inches above ramp surfaces.

6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.

7) Handrails shall not rotate within their fittings.

8) The diameter or width of the gripping surfaces of a handrail shall be 1¼ to 1½ inch, or the shape shall provide an equivalent gripping surface.

Firm and sturdy steps shall also be provided with 7 inch maximum riser and 11 inch minimum depth, and at least one handrail extending from the top of the steps to a minimum 12 inches beyond the bottom of the steps.

The Contractor will make reasonable effort(s) to provide wheelchair accessible toilet facilities when "portable" facilities are provided.

The Contractor shall provide wheelchair accessible toilet facilities when flush type facilities, that is, those with running water, are provided; and the Contractor shall provide wheelchair accessible portable facilities, if used, when the contract duration exceeds two continuous construction seasons.

In addition to the facilities previously specified in this subsection, each field office shall meet the following minimum requirements:

Description	Quantity		
	Type A	Type B	Type C
Floor Area (Outside Dimension) - ft^2	312	220	125
Inside Wall Height – feet	7	7	7
Window Area - ft^2	55	35	35
Drafting Table Surface Area - ft^2	15	15	15
Drafting Stools - each	2	1	1
Office Desks - each	2	1	1
Ergonomic Swivel Chairs -ea (5-way adjustable)	3	2	2
Folding Chairs - each	3	2	2
Lighting Units - each	4	2	2
Electric Wall Outlets - each	6	4	3
Power Strip Surge Protectors - each	3	2	1
Wall Closets - each	1	1	1
Plan Rack for minimum of 6 sets of plans	1	1	0
Toilet Facility	1	1	1
Wastebaskets - each	2	2	1

All windows shall be provided with shades or blinds.

The toilet facility shall be for the exclusive use of State personnel. If requested, the Contractor will supply a lock to ensure exclusive use.

The Resident will have the option to reject any furniture or supplies provided to the field office based on general condition.

One hundred ten volt, 60 cycle, continuous electric service shall be supplied for lighting and 15 amp duplex wall outlets. Lighting shall consist of florescent light units with rapid start bulbs or LED shop style lights located over the work areas for a minimum of 50 foot candles overall. At least one external light source will be provided.

Drafting surfaces shall be 40 inches above the floor and have shelves beneath. Shelves for plans and rolls shall also be furnished overhead. Drafting stools shall be approximately 28 inches high.

Desks shall be single or double pedestal standard office type, and shall be in addition to "built-in" type desks in the office trailer.

Field offices shall be furnished with one four-drawer letter size metal filing cabinet.

Wall closets shall be 21 inches wide, 15 inches deep, and at least 4 feet high.

Each office shall be furnished with a broom, dustpan, sweeping compound, trash bags, and with cleaning material for cleaning glass. If the field office is carpeted, then a vacuum cleaner will be provided. The contractor will be responsible for disposing of trash from the field office.

The Contractor shall provide a fully functional wireless desktop copier/scanner/printer, capable of copying field books, for the Resident's use during the project. All maintenance and supplies, except paper, shall be the responsibility of the Contractor.

The Contractor shall provide bottled water and a microwave for the duration of the project. All maintenance and supplies shall be the responsibility of the Contractor. Alternate source of water, such as a water cooler, may be provided as approved by resident.

The Contractor shall provide a 4 cubic-foot refrigerator in the field office for the duration of the project.

Each office shall be furnished with a 10-person general-purpose first aid kit. The first aid kit shall be periodically inspected and refilled as necessary.

<u>639.08 Heat</u> Heat appropriate to the building size shall be supplied by the Contractor to maintain an acceptable room temperature during occupancy.

639.091 Broadband Connection **The contractor will supply one computer broadband connection, modem lease and router. The router shall have wireless access and be 802.11n or newer capable. The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). It shall be the contractor's option to provide dynamic or static IP addresses through the service. The selected service will have a minimum download connection of 5.0 Mbps and 1.0 Mbps upload. The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.**

639.10 Method of Measurement **Field office will be measured by the unit or lump sum for each building provided, equipped and maintained satisfactorily.**

639.11 Basis of Payment **The accepted quantity of field office will be paid for at the contract unit price each or lump sum which payment shall be full compensation for furnishing until contract completion, erecting, equipping, maintaining, furnishing electricity, heating, installing and maintaining toilet facilities and if necessary removing the buildings or office trailers.**

Payment for these items will be made in 3 parts; the first payment of ½ to be made after the Contractor has supplied the building or office trailer and it has been approved. The remaining payments shall be made at intervals as follows:

A second payment of ¼ shall be made when one-half of the anticipated work has been completed.

The final payment of the remaining ¼ shall be made upon completion of the work.

Payment will be made under:

Pay Item		Pay Unit
639.18	Field Office, Type A	Each
639.19	Field Office, Type B	Each
639.20	Field Office, Type C	Each

SECTION 652
MAINTENANCE OF TRAFFIC

652.2.4 Other Devices Revise this Section by removing the following paragraph:
" STOP/SLOW paddles shall be the primary and preferred hand held signaling device. Flags shall be limited to Emergencies. The paddle shall have an octagonal shape and be at least 18 inches wide with letters at least 6 inches high and should be fabricated from semi-rigid material"

And replace with these two paragraphs
"**Flaggers shall use a STOP / SLOW hand held paddle as the primary and preferred hand signaling device. Use of flags shall be limited to emergency situations.**

STOP / SLOW paddles shall have high intensity prismatic retro reflective sheeting Type XI, have an octagonal shape on a rigid handle and shall be at least 18 inches wide with letters at least 6 inches high and shall be constructed from light semi-rigid material. The STOP (R1-1) face shall have white letters and a white border on a red background. The SLOW (W20-8) face shall have black letters and a black border on an orange background. Paddles in existing stock meeting the current specification (Type VII, Type VIII, or Type IX) may be utilized until the end of the service life or until 12/31/18. All new paddles must meet the Type XI requirements."

652.3.3 Submittal of Traffic Control Plan On page **6-148**, note **f,** in the last sentence revise the "105.2.2" to "105.2.3" so that the last sentence reads, "**For a related provision, see Section 105.2.3 – Project Specific Emergency Planning**.".

652.3.4 General Revise the eighth paragraph by removing "Earth Berm" and replace it with "**Concrete Barrier**".

Amend this section by adding the following paragraph before the paragraph beginning with "Special Detours and temporary structures…":

"A temporary ramp shall be constructed with HMA at the ends of the roadway section paved or milled each day. The use of millings or RAP will not be allowed, but cold patch may be temporarily utilized until HMA plants are open for the season. The maximum ramp change in elevation shall not exceed 4" vertical. For Interstate Highways or roadways with speed limits equaling or exceeding 50 mph; temporary ramps shall be constructed at a length of eight feet per inch of transition depth. For roadways with speed limits less than 50 mph and greater than 25 mph, temporary ramps shall be constructed at a length of four feet per inch of transition depth. For roadways with speed limits 25 mph or less, temporary ramps shall be constructed at a length of two feet per inch of transition depth. Materials, placement, maintenance, and removal shall be incidental to contract items."

652.4 Flaggers Revise this section by removing the first paragraph, and replace it with the following"

"The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier. All flaggers must carry an official certification card with them at all times while flagging.

For daytime conditions, flaggers shall wear a top (vest, shirt or jacket) that is orange, yellow, yellow-green, or fluorescent versions of these colors meeting ANSI 107-2004, Class 2 or Class 3, along with a hardhat with 360 ˚ retro-reflectivity.

For nighttime conditions, flaggers shall wear all Class 3 apparel, meeting ANSI 107-2004, including a Class 3 top (vest, shirt or jacket) and a Class E bottom (pants or coveralls), shall be worn along with a hardhat with 360 ° retro-reflectivity and shall be visible at a minimum distance of 1000 ft. Flagger stations must be illuminated in nighttime conditions to assure visibility and will be specifically addressed in detail in the Contractor's TCP".

652.41 TRAFFIC OFFICERS

Revise this subsection so that the subsection number and title is

"**652.4.1 TRAFFIC OFFICERS** "

SECTION 656
TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.2 If No Pay Item Add the following to the end of the first paragraph:

"Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 will result in a violation letter and a reduction in payment as shown in the schedule list in 656.5.1. The Department's Resident or any other representative of The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

SECTION 660
ON-THE-JOB TRAINING

660.06 Method of Measurement

Remove the first sentence in its entirety and replace with " **The OJT item will be measured by the number of OJT hours by a trainee who has successfully completed an approved training program.**"

660.07 Basis of payment to the Contractor

Remove the last word in the first sentence so that the first sentence reads " The OJT shall be paid for once successfully completed at the contract unit price per **hour**."

Payment will be made under

Change the Pay Item from "660.22" to "**660.21**" and change the Pay Unit from "Each" to "**Hour**".

SECTION 672
PRECAST CONCRETE BLOCK GRAVITY WALL

672.035 Backfill Material– Revise this section by adding the following after the second paragraph:

Backfill materials shall meet the criteria in the following table.

Base Polymer	Property	Criteria	Test Method
Polyester (PET)	pH	3< pH > 9	AASHTO T-289
Polyolefin (PP & HDPE)	pH	pH > 3	AASHTO T-289

672.04 Design Requirements – Revise this section by replacing items 2 and 3 in the second paragraph with the following:

2. FHWA-NHI-10-024 and FHWA-NHI-10-025, Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, Volumes I and II, current edition.

3. FHWA-NHI-09-087 Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, current edition.

SECTION 673
WETCAST SMALL LANDSCAPE BLOCK WALL

673.035 Backfill Material – Revise this section by adding the following after the second paragraph:

Backfill materials shall meet the criteria in the following table.

Base Polymer	Property	Criteria	Test Method
Polyester (PET)	pH	3< pH > 9	AASHTO T-289
Polyolefin (PP & HDPE)	pH	pH > 3	AASHTO T-289

673.04 Design Requirements – Revise this section by replacing items 2 and 3 in the second paragraph with the following:

2. FHWA-NHI-10-024 and FHWA-NHI-10-025, Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, Volumes I and II, current edition.

3. FHWA-NHI-09-087 Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, current edition

SECTION 674
PREFABRICATED CONCRETE MODULAR GRAVITY WALL

674.02 Materials

Amend this section by adding the following after "Concrete Units:" and before the paragraph beginning with "Tolerances ".

Concrete shall be Class P. The concrete shall contain a minimum of 5.5 gallons per cubic yard of calcium nitrite solution.

The minimum permeability of the concrete as indicated by Surface Resistivity shall be 17 KOhm-cm.

Defects Defects which may cause rejection of precast units include, but are not limited to, the following:
Any discontinuity (crack, rock pocket, etc.) of the concrete which could allow moisture to reach the reinforcing steel.
Rock pockets or honeycomb over 6 square inches in area or over 1 inch deep.
Edge or corner breakage exceeding 12 inches in length or 1 inch in depth.
Any other defect that clearly and substantially impacts the quality, durability, or maintainability of the structure, as determined by the Fabrication Engineer.

Repair honeycombing, ragged or irregular edges and other non-structural or cosmetic defects using a patching material from the MaineDOT Qualified Products List (QPL). The repair, including preparation of the repair area, mixing and application and curing of the patching material, shall be in accordance with the manufacturer's product data sheet. Corners that are not exposed in the final product may be ground smooth with no further repair necessary if the depth of the defect does not exceed 1/2 inch. Remove form ties and other hardware to a depth of not less than 1 inch from the face of the concrete and patch the holes using a patching material from the MaineDOT QPL.

Repair structural defects only with the approval of the Fabrication Engineer. Submit a nonconformance report (NCR) to the Fabrication Engineer with a proposed repair procedure. Do not perform structural repairs without an NCR that has been reviewed by the Fabrication Engineer. Structural defects include, but are not be limited to, exposed reinforcing steel or strand, cracks in bearing areas, through cracks and cracks 0.013 inch in width that extend more than 12 inches in length in any direction. Give the QAI adequate notice prior to beginning any structural repairs.

SECTION 677
MECHANICALLY STABILIZED EARTH RETAINING WALL

677.03 Design Requirements – Revise this section by replacing items 6, 7 and 8 in the second paragraph with the following:

6. FHWA-NHI-10-024, Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, Volumes I, current edition.

7. FHWA-NHI-10-025, Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, Volumes II, current edition.

8. FHWA-NHI-09-087 Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, current edition

On page 6 - 203 change "636.041" to "677.041"

Amend 677.042 Precast Panel Tolerances and Surface Finish by the addition of the following:

Defects Defects which may cause rejection of precast units include, but are not limited to, the following:

Any discontinuity (crack, rock pocket, etc.) of the concrete which could allow moisture to reach the reinforcing steel.
Rock pockets or honeycomb over 6 square inches in area or over 1 inch deep.
Edge or corner breakage exceeding 12 inches in length or 1 inch in depth.
Any other defect that clearly and substantially impacts the quality, durability, or maintainability of the structure, as determined by the Fabrication Engineer.

Repair honeycombing, ragged or irregular edges and other non-structural or cosmetic defects using a patching material from the MaineDOT Qualified Products List (QPL). The repair, including preparation of the repair area, mixing and application and curing of the patching material, shall be in accordance with the manufacturer's product data sheet. Corners that are not exposed in the final product may be ground smooth with no further repair necessary if the depth of the defect does not exceed 1/2 inch. Remove form ties and other hardware to a depth of not less than 1 inch from the face of the concrete and patch the holes using a patching material from the MaineDOT QPL.

Repair structural defects only with the approval of the Fabrication Engineer. Submit a nonconformance report (NCR) to the Fabrication Engineer with a proposed repair procedure. Do not perform structural repairs without an NCR that has been reviewed by the Fabrication Engineer. Structural defects include, but are not be limited to, exposed reinforcing steel or strand, cracks in bearing areas, through cracks and cracks 0.013 inch in width that extend more than 12 inches in length in any direction. Give the QAI adequate notice prior to beginning any structural repairs.

SECTION 702
BITUMINOUS MATERIAL

702.01 Asphalt Cement - Remove this section in its entirety and replace with the following:
Performance-Graded Asphalt Binder (PGAB) that has not been modified with polymer shall

conform to the requirements of AASHTO M 320. Polymer modified binder shall meet the requirements of AASHTO M 332 (including Appendix X1), except that the percent difference in nonrecoverable creep compliance, Jnrdiff, shall not be enforced. Performance-Graded Asphalt Binder shall not contain re-refined engine oil bottoms (REOB).
The Contractor shall arrange for the Supplier to furnish the following items to the Department's Asphalt Pavement Engineer:
a. A Quality Control Plan that conforms to the requirements of AASHTO R 26 "Certifying Suppliers of Performance-Graded Asphalt Binders" and

b. A CERTIFICATE OF ANALYSIS for all asphalt materials furnished for use on the project. The Certificate shall include the actual test results of the material in storage from which the shipments are being made. Certificates shall be supplied for each lot, batch, or blend of each type and grade of material. A new certificate shall be issued at least every 30 days or upon receiving or manufacture of a new material. The original of each Certificate of Analysis shall be mailed to the Departments Asphalt Pavement Engineer.

The Contractor shall give the supplier sufficient notice of orders to permit testing and certification. Material not certified will not be accepted for use.
Deliveries of asphalt materials shall be accompanied by a Bill of Lading containing the information required under Section l08.1.3 f. The Bill of Lading shall include the applicable certificate number and shall include a printed or stamped statement such as the following: "THIS IS TO CERTIFY THAT THE ASPHALT MATERIAL REPRESENTED BY THIS LOADING INVOICE CONFORMS TO THE SPECIFICATIONS OF THE PURCHASER FOR THE MATERIAL TYPE AND GRADE STATED THEREON."
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.
All non-bituminous components added to the binder prior to the sampling point for binder certification shall be included on the asphalt binder Certificate of Analysis identifying their presence. All non-bituminous components added after the certification sampling point and prior to transport shall be included on the Bill of Lading. All non-bituminous components added to the binder at the HMA plant shall be identified on the mix plant documentation and accompanied by test results and certification showing the effect of the additives introduced, if any.

702.04 Emulsified Asphalt

Revise this Section by removing the first paragraph in its entirety and replace with the following:

Emulsified Asphalt shall conform to the requirements of AASHTO M 140. Cationic emulsified asphalt shall conform to the requirements of AASHTO M 208. Anionic emulsified asphalt Grade RS-1h shall conform to the requirements in the following table:

Type	Rapid-Setting	
Grade	RS-1h	
Tests on Emulsions	min	max
Viscosity, Saybolt Furol at 25°C SFS	20	100
Storage Stability test, 24-h, %[A]	-	1.0
Demulsibility, 35 ml, 0.02 *N* $CaCl_2$, %	60	-
Sieve Test, %[A]	-	0.10
Residue by distillation, %	55	-
Tests on Residue from Distillation Test	min	max
Penetration, 25°C 100g, 5 s	40	90
Ductility, 25°C 5 cm/min, cm	40	-
Solubility in trichloroethylene or n-propyl bromide, %	97.5	-

[A] **This requirement is waived if successful application of material has been achieved in the field.**

SECTION 703
AGGREGATES

703.01 Fine Aggregate for Concrete Replace the second paragraph with the following:

"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 organic plate number 3, the fine aggregate shall be rejected."

703.0201 Alkali Silica Reactive Aggregates. Remove this section in its entirety and replace with the following:

All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by an accredited independent lab submitted to the Department. Aggregate submittals will be required on a 5-year cycle, unless the source or character of the aggregate in question has changed within 5 years from the last test date.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting as tested under ASTM C 1567.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include, but are not limited to the following:

Class F Coal Fly Ash meeting the requirements of AASHTO M 295.
Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.

Densified Silica Fume meeting the requirements of AASHTO M 307.
Lithium based admixtures
Metakaolin

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

703.06 Aggregate for Base and Subbase - Remove the first two paragraphs in their entirety and replace with these:
"**The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro- Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed, except that the test shall be performed on the portion of the sample that passes the ½ in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected.**

The material used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. "

703.081 RAP for Asphalt Pavement
Remove this section in its entirety and replace with the following:

703.081 RAP for Asphalt Pavement Recycled Asphalt Pavement (RAP) may be introduced into hot-mix asphalt pavement at percentages approved by the Department according to the MaineDOT Policies and Procedures for HMA Sampling and Testing.

If approved by the Department, the Contractor shall provide documentation stating the source, test results for average residual asphalt content, and stockpile gradations showing RAP materials have been sized to meet the maximum aggregate size requirements of each mix designation. The Department will obtain samples for verification and approval prior to its use.

The maximum allowable percent of RAP shall be determined by the asphalt content, the percent passing the 0.075 mm sieve, the ratio between the percent passing the 0.075 mm sieve and the asphalt content, and Coarse Micro-Deval loss values as tested by the Department. The maximum percentage of RAP allowable shall be the lowest percentage as determined according to Table 4 below:

Table 4: Maximum Percent RAP According to Test Results

Classification	Maximum RAP Percentage Allowed	Asphalt content standard deviation	Percent passing 0.075 mm sieve standard deviation	Percent passing 0.075 mm sieve / asphalt content ratio	Residual aggregate M-D loss value
Class III	10%	≤ 1.0	N/A	≤ 4.0	≤ 18
Class II	20%	≤ 0.5	≤ 1.0	≤ 2.8	
Class I	30%	≤ 0.3	≤ 0.5	≤ 1.8	

The Department will monitor RAP asphalt content and gradation during production by testing samples from the stockpile at approximately 15,000 T intervals (in terms of mix production). The allowable variance limits (from the numerical average values used for mix designs) for this testing are determined based upon the maximum allowable RAP percentage, and are shown below in Table 5.

Table 5: RAP Verification Limits

Classification	Asphalt content (compared to aim)	Percent passing 0.075 mm sieve (compared to aim)
Class III	± 1.5	± 2.0
Class II	± 1.0	± 1.5
Class I	± 0.5	± 0.7

For specification purposes, RAP will be categorized as follows:

Class III – A maximum of 10.0 percent of Class III RAP may be used in any base, intermediate base, surface, or shim mixture. A maximum of 20.0 percent of Class III RAP may be used in hand-placed mixes for item 403.209.

Class II – A maximum of 20.0 percent Class II RAP in any base, binder, surface, or shim course.

Class I – A maximum of 20.0 percent Class I RAP may be used in any base, intermediate base, surface, or shim mixture without requiring a change to the specified asphalt binder. A maximum of 30.0 percent Class I RAP may be used in in any base or intermediate base mixture provided that a PG 58-28 asphalt binder is used. A maximum of 30.0 percent Class I RAP may be used in any surface or shim mixture provided that PG 58-34 or 52-34 asphalt binder is used. Mixtures exceeding 20.0 percent Class I RAP must be evaluated and approved by the Department.

The Contractor may use up to two different RAP sources in any one mix design. The total RAP percentage of the mix shall not exceed the maximum allowed for the highest classification RAP source used (i.e. if a Class I & Class III used, total RAP must not exceed 30.0%). The blended RAP material must meet all the requirements of the classification for which the RAP is entered (i.e. 10% Class III with 20% Class I, blend must meet Class I criteria). The Department may take belt cuts of the blended RAP to verify the material meets these requirements. If the Contractor elects to use more than one RAP source in a design, the Contractor shall provide an acceptable point of sampling blended RAP material from the feed belt.

In the event that RAP source or properties change, the Contractor shall notify the Department of the change and submit new documentation stating the new source or properties a minimum of 72 hours prior to the change to allow for obtaining new samples and approval.

703.19 Granular Borrow

Remove the gradation requirements table, and replace with the following:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Material for Underwater Backfill	Material for Embankment Construction
6 inch	100	
No. 40	0-70	0-70
No. 200	0-7.0	0-20.0

703.33 Stone Ballast - In the third paragraph, remove the words " less than" before 2.60 and add the words "or greater" after 2.60.

SECTION 708
PAINTS AND PRESERVATIVES

708.05 Timber Preservative Revise this section by removing it in its entirety and replacing with: "**Timber preservatives shall conform to the requirements of AASHTO M 133 and AWPA Standard U1. All preservatives shall meet the requirements of the US EPA regulations under the Federal Insecticide, Fungicide and Rodenticide Act."**

SECTION 710
FENCE AND GUARDRAIL

710.07 Guardrail Posts Amend subsection 'a' by removing the words "white oak", "cedar", "tamarack", "maple", "beech", "birch" and "red oak" from the first sentence. Also in the first sentence, place an "**or**" between "pine" and "eastern hemlock". In the second sentence remove the words "well seasoned". Remove the sentence beginning with "Wood posts and offset brackets…" and replace it with: "**Wood posts and offset brackets shall be preservative treated in accordance with the requirements of AASHTO M 133 and AWPA U1, UC4A Commodity Specification A: Sawn Products**."

SECTION 712
MISCELLANEOUS HIGHWAY MATERIAL

712.061- Structural Precast Concrete Units

Under the heading, Quality Control and Quality Assurance, revise the fourth paragraph to read:

"Acceptance is the prerogative of the Department. The Department will conduct Quality Assurance (QA) in accordance with Standard Specification Subsection 106.5. Testing deemed necessary by the Department that is in addition to the minimum testing requirements will be scheduled to minimize interference with the production schedule. The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents."

Under the heading, Concrete Testing, revise the first paragraph to read as the following two paragraphs:

"Concrete Testing Acceptance of structural precast units, for each day's production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results.

At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All testing equipment required by the QAI to perform this testing shall be in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made.

Quality Control test cylinders shall be made and tested in accordance with the following standards:

AASHTO T 22 (ASTM C39) Test Method for Compressive Strength of Cylindrical Concrete Specimens

AASHTO T23 (ASTM C31) Practice for Making and Curing Concrete Test Specimens in Field

AASHTO T141 (ASTM C172) Practice for Sampling Freshly Mixed Concrete
AASHTO T152 (ASTM C231) Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
AASHTO T196 (ASTM C173) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C1064 Test Method for Temperature of Freshly mixed Portland Cement Concrete
ASTM C1611 Standard Test Method for Slump Flow of Self-Consolidating Concrete"

Under the heading, Concrete Testing, **delete** the paragraph that begins:
"At least once per week, the Contractor shall make 2 concrete cylinders..…for use by the Department….."

SECTION 713
STRUCTURAL STEEL AND RELATED MATERIAL

Section 713.01- Structural Steel Revise this Section by removing the sentence:
" Impact test sampling and testing procedures shall be in accordance with AASHTO T."
And replace it with: **"Impact test sampling and testing procedures shall be in accordance with AASHTO T 243 M/T 243 and AASHTO T 244."**

SECTION 717
ROADSIDE IMPROVEMENT MATERIAL

717.02 Agricultural Ground Limestone

In the table after the third paragraph which starts with "Liquid lime…" change the Specification for Nitrogen (N) from "15.5 percent of which 1% is from ammoniac nitrogen and 14.5 /5 is from Nitrate Nitrogen" to read "**15.5 % of which 1% is from Ammoniacal Nitrogen and 14.5 % is from Nitrate Nitrogen**"

717.061 Erosion Control Blankets Revise this section by removing it in its entirety and replacing it with the following:

"**717.061 Erosion Control Blankets Shall consist of a machine produced rolled blanket of biodegradable fibers, evenly distributed over the entire area of blanket, of a consistent thickness, sewn into a biodegradable mesh on the top and bottom surface using a cotton blend thread. The blanket shall remain in place when subject to shear stress of 1.55 lb/ft^2. The blanket shall remain intact until grass is established. The blanket shall be a product currently listed on the department's Qualified Products List (QPL) of Erosion Control Products. See Section 618.10 - Seeding, Maintenance and Acceptance."**

SECTION 720
STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS

720.10 Wood Utility Pole Amend the first sentence in this section by adding "**, Red Pine**" after "Douglas Fir".

Replace the paragraph beginning with "Wood Utility poles…" with:
"**Wood Utility poles shall be pressure treated, after fabrication in accordance with AASHTO Specifications M 133 and AWPA U1, UC4B, Commodity Specification D: Poles**."

720.12 Wood Sign Posts Remove the first sentence and replace with "**Wood sign posts shall be rectangular, straight and sound timber, cut from live growing native spruce, red pine, hemlock or cedar trees, free from loose knots or other structurally weakening defects of importance, such as shake or holes or heart rot**."

Remove the paragraph beginning with "When pressure treated sign posts are called for on the plans …" with "**When pressure treated sign posts are called for on the plans, the wood shall be Yellow Pine, Number 2 or better, or the species listed above. The pressure treated wood shall meet AASHTO M 133 and AWPA Standard U1, UC4A, Commodity Specification A: Sawn Products.**"

Environmental Summary Sheet

WIN: 21843.00 **Date Submitted: 2/5/2018**
Town: Wiscasset
CPD Team Leader: Danielle Tetreau
ENV Field Contact: Peter Newkirk

NEPA Complete: Not required: State-funded project, no Federal nexus.

☐ **Section 106**
Not Applicable

☐ **Section 4(f) and 6(f)**
Not Applicable

☐ **Maine Department of Inland Fisheries and Wildlife Essential Habitat**

Not Applicable Timing Window: Not Applicable

☐ **Section 7**
Not Applicable

☐ **Essential Fish Habitat**
Not Applicable

☐ **Maine Department of Conservation/Public Lands, Submerged Land Lease**
Not Applicable

☐ **Maine Land Use Regulation Commission**
Not Applicable

☐ **Maine Department of Environmental Protection**
Not Applicable-No work in jurisdictional resources.

☐ **Army Corps of Engineers, Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
Not Applicable-No work in jurisdictional resources.

☐ **Stormwater Review**
Not Applicable – less than 1 acre of new impervious area, not MS4

☒ **Special Provisions Required**

Special Provision 105-Timing of Work Restriction	N/A☒	Applicable☐
Special Provision 656-Minor Soil Disturbance	N/A☒	Applicable☐
Standard Specification 656-Erosion Control Plan	N/A☐	Applicable☒
Special Provision 203-Dredge Spec	N/A☒	Applicable☐
General Note for Hazardous Waste	N/A☒	Applicable☐
Special Provision 203-Hazardous Waste	N/A☒	Applicable☐

**All permits and approvals based on plans/scope: 10/4/2017*