

MAINE TURNPIKE AUTHORITY

CONTRACT DOCUMENTS

CONTRACT 2014.04

BRIDGE PAINTING
SACO RIVER OVERPASS
MILE 33.0

NOTICE TO CONTACTORS

PROPOSAL

CONTRACT AGREEMENT

CONTRACT BOND

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

SPECIFICATIONS

TABLE OF CONTENTS

	<u>PAGE</u>
NOTICE TO CONTRACTORS	N-1
PROPOSAL	P-1
CONTRACT AGREEMENT	C-1
CONTRACT BOND	CB-1
FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT	F-1
 <u>ARRANGEMENT OF SPECIFICATIONS</u>	
PART I - GENERAL PROVISIONS	GP-1
PART II - SPECIAL PROVISIONS	SP-1
PART III - APPENDICES (Part of Special Provisions)	AP-1

PART I - GENERAL PROVISIONS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
<u>100</u>	<u>GENERAL PROVISIONS</u>	
100.1	REPLACEMENT OF FORMER STANDARD SPECIFICATIONS AND DETAILS	GP-1
<u>101</u>	<u>CONTRACT INTERPRETATION</u>	
101.2	DEFINITIONS	GP-1
<u>102</u>	<u>BIDDING</u>	
102.1.1	BASIC REQUIREMENTS	GP-2
102.6	BID GUARANTY	GP-3
102.7.1	LOCATION AND TIME	GP-3
102.7.2	EFFECTS OF SIGNING AND DELIVERY OF BIDS	GP-3

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
<u>103</u>	<u>AWARD AND CONTRACTING</u>	
103.3.1	NOTICE AND INFORMATION GATHERING	GP-3
103.3.2	NOTICE OF DETERMINATION	GP-3
103.3.3	APPEAL	GP-4
103.4	NOTICE OF AWARD	GP-4
103.5.4	EXECUTION OF CONTRACT BY BIDDER	GP-4
103.8	EXECUTION OF CONTRACT BY DEPARTMENT	GP-5
<u>104</u>	<u>GENERAL RIGHTS AND RESPONSIBILITIES</u>	
104.2.1	FURNISHING OF RIGHT-OF-WAY	GP-5
104.2.3	AUTHORITY OF PROJECT MANAGER AND RESIDENT	GP-5
104.3.5	DUTIES REGARDING INSPECTION OF WORK	GP-5
104.3.7	LAWS TO BE OBSERVED	GP-6
104.3.8	WAGE RATES AND LABOR LAWS	GP-6
104.3.11	RESPONSIBILITY FOR PROPERTY OF OTHERS	GP-7
104.3.14	INTERPRETATION AND INTERPOLATION	GP-7
104.4.2	PRECONSTRUCTION CONFERENCE	GP-7
104.4.5	EARLY NEGOTIATION	GP-8
104.4.7	COOPERATION WITH OTHER CONTRACTORS	GP-8
104.4.10	COORDINATION OF BRIDGE CLOSURE/BRIDGE WIDTH RESTRICTION NOTIFICATION	GP-9
104.5.9	LANDSCAPE SUBCONTRACTORS	GP-9
<u>105</u>	<u>GENERAL SCOPE OF WORK</u>	
105.1	INTENT OF THE CONTRACT	GP-9

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
105.2.3	JOINT DUTY REGARDING SAFETY	GP-10
105.2.4.1	LOCKOUT/TAGOUT PROCEDURES	GP-10
105.4.1	MAINTENANCE DURING CONSTRUCTION	GP-10
105.4.3	MAINTENANCE DURING WINTER CONSTRUCTION	GP-11
105.5.1	GENERAL REQUIREMENTS	GP-11
105.6	CONSTRUCTION SURVEYING	GP-13
105.6.1	AUTHORITY PROVIDED SERVICES	GP-13
105.6.2	CONTRACTOR PROVIDED SERVICES	GP-13
105.6.2.1	QUALITY CONTROL	GP-13
105.6.3	QUALITY ASSURANCE	GP-13
105.6.4	BOUNDARY MARKERS	GP-14
105.7.1	GENERAL	GP-14
105.7.4	SUBMITTAL REQUIREMENTS	GP-15
105.8.1	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	GP-15
105.10	EQUAL OPPORTUNITY AND CIVIL RIGHTS	GP-16
105.10.1	REQUIREMENTS APPLICABLE TO FEDERALLY FUNDED CONTRACTS	GP-16
105.10.2	REQUIREMENTS APPLICABLE TO ALL CONTRACTS	GP-16
105.11	OTHER FEDERAL REQUIREMENTS	GP-17
105.12	LIMITATIONS OF OPERATIONS	GP-17
<u>106</u>	<u>QUALITY</u>	
106.3.3	SOURCES	GP-18
106.3.4	STORAGE	GP-18

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
106.3.7	SAMPLING AND TESTING	GP-18
106.6	ACCEPTANCE	GP-18
106.8.3	UNAUTHORIZED WORK	GP-18
<u>107</u>	<u>TIME</u>	
107.1.1	SUBSTANTIAL COMPLETION	GP-19
107.3.1	GENERAL	GP-19
107.3.2	NIGHT WORK	GP-19
107.3.3	SUNDAYS AND HOLIDAYS	GP-20
107.4.2	SCHEDULE OF WORK REQUIRED	GP-20
107.4.4	SCHEDULE REVISIONS	GP-20
107.7.2	SCHEDULE OF LIQUIDATED DAMAGES	GP-20
107.9.1	FINAL CLEAN-UP AND FINISHING	GP-21
<u>108</u>	<u>PAYMENT</u>	
108.1	MEASUREMENT OF QUANTITIES FOR PAYMENT	GP-21
108.1.2	GENERAL MEASUREMENT PROVISIONS	GP-21
108.1.3	PROVISIONS RELATING TO CERTAIN MEASUREMENTS	GP-21
108.2.1	GENERATION OF PROGRESS PAYMENT ESTIMATES	GP-21
108.2.2	PAYMENT	GP-22
108.2.3	MOBILIZATION PAYMENTS	GP-22
108.3	RETAINAGE	GP-22
108.4	PAYMENT FOR MATERIALS OBTAINED AND STORED	GP-23
108.4.1	PRICE ADJUSTMENT FOR HOT MIX ASPHALT	GP-23
108.5	RIGHT TO WITHHOLD PAYMENT	GP-23

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
108.6	TAXES, FEES, ALLOWANCES, AND NOTICES	GP-24
108.8	FINAL PAYMENT	GP-24
<u>109</u>	<u>CHANGES</u>	
109.1.1	CHANGES PERMITTED	GP-24
109.1.2	SUBSTANTIAL CHANGES TO MAJOR ITEMS	GP-24
109.3	EXTRA WORK	GP-24
109.4	DIFFERING SITE CONDITIONS	GP-25
109.4.1	DEFINITION	GP-25
109.4.4	INVESTIGATION / ADJUSTMENT	GP-25
109.5.1	DEFINITIONS – TYPES OF DELAYS	GP-25
109.5.2	ENTITLEMENT TO ADJUSTMENTS	GP-25
109.5.5	DOCUMENTING THE DELAY AND REQUEST FOR ADJUSTMENTS	GP-26
109.5.6	DECISION BY PROGRAM MANAGER	GP-26
109.5.7	ADDITIONAL CONSIDERATION BY DEPARTMENT	GP-26
109.6.1	OVERVIEW – GENERAL REQUIREMENTS	GP-26
109.7.2	BASIS OF PAYMENT	GP-26
109.7.3	COMPENSABLE ITEMS	GP-26
109.7.5	FORCE ACCOUNT WORK	GP-27
<u>110</u>	<u>INDEMNIFICATIONS, BONDING AND INSURANCE</u>	
110.2.1	BONDS	GP-27
110.2.3	BONDING FOR LANDSCAPE SUBCONTRACTORS	GP-28
110.2.3	BONDING FOR LANDSCAPE ESTABLISHMENT PERIOD	GP-28

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
110.3	INSURANCE	GP-29
110.3.05	UMBRELLA LIABILITY	GP-29
110.3.2	COMMERCIAL GENERAL LIABILITY	GP-29
110.3.4	PROFESSIONAL LIABILITY	GP-29
110.3.5	OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY	GP-30
110.3.6	BUILDER'S RISK INSURANCE	GP-30
110.3.8	ADMINISTRATIVE AND GENERAL PROVISIONS	GP-30
<u>111</u>	<u>RESOLUTION OF DISPUTES</u>	
111.1.2	ESCALATION PROCESS	GP-30
111.1.8	COMMISSIONER COMMUNICATIONS BEFORE APPEAL	GP-31
111.2	PROJECT LEVEL NEGOTIATION TO 111.6 JUDICIAL REVIEW	GP-31
<u>112</u>	<u>DEFAULT AND TERMINATION</u>	
112.2	TERMINATION	GP-31
<u>203</u>	<u>EXCAVATION AND EMBANKMENT</u>	
203.01	DESCRIPTION	GP-32
203.18	METHOD OF MEASUREMENT	GP-32
<u>502</u>	<u>STRUCTURAL CONCRETE</u>	
502.10	FORMS AND FALSE WORK	GP-32
502.11	PLACING CONCRETE	GP-32
502.15	CURING CONCRETE	GP-32
<u>503</u>	<u>REINFORCING STEEL</u>	
503.06	PLACING AND FASTENING	GP-33

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
<u>504</u>	<u>STRUCTURAL STEEL</u>	
504.09	FACILITIES FOR INSPECTION	GP-33
504.18	PLATES FOR FABRICATED MEMBERS	GP-33
504.31	SHOP ASSEMBLY	GP-33
<u>535</u>	<u>PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE</u>	
535.02	MATERIALS	GP-34
535.05	INSPECTION FACILITIES	GP-34
535.26	LATERAL POST-TENSIONING	GP-34
<u>603</u>	<u>PIPE CULVERTS AND STORMDRAINS</u>	
603.0311	CORRUGATED POLYETHYLENE PIPE FOR OPTION III	GP-34
<u>604</u>	<u>MANHOLES, INLETS, AND CATCH BASINS</u>	
604.02	MATERIALS	GP-34
<u>605</u>	<u>UNDERDRAINS</u>	
605.05	UNDERDRAIN OUTLETS	GP-35
<u>606</u>	<u>GUARDRAIL</u>	
606.02	MATERIALS	GP-35
606.09	BASIS OF PAYMENT	GP-35
<u>615</u>	<u>LOAM</u>	
615.02	MATERIALS	GP-35
<u>618</u>	<u>SEEDING</u>	
618.01	DESCRIPTION	GP-36
618.03	RATES OF APPLICATION	GP-36
618.09	CONSTRUCTION METHOD	GP-36

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
618.15	TEMPORARY SEEDING	GP-36
<u>620</u>	<u>GEOTEXTILES</u>	
620.03	PLACEMENT	GP-36
620.07	SHIPMENT, STORAGE, PROTECTION AND REPAIR OF FABRIC	GP-36
620.09	BASIS OF PAYMENT	GP-36
<u>621</u>	<u>LANDSCAPING</u>	
621.0036	ESTABLISHMENT PERIOD	GP-37
<u>626</u>	<u>HIGHWAY SIGNING</u>	
626.034	CONCRETE FOUNDATIONS	GP-37
<u>639</u>	<u>ENGINEERING FACILITIES</u>	
639.04	FIELD OFFICES	GP-37
639.09	TELEPHONE	GP-37
639.11	BASIS OF PAYMENT	GP-38
<u>652</u>	<u>MAINTENANCE OF TRAFFIC</u>	
652.2	MATERIALS	GP-38
652.2.4	OTHER DEVICES	GP-38
652.2.5	SAFETY VESTS	GP-38
652.3.1	RESPONSIBILITY OF THE DEPARTMENT	GP-38
652.3.2	RESPONSIBILITY OF THE CONTRACTOR	GP-39
652.3.3	SUBMITTAL OF TRAFFIC CONTROL PLAN	GP-39
652.3.4	GENERAL	GP-39
652.3.41	LOCAL ROAD GENERAL REQUIREMENTS	GP-40

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
652.3.5	INSTALLATION OF TRAFFIC CONTROL DEVICES	GP-41
652.3.6	TRAFFIC CONTROL	GP-42
652.41	TRAFFIC OFFICERS	GP-42
652.6	NIGHT WORK	GP-42
652.61	CONSTRUCTION VEHICLES	GP-42
652.7	METHOD OF MEASUREMENT	GP-42
652.8.2	OTHER ITEMS	GP-43
<u>653</u>	<u>POLYSTYRENE PLASTIC INSULATION</u>	
653.05	PLACING BACKFILL	GP-43
653.06	COMPACTION	GP-43
<u>656</u>	<u>TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL</u>	
656.01	DESCRIPTION	GP-43
656.02	GENERAL	GP-44
656.03	SILT FENCE	GP-44
656.04	TEMPORARY EROSION CHECKS	GP-45
656.041	EROSION CONTROL FILTER BERM	GP-45
656.05	TEMPORARY BERMS	GP-45
656.06	TEMPORARY SLOPE DRAINS	GP-45
656.07	DUMPED STONE	GP-45
656.08	SILT FENCE	GP-46
656.081	BOOM SUPPORTED FLOATING SILT FENCE	GP-46
656.082	MAINTENANCE	GP-46

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
656.085	EROSION CONTROL COMPLIANCE OFFICER	GP-46
656.09	REMOVING AND DISPOSING	GP-47
656.10	METHOD OF MEASUREMENT	GP-47
656.11	BASIS OF PAYMENT	GP-47
<u>701</u>	<u>STRUCTURAL CONCRETE RELATED MATERIALS</u>	
701.10	FLY ASH – CHEMICAL REQUIREMENTS	GP-48
<u>703</u>	<u>AGGREGATES</u>	
703.06	AGGREGATE FOR BASE AND SUBBASE	GP-48
703.22	UNDERDRAIN BACKFILL MATERIAL	GP-49
<u>706</u>	<u>NON-METALLIC PIPE</u>	
706.06	CORRUGATED POLYETHYLENE PIPE FOR UNDERDRAIN, OPTION I AND OPTION II IN CULVERT PIPE	GP-49
<u>709</u>	<u>REINFORCING STEEL AND WELDED STEEL WIRE FABRIC</u>	
709.03	STEEL STRAND	GP-49
<u>712</u>	<u>MISCELLANEOUS HIGHWAY MATERIALS</u>	
712.07	TOPS AND TRAPS	GP-49
712.08	CORRUGATED METAL UNITS	GP-49
712.09	CATCH BASIN AND MANHOLE STEPS	GP-50
712.23	FLASHING LIGHTS	GP-50
712.32	COPPER TUBING	GP-51
712.33	NON-METALLIC PIPE, FLEXIBLE	GP-51
712.34	NON-METALLIC PIPE, RIGID	GP-51
712.341	METALLIC PIPE	GP-51

PART I - GENERAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
712.35	EPOXY RESIN	GP-51
712.36	BITUMINOUS CURB	GP-52
712.37	PRECAST CONCRETE SLAB	GP-52
712.38	STONE SLAB	GP-52
<u>717</u>	<u>ROADSIDE IMPROVEMENT MATERIAL</u>	
717.03	C. METHOD #3 – ROADSIDE MIXTURE #3	GP-52
717.05	MULCH BINDER	GP-53

PART II - SPECIAL PROVISIONS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
—	GENERAL DESCRIPTION OF WORK	SP-1
—	PLANS	SP-1
101.2	DEFINITION	SP-1
103.4	NOTICE OF AWARD	SP-1
104.3.8	WAGE RATES AND LABOR LAWS	SP-1
104.4.4	REQUEST FOR INFORMATION (RFI)	SP-4
104.4.6	UTILITY COORDINATION	SP-4
104.4.7	COOPERATION WITH OTHER CONTRACTORS	SP-4
104.4.7.1	COORDINATION WITH OTHER CONTRACTORS	SP-5
105.2.4.2	LEAD PAINT	SP-5
105.3	TRAFFIC CONTROL AND MANAGEMENT	SP-8
105.5.1	GENERAL REQUIREMENTS	SP-8
105.7.4	SUBMITTAL REQUIREMENTS	SP-8
105.8.1	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	SP-8
105.8.1.1	ENVIRONMENTAL STANDARDS	SP-10
105.8.1.11	WATER POLLUTION CONTROL REQUIREMENTS	SP-10
105.8.1.12	CONSTRUCTION REQUIREMENTS	SP-12
105.8.2	PERMIT REQUIREMENTS	SP-13
105.8.3	WETLAND AND WATER BODY IMPACTS	SP-14
106.9	WARRANTY PROVISIONS	SP-14
106.9.1	WARRANTY DEFECTS	SP-14
106.9.2	REMEDIAL WORK PROCEDURE AND REQUIREMENTS	SP-15

PART II – SPECIAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
107.1	CONTRACT TIME AND CONTRACT COMPLETION DATE	SP-15
107.1.1	SUBSTANTIAL COMPLETION	SP-15
107.4.2	SCHEDULE OF WORK REQUIRED	SP-16
107.4.7	LIMITATIONS OF OPERATIONS	SP-16
107.4.9	FAILURE TO STOP WORK WHEN DIRECTED	SP-17
107.7.2	SCHEDULE OF LIQUIDATED DAMAGES	SP-18
108.4	PAYMENT FOR MATERIALS OBTAINED AND STORED	SP-18
109.7.3	COMPENSABLE ITEMS	SP-19
202.	REMOVING STRUCTURES AND OBSTRUCTIONS (Removing Rumble Strips)	SP-20
504.	STRUCTURAL STEEL (Remove Rivet and Replace with High-Strength Bolt)	SP-22
506.	PAINTING STRUCTURAL STEEL (Field Painting of Existing Structural Steel Girders) (Surface Preparation of Existing Structural Steel Girders) (Containment System and Pollution Control) (Disposal of Hazardous or Toxic Material)	SP-28
526.	CONCRETE BARRIER (Temporary Concrete Barrier Type I - Supplied by Authority)	SP-53
527.	ENERGY ABSORBING UNIT (Work Zone Crash Cushion)	SP-56
619.	MULCH	SP-57
627.	PAVEMENT MARKINGS (Temporary Pavement Markings – Tape)	SP-59
627.	PAVEMENT MARKINGS (Temporary Pavement Markings – Black Tape)	SP-61
652.	MAINTENANCE OF TRAFFIC (General)	SP-63

PART II – SPECIAL PROVISIONS - Continued

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
652.	MAINTENANCE OF TRAFFIC (Specific Project Maintenance of Traffic Requirements)	SP-68
652.	MAINTENANCE OF TRAFFIC (Temporary Mainline Lane Closures) (Lane Closure Installation and Removal Procedures) (Temporary Mainline Shoulder Closures) (Work Requiring Complete Stoppages of Traffic) (Short-Term or Work Hour Speed)	SP-69
652.	MAINTENANCE OF TRAFFIC (Portable Changeable Message Sign)	SP-73
652.	MAINTENANCE OF TRAFFIC (Truck Mounted Attenuator)	SP-75
656.	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	SP-77

PART III – APPENDICES

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
APPENDIX A	LEAD DETERMINATION REPORTS	A-A1
APPENDIX B	TABLES A & B – ALLOWABLE LANE CLOSURES	B-B1

MAINE TURNPIKE AUTHORITY

NOTICE TO CONTRACTORS

Sealed Proposals will be received by the Maine Turnpike Authority for:

CONTRACT 2014.04

BRIDGE PAINTING
SACO RIVER OVERPASS
MILE 33.0

at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, ME, until 1:00 p.m., prevailing time as determined by the Authority on Tuesday, February 18, 2014 at which time and place the Proposals will be publicly opened and read. Bids will only be accepted from Painting Contractors who are SSPC-QP1 and QP2 Certified. Bidders shall submit proof of this certification for themselves and all painting subcontractors, if any, with their bid. All other bids may be rejected. This Project includes a wage determination developed by the State of Maine Department of Labor.

The work consists of the partial painting of the steel superstructures with a high-ratio calcium sulfonate alkyd paint system as shown on the Contract drawings, maintenance of traffic, and all other work incidental thereto in accordance with the Plans and Specifications.

Plans and Contract Documents may be examined by prospective Bidders weekdays between 8:00 a.m. and 4:30 p.m. at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine. **The full size Plans** and Contract Documents may be obtained from the Authority upon payment of Fifty (\$50.00) Dollars for each set, which payment will not be returned. **The half size Plans** and Contract Documents may be obtained from the Authority upon payment of Thirty (\$30.00) Dollars for each set, which payment will not be returned. Checks shall be made payable to: Maine Turnpike Authority. The Plans and Contract Documents may also be downloaded from a link on our website at:

<http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx>.

For general information regarding Bidding and Contracting procedures, contact Nathaniel Carll, Purchasing Manager, at (207) 871-7771 Ext. 115. For information regarding Schedule of Items, plan holders list and bid results, visit our website at <http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx>. For Project specific information, fax all questions to the Purchasing Department at (207) 871-7739. Responses will not be prepared for questions received by telephone. Bidders shall not contact any other Authority staff or Consultants for clarification of Contract provisions, and the Authority will not be responsible for any interpretations so obtained.

All work shall be governed by the Specifications entitled "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", "Standard Details, Revision of December 2002" and "Best Management Practices for Erosion and Sediment Control", latest issue. Copies and recent updates to these publications can be downloaded at: <http://www.maine.gov/mdot/contractors/publications/>.

Proposals must be accompanied by an original bid bond, certified or cashier's check payable to the Maine Turnpike Authority in an amount not less than Five (5%) Percent of the Total Amount in the Proposal, but not less than \$500.00. The Bidder to whom a Contract is awarded will be required to furnish a Surety Corporation Bond, satisfactory to the Authority, on the standard Contract Bond form of the Authority, for a sum not less than the Total Amount of the Proposal.

Proposals must be made upon the Proposal Forms furnished by the Authority separately with the Contract Documents, and must be enclosed in the sealed special addressed envelope provided therefore bearing the name and address of the Bidder, the name of the Contract, and the date and time of Proposal opening on the outside.

A pre-bid meeting will be held on Thursday, February 6, 2014 at 1:00 p.m. at the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine.

The Authority reserves the unqualified right to reject any or all Proposals and to accept that Proposal which in its sole judgment will under all circumstances serve its best interest.

MAINE TURNPIKE AUTHORITY

Nathaniel Carll
Purchasing Manager
Maine Turnpike Authority

Portland, Maine

Maine Turnpike Authority

MAINE TURNPIKE

PROPOSAL

CONTRACT 2014.04

BRIDGE PAINTING
SACO RIVER OVERPASS
MILE 33.0

MAINE TURNPIKE AUTHORITY

PROPOSAL

CONTRACT 2014.04

BRIDGE PAINTING
SACO RIVER OVERPASS
MILE 33.0

TO MAINE TURNPIKE AUTHORITY:

The work consists of the partial painting of the steel superstructures with a high-ratio calcium sulfonate alkyd paint system as shown on the Contract drawings, maintenance of traffic, and all other work incidental thereto in accordance with the Plans and Specifications.

This Work will be done under a Contract known as Contract 2014.04 according to the Plans and Specifications which are on file in the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine.

On the acceptance of this Proposal for said Work, the undersigned will give the required bond with good security conditioned for the faithful performance of said Work, according to said Plans and Specifications, and the doing of all other work required by said Specifications for the consideration herein named and with the further condition that the Maine Turnpike Authority shall be saved harmless from any and all damages that might accrue to any person, persons or property by reason of the carrying out of said Work, or any part thereof, or by reason of negligence of the undersigned, or any person or persons under his employment and engaged in said Work.

The undersigned hereby declares that he/she has carefully examined the Plans, Specifications and other Contract Documents, and that he/she will contract to carry out and complete the said Work as specified and delineated at the price per unit of measure for each scheduled item of Work stated in the Schedule of Prices as follows:

It is understood that the TOTAL AMOUNT stated by the undersigned in the following Schedule of Prices is based on approximate quantities and will be used solely for the comparison of bids, and that the quantities stated in the Schedule of Prices for the various items are estimates only and may be increased or decreased all as provided in the Specifications.

**SCHEDULE OF BID PRICES
CONTRACT NO. 2014.04
BRIDGE PAINTING
SACO RIVER OVERPASS
MILE 33.0**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
202.206	Removing Rumble Strips	Linear Foot	1,920				
504.81	Remove Rivet and Replace with High-Strength Bolt	Each	50				
506.141	Field Painting of Existing Structural Steel Girders	Lump Sum	1				
506.17	Surface Preparation of Existing Structural Steel Girders	Lump Sum	1				
506.9108	Containment System and Pollution Control	Lump Sum	1				
506.9109	Disposal of Hazardous or Toxic Material	Lump Sum	1				
506.9110	Containment, Prep, Disposal and Painting of Beam Ends	Lump Sum	1				
526.306	Temporary Concrete Barrier, Type 1 - Supplied by the Authority	Lump Sum	1				
527.341	Work Zone Crash Cushions - TL3	Unit	2				
619.1202	Temporary Mulch	Lump Sum	1				
627.73	Temporary 6 Inch Pavement Marking Tape	Linear Foot	19,600				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
627.731	Temporary 6 Inch Black Pavement Marking Tape	Linear Foot	6,320				
629.05	Hand Labor, Straight Time	Hour	20				
631.10	Air Compressor (including operator)	Hour	5				
631.11	Air Tool (including operator)	Hour	5				
631.171	Truck - small (including operator)	Hour	5				
631.36	Foreman	Hour	10				
652.30	Flashing Arrow	Each	2				
652.312	Type III Barricades	Each	4				
652.33	Drum	Each	220				
652.35	Construction Signs	Square Foot	1,300				
652.361	Maintenance of Traffic Control Devices	Lump Sum	1				
652.41	Portable - Changeable Message Sign	Each	2				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
652.45	Truck Mounted Attenuator	Calendar Day	100	\$100	00	\$10,000	00
659.10	Mobilization	Lump Sum	1				
TOTAL:							

Contractor's selected approach to Maintenance of Traffic (Lane Closure or Crossovers):

Acknowledgment is hereby made of the following Addenda received since issuance of the Plans and Specifications: _____

Accompanying this Proposal is an original bid bond, cashiers or certified check on _____ Bank, for _____, payable to the Maine Turnpike Authority. In case this Proposal shall be accepted by the Maine Turnpike Authority and the undersigned should fail to execute a Contract with, and furnish the security required by the Maine Turnpike Authority as set forth in the Specifications, within the time fixed therein, an amount of money equal to Five (5%) Percent of the Total Amount of the Proposal for the Contract awarded to the undersigned, but not less than \$500.00, obtained out of the original bid bond, cashier's or certified check, shall become the property of the Maine Turnpike Authority; otherwise the check will be returned to the undersigned.

The performance of said Work under this Contract will be completed during the time specified in Subsection 107.1.

It is agreed that time is of the essence of this Contract and that I (we) will, in the event of my (our) failure to complete the Work within the time limit named above, pay to Maine Turnpike Authority liquidated damages in the amount or amounts stated in the Specifications.

The undersigned is an Individual/Partnership/Corporation under the laws of the State of _____, having principal office at _____, thereunto duly authorized.

_____ (SEAL)

_____ (SEAL)

*Affix Corporate Seal
or Power of Attorney
Where Applicable*

_____ (SEAL)

By: _____

Its: _____

Information below to be typed or printed where applicable:

INDIVIDUAL:

_____	_____
(Name)	(Address)

PARTNERSHIP - Name and Address of General Partners:

_____	_____
(Name)	(Address)

_____	_____
(Name)	(Address)

_____	_____
(Name)	(Address)

_____	_____
(Name)	(Address)

INCORPORATED COMPANY:

_____	_____
(President)	(Address)

_____	_____
(Vice-President)	(Address)

_____	_____
(Secretary)	(Address)

_____	_____
(Treasurer)	(Address)

MAINE TURNPIKE AUTHORITY

MAINE TURNPIKE

YORK TO AUGUSTA

CONTRACT AGREEMENT

This Agreement made and entered into between the Maine Turnpike Authority, and sometimes termed the "Authority", and _____

_____ herein termed the "Contractor":

WITNESSETH: That the Authority and the Contractor, in consideration of the premises and of the mutual covenants, considerations and agreements herein contained, agree as follows:

FIRST: The parties hereto mutually agree that the documents attached hereto and herein incorporated and made a part hereof collectively evidencing and constituting the entire Contract to the same extent as if herein written in full, are the Notice to Contractors, the Accepted Proposal, the Specifications, the Plans, this Agreement, the Contract Bond and all Addenda to the Contract Documents duly issued and herewith enumerated:

SECOND: The Contractor for and in consideration of certain payments to be made as hereafter specified, hereby covenants and agrees to perform and execute all of the provisions of this Contract and of all documents and parts attached hereto and made a part thereof, and at his own cost and expense to furnish and perform everything necessary and required to construct and complete, ready for its intended purpose, in accordance with the Contract and such instructions as the Engineer may give, acceptable to the Authority, in the times provided, all of the Work covered and included under Contract No. _____ covering _____ as herein described.

THIRD: In consideration of the performance by the Contractor of his covenants and agreements as herein set forth, the Authority hereby covenants and agrees to pay the Contractor according to the Schedule of Prices set forth in the Proposal with additions and deductions as elsewhere herein provided in the times and in the manner stated in the Specifications. This Agreement shall insure to the benefit of, and shall be binding upon the parties hereto, and upon their respective successors and assigns; but neither party hereto shall assign or transfer his interest herein in whole or in part without the consent of the other, except as herein provided.

IN WITNESS WHEREOF the parties to this Agreement have executed the same in quintuplicate.

AUTHORITY -

MAINE TURNPIKE AUTHORITY

By: Peter Mills

Title: Executive Director

Date of Signature: _____

ATTEST:

Jonathan Arey
Secretary

CONTRACTOR -

CONTRACTOR

By: _____

Title: _____

Date of Signature: _____

WITNESS:

APPROVAL DATE: _____

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS that _____
of _____ in the County of _____ and 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 Maine Turnpike Authority in the sum of _____ Dollars (\$_____.____),
to be paid to said Maine Turnpike Authority, or its successors, for which payment, well and truly
to be made, we bind ourselves, our heirs, executors, successors and assigns jointly and severally
by these presents.

The condition of this obligation is such that the Principal, designated as Contractor in the
foregoing Contract No. _____ shall faithfully perform the Contract on his part and
satisfy all claims and demands incurred for the same and shall pay all bills for labor, material,
equipment and all other items contracted for, or used by him, in connection with the Work
contemplated by said Contract, and shall fully reimburse 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.

Signed and sealed this _____ day of _____, A.D., 201____

Witnesses:

CONTRACTOR

_____	_____ (SEAL)
_____	_____ (SEAL)
_____	_____ (SEAL)

SURETY

_____	_____ (SEAL)
_____	_____ (SEAL)
_____	_____ (SEAL)

(Surety must attach copy of Power of Attorney showing authority of Office or Agent to execute bonds)

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

Upon receipt of the sum of _____, which sum represents the total amount paid, including the current payment for work done and materials supplied for Project No. _____, in _____, Maine, under the undersigned's Contract with the Maine Turnpike Authority.

The undersigned, on oath, states that the Final Payment of _____ is the final payment for all work, labor, materials, services and miscellaneous (all of which are hereinafter referred to as "Work Items") supplied to the said Project through _____ and that no additional sum is claimed by the undersigned respecting said Project.

The undersigned, on oath, states that all persons and firms who supplied Work Items to the undersigned in connection with said Project have been fully paid by the undersigned for such Work Items or that such payment will be fully effected immediately upon receipt of this payment.

In consideration of the payment herewith made, the undersigned does fully and finally release and hold harmless the Maine Turnpike Authority, and its Surety, if any, from any and all claims, liens or right to claim or lien, arising out of this Project under any applicable bond, law or statute.

It is understood that this Affidavit is submitted to assure the Owner and others that all liens and claims relating to the Work Items furnished by the undersigned are paid.

(Contractor)

By: _____

Title: _____

State of MAINE

County of _____

I, _____, hereby certify on behalf of _____
(Company Officer) *(Company Name)*

its _____, being first duly sworn and stated that the foregoing representations are
(Title)

are true and correct upon his own knowledge and that the foregoing is his free act and deed in said capacity and the free act and deed of the above-named _____
(Company Name)

The above-named, _____, personally appeared before me this ____ day of _____ and swears that this is his free act and deed.

(SEAL)

Notary Public

My Commission Expires: _____

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART I – GENERAL PROVISIONS

(Rev. May 18, 2009)

The Specifications are divided into two parts:
Part I, General Provisions and Part II, Special Provisions.

The Maine Turnpike General Provisions are additions and alterations to the Maine Department of Transportation Standard Specifications. See Subsection 100.1.

DIVISION 100 - GENERAL PROVISIONS

100.1 Replacement of Former Standard Specifications and Details

The following paragraphs are added:

The Maine Department of Transportation Standard Specifications Revisions of 2002 as modified herein is referenced and incorporated in all Maine Turnpike Authority Construction Contracts. These Maine Turnpike General Provisions replace all previous Maine Turnpike General Provisions and are additions and alterations to the Maine Department of Transportation Standard Specifications. Maine Department of Transportation Consolidated Special Provisions or corrections, additions, and revisions to their Standard Specifications are not referenced or incorporated unless specifically included in the Contract. Applicable MaineDOT December 28, 2004 Consolidated Special Provisions, corrections, additions, and revisions have been incorporated into this document.

All references to components or employees of the Maine Department of Transportation listed in Column A shall also refer to components or employees of the Maine Turnpike Authority in Column B unless otherwise stated.

<u>A</u>	<u>B</u>
Maine Department of Transportation Department Commissioner Contracts Engineer Contracts Section Chief Engineer Bureau of Project Development	Maine Turnpike Authority Authority Executive Director Purchasing Manager Purchasing Department Director of Engineering Maine Turnpike Authority

SECTION 101 – CONTRACT INTERPRETATION

101.2 Definitions

The following definitions are added or revised:

Authority - The Maine Turnpike Authority, a body corporate and politic duly created and existing under and by virtue of an act of the Legislature of the State of Maine, Chapter 69 of the Private and Special Laws of 1941, as amended.

Award - The resolution of the Authority at an official meeting expressly authorizing the Executive Director or his designee to notify the successful Bidder that his/her Proposal has been accepted and that he/she is required to execute the Contract Agreement and to furnish satisfactory Bonds.

Environmental Information - Hazardous waste assessments, dredge material test results, boring logs, geophysical studies, and other records and reports of the environmental conditions. For a related provision, see Subsection 104.3.14, Interpretation and Interpolation.

Fabrication Engineer - The Department’s representative responsible for Quality Assurance of pre-fabricated products that are produced off-site.

Geotechnical Information - Replace with the following: “Boring logs, soil reports, geotechnical design reports, ground penetrating radar evaluations, seismic refraction studies, and other records of subsurface conditions. For a related provision, see Subsection 104.3.14, Interpretation and Interpolation.

Holidays - The following are extended to include the Holiday Period:

<u>HOLIDAY</u>	<u>HOLIDAY PERIOD</u>
Martin Luther King Day	12:01 a.m. (Midnight) to 11:59 p.m. Martin Luther King Day.
President's Day	12:01 a.m. (Midnight) preceding Friday to 12:01 p.m. following Tuesday.
Easter	12:01 a.m. (Midnight) preceding Friday to 12:01 p.m. following Monday.
Memorial Day	12:01 p.m. preceding Thursday to 6:00 a.m. following Tuesday.
Labor Day	12:01 p.m. preceding Thursday to 6:00 a.m. following Tuesday.
Columbus Day	12:01 a.m. (Midnight) preceding Friday to 12:01 p.m. following Tuesday.
Veterans' Day	12:01 a.m. (Midnight) to 11:59 p.m. Veterans' Day.
Thanksgiving Day	12:01 a.m. (Midnight) preceding Wednesday to 12:01 p.m. following Monday.

Project - The following sentence is added:

All the Work to be performed under the Contract.

Solicitation - Contract proposal sent to a select list of Contractors. Solicitations do include a requirement for a bid bond. Solicitations do not need Maine Turnpike Board Approval for an award.

Turnpike - The entire toll highway, including all approaches, bridges, interchanges, toll facilities, and structures owned by the Maine Turnpike Authority, and authorized by Chapter 69, Private and Special Laws of Maine, 1941, as amended, and located on properties held in the name of the Authority.

Working Day - The Contractor shall not work during the period from 1/2-hour after sunset to 1/2-hour before sunrise, unless otherwise approved by the Resident.

If, after approval, Work is performed on a Saturday, Sunday, or a holiday, the day shall be considered a Working Day.

SECTION 102 - BIDDING

102.1.1 Basic Requirements

This Subsection is amended by the addition of the following:

To be eligible to Bid, prospective Bidders must not have been debarred or suspended from Bidding by the Authority or the Maine Department of Transportation.

102.6 Bid Guaranty

The second paragraph is deleted and replaced with the following:

No Proposal will be considered unless accompanied by a "Proposal Guaranty" in the form of an original bid bond, certified or cashier's check in favor of the Maine Turnpike Authority, in the amount of not less than five (5%) percent of the Total Amount of the Proposal, except that the amount of the check or Proposal Guaranty shall not be less than \$500.00. Solicitations do not require a Bid Guaranty.

Sentence (C) of the third paragraph is deleted and not replaced.

102.7.1 Location and Time

The first paragraph is deleted and replaced with the following:

The Proposal and the Proposal Guaranty shall be enclosed in a sealed envelope furnished by the Authority for this purpose, and shall bear on the outside, the name and address of the Bidder as well as the designation of the Project as named in the Proposal form. Proposals will be received at the place and time stated in the Notice to Contractors, Solicitation, or Addendum as determined by the Authority. Proposals received after the time for opening of bids will be returned to the Bidder unopened. See also Subsection 102.11, Bid Responsiveness.

102.7.2 Effects of Signing and Delivery of Bids

Paragraph C, Certifications, is deleted and not replaced.

SECTION 103 - AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering

This Subsection is deleted and replaced with the following:

The Authority will review the Bid Proposals. As a condition for Award of a Contract, the Authority may require an Apparent Successful Bidder to demonstrate to the Authority's satisfaction that the Bidder is responsible and qualified to perform the Work. If such information is required, the Authority, or the Authority's agent, will contact the Apparent Successful Bidder and request specific information. If requested by the Apparent Successful Bidder, this request can be in writing. The Apparent Successful Bidder shall respond to the request within 24-hours (one work day) unless both parties agree in writing to extend the deadline.

103.3.2 Notice of Determination

The first paragraph is deleted and replaced with the following:

If the Authority determines that a Bidder is "Not Qualified", the Authority or its representative will notify the Bidder in writing of its determination. The notice will set forth the specific reasons therefore to the extent practical. Such reasons may include the following:

- N. Bidder has previously performed Work for the State or for the Authority in an unsatisfactory manner;
- O. Bidder does not have the capacity to perform the required Work in the opinion of the Authority;

- P. This Project combined with other projects committed to by the Bidder puts him in excess of his capacity in the opinion of the Authority;
- Q. Reasonable grounds for believing that the Bidder is interested in more than one Proposal for the Work contemplated;
- R. Developments arise which, in the opinion of the Authority, adversely affect the Bidder's responsibility; and/or,
- S. Lack of qualifications as determined by the Authority.

The Maine Turnpike Authority Board or Executive Director must approve the Award of a Contract. Once approved, the Contractor will be provided with a "Notice of Award". See Subsection 103.4.

103.3.3 Appeal

"Commissioner" is replaced with "Chief Operations Officer".

The third and fourth paragraphs are deleted and replaced with the following:

Within 14 Days of Receipt of such information and arguments, the Chief Operations Officer will notify the Bidder in writing as to whether the decision of "Not Qualified" is upheld, modified, or reversed. The Chief Operations Officer's decision is final.

After a final determination of "Not Qualified" the Bidder's Bid Guaranty will be returned and the Bidder will be ineligible to bid on future MTA Contracts until the Bidder has been determined "Qualified" by the Maine Turnpike.

103.4 Notice of Award

This Subsection is deleted and replaced with the following:

Within five (5) days of the Maine Turnpike Authority Board or Executive Director approval of a Contract Award, the Authority will transmit to the successful Bidder a Notice of Award along with the Contract Documents for execution by the Contractor. The Authority has the option of notifying the successful low Bidder that the above noted material is available at the Authority for the Contractor to pick-up. The Contractor has 20 days following the Bid Opening to deliver to the Authority the signed Contract Documents, required bonds, insurance certificates, and other required information from the successful Bidder. Once these Documents are submitted to the Authority, the Authority will execute the Contract. If the Authority does not execute the Contract within 30 days of receipt of all the proper requested information, the successful Bidder may withdraw their bid without forfeiture of its Bid Guaranty or bidding eligibility. If the Authority and the successful Bidder agree in writing, an extension may be allowed.

103.5.4 Execution of Contract by Bidder

The first sentence is deleted and replaced with the following:

The properly completed and signed Contract Agreement form provided in the Contract Documents constitutes the Bidder's offer.

103.8 Execution of Contract by Department

This Subsection is deleted and replaced with the following:

The Contract will be awarded or Proposals rejected within twenty (20) days from the date of Proposal openings, except that by mutual written agreement between the Bidders and the Authority, the award may be withheld for any length of time. Any Bidder not agreeing to extend the award date shall be eliminated from the Bid List without prejudice, and their Bid Bond released.

The Contract shall not be binding until the Contract has been executed by the Authority, nor shall any Work be performed on account of the proposed Contract until the Contract has been fully executed and delivered.

SECTION 104 - GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way

The first sentence is deleted and replaced with the following:

The Maine Turnpike Authority will secure all necessary rights to real property within the Project Limits shown on the Plans.

104.2.3 Authority of Project Manager and Resident

The following sentences are added:

The Resident is not responsible for supervising the construction Work and is not responsible for monitoring jobsite safety.

The Resident is not authorized to increase the obligation of the Authority to the Contractor, except as specifically set forth in the Specifications.

104.3.5 Duties Regarding Inspection of Work

The following paragraphs are added at the end of Paragraph A. Safe Access:

The Contractor shall furnish the Resident with every reasonable facility for ascertaining whether or not the Work is performed and the materials are furnished in accordance with the requirements and intent of the Contract. Such inspection may include mill, plant or shop inspection. If at any time before acceptance of the Work, the Resident requests it in writing, the Contractor shall remove or uncover such portion of the finished Work as directed. After examination, the Contractor shall restore said portions of the Work to the standards required by the Specifications. Should the Work exposed or examined meet the requirements of the Plans and Specifications, the uncovering or removing and the restoration of the uncovered Work shall be paid for as Extra Work except that no such payment will be made in those cases for which such removal is required by the Plans and Specifications as a part of the Work under the Project. Should the Work not meet the requirements of the Plans and Specifications, the uncovering or removing and restoration shall be at the Contractor's own expense. Any Work done or materials used without suitable supervision or inspection may be ordered to be removed and replaced by the Contractor without extra compensation.

No Work shall be done at night, on weekends, or legal holidays, without prior notice and approval of the Resident. No night Work shall be done until the Contractor has provided an adequate and sufficient source of artificial light to permit examination by the Resident of the suitability of the materials being used and the quality and character of the workmanship.

104.3.7 Laws to be Observed

This Subsection is amended by the addition of the following:

Any section of roadway open to the traveling public is a public way and subject to the applicable rules, regulations, and laws.

104.3.8 Wage Rates and Labor Laws

This Subsection is amended as follows:

- A. Federal Wage Rates and Labor Laws is deleted and not replaced.
- B. State Wage Rates and Labor Laws.

This Subsection is amended by the addition of the following:

This Contract is governed by the Prevailing Wage Provisions in Title 26, Chapter 15 of the Maine Revised Statutes Annotated. State Wage Rates, if applicable to the Contract, will be included in the Special Provisions.

Fair Minimum Wages

The hourly wage rate paid to laborers of the General Contractor and all Subcontractors shall not be less than the prevailing hourly rate of wages for Work of similar character in the State of Maine. The fair minimum hourly rates determined by the State of Maine Department of Labor for this Contract are included as part of this Contract.

A copy of the Wage Determination(s) shall be provided by the Contractor to all Subcontractors on the Project. In addition, the Wage Determination(s) must be kept posted at the Work site by the Contractor and by all Subcontractors at a prominent location, easily accessible by the workers. On a Project where there is no such location, a Contractor may comply with this requirement by providing each worker with a copy of the Wage Determination(s) within the first full day that the worker works on that Project. The Contractor must be able to document that each worker has received a copy of the Wage Determination(s).

Records

The Contractor and all Subcontractors shall keep an accurate record noting:

- The name and occupation of each and all laborers, workmen, and mechanics employed by them, and all independent Contractors working under Contract to them in connection to the Project;
- Number of hours worked;
- Title of the job;
- Hourly rate or other method of remuneration for the job; and,
- Actual wages or other compensation paid to each of the laborers, workmen, mechanics, and independent Contractors.

A copy of this record must be kept at the jobsite and shall be available at all reasonable hours to the inspection of the Bureau of Labor and/or the Maine Turnpike Authority, its officers and agents. These records must be preserved for a minimum of three (3) years after the completion of the Contract.

A copy of each record must be filed monthly with the Maine Turnpike Authority. This information shall be sent directly to the Maine Turnpike Authority, Director of Engineering and Building Maintenance, Attention: Wage Rate Records, 2360 Congress Street, Portland, ME 04102. The records shall note the Maine Turnpike Contract Number.

The Contractor and all Subcontractors are subject to penalties described in Title 26, Chapter 15 of the Maine Revised Statutes Annotated, for any violations of the Fair Minimum Wage Rates Policy for the State of Maine.

104.3.11 Responsibility for Property of Others

This Subsection is amended by the addition of the following:

The Contractor shall respond to all damage claims in writing, within 30 days, to the party making a damage claim. The response shall state that the Contractor accepts responsibility for the damage or outlines the reasons why the claim has been denied. If the Contractor has turned the claim over to their insurance agent or carrier, the name of the agent or carrier, along with the contact person, address and telephone information shall be included in the response to the claimant and a copy to the Authority. A standard form letter denying the claim without an explanation of the situation shall be unacceptable. A copy of the response letter shall be submitted to the Authority within the 30 day response time. The Authority shall review the response letter and will determine if the Contractor has replied in a responsive manner. If the Authority does not receive a response letter or action report from the Contractor within the 30 day response time, the Authority will determine if the Contractor is responsible for the claimed damage. If, in the absence of the Contractor's response or action report, the Authority deems the claim to be valid, the Authority will at its option pay the damage claim and deduct the amount of the claim from the Contractor. The Contractor will not be entitled to recoup these funds if their response was not transmitted within the 30 day response time. The Authority will not intervene in any claim actions where the Contractor's insurance carrier is conducting a valid, ongoing claim investigation.

104.3.14 Interpretation and Interpolation

The first sentence is change from "...and Geotechnical Information." to "...Environmental Information, and Geotechnical Information".

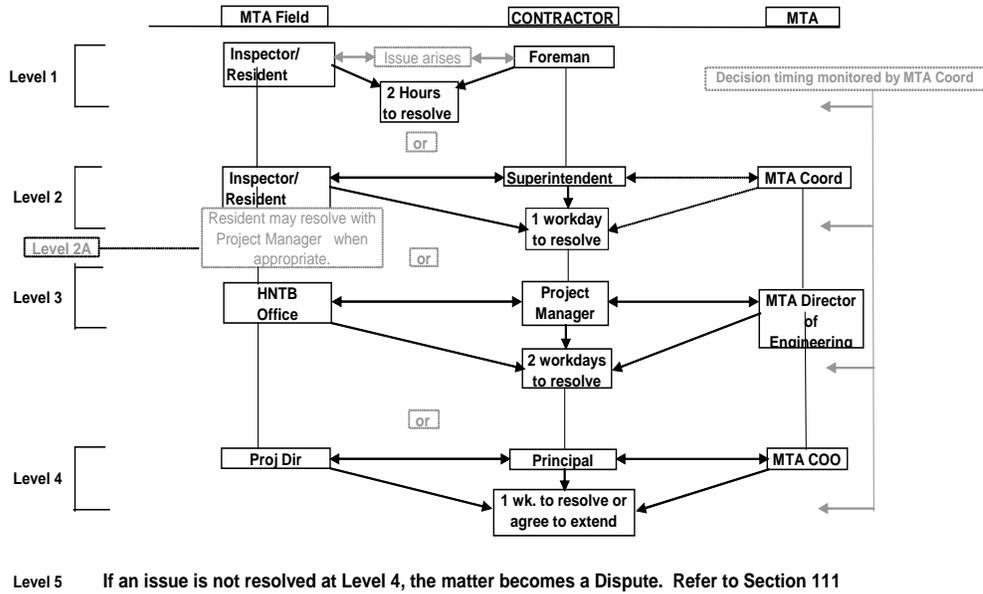
104.4.2 Preconstruction Conference

The following Matrix is added:

Project Decision Matrix

A Project "communication decision tree" will be developed mutually by the Authority and the Contractor during either the preconstruction meeting or partnering session. This Decision Matrix will clearly define, by descriptive job title and name, the respective counterparts for the Authority, and the Contractor who will be responsible for resolving issues at their respective levels of communication. Each level of communicators will be assigned a dollar magnitude of authority and a designated period of time within which all disputed issues must either be resolved or referred to the next higher level of communicators. The purpose of this Decision Matrix is to accelerate the resolution of decisions, to promote resolution at the lowest possible level, and to reduce the number of issues that become disputes.

The following is a sample of the Decision Matrix:



Notes:

- 1) Each project will enter names in all title boxes at Preconstruction or Partnering sessions.
- 2) Substitute names will be provided for all key decision levels.
- 3) Each decision level will be empowered with a maximum dollar guidance value.
- 4) Issues will automatically bounce up to next level if decision time limits are surpassed.

104.4.5 Early Negotiation

The second paragraph in Part A is deleted and replaced with the following:

Such notice may not be verbal. Notice shall be in the form of a written memo with signatures representing both the Owner and Contractor or shall be in the form of meeting minutes within 14 days of the date that the issue became known. Meeting minutes shall not be valid documentation until they are accepted by the Resident and the Contractor.

Paragraph C, Additional Consideration, is deleted and not replaced. See related Subsection 104.4.2.

104.4.7 Cooperation With Other Contractors

This Subsection is amended by the addition of the following:

The Contractor shall cooperate with the Maine Turnpike Authority. The Authority reserves the right to conduct maintenance operations and to erect and remove traffic control devices as deemed necessary by the Authority or the Resident within or adjacent to the Project.

The Contractor shall note that other contracts may be awarded for Work adjacent to this Contract and these shall be considered adjacent contracts. The Contractor shall cooperate with other Contractors and the Resident so that all Work can be completed in a safe and timely manner. The Resident may direct the Contractor to revise the Work or schedule based on Work that is ongoing in the adjacent Contract. The Contractor's Superintendent or Project Manager shall attend coordination meetings with the Resident and the adjacent Contractors at least once every two weeks. All Contractors bear the full responsibility of cooperation and coordination with each other in the planning and scheduling of traffic closures, stoppages, and other construction activity. The Resident's responsibility for coordination is limited to the timely dissemination of all schedules and information submitted by adjacent Contractors. Neither the Resident, nor the Maine Turnpike Authority, shall bear any responsibility for costs resulting from a Contractor's failure to submit all information as required. Issues and concerns not presented for review and discussion at joint Contractor meetings will not later be cause for claims. This cooperation shall be completed at no additional cost to the Authority.

The Contractor working on an adjacent section may require the placement of temporary construction signs and traffic control devices within this Project area. The placement and maintenance of these devices by another Contractor shall be allowed in this Contract at no additional cost to the Authority.

104.4.10 Coordination of Bridge Closure/Bridge Width Restriction Notification

This Subsection is deleted and replaced with the following:

The Contractor shall notify the Authority a minimum of two (2) weeks prior to the date of closure/restriction with the date on which the closure/restriction will begin and the anticipated duration of the closure/restriction. The Authority will be responsible for notification to others.

104.5.9 Landscape Subcontractors

This Subsection is deleted and replaced with the following:

The Contractor shall retain only Landscape Subcontractors that are certified by the Maine Department of Transportation Environmental Office Landscape Unit.

SECTION 105 – GENERAL SCOPE OF WORK

Scope of Section

The second paragraph is deleted and replaced with the following:

This Contract is not federally funded.

105.1 Intent of the Contract

This Subsection is amended by the addition of the following:

The Plans and Specifications complement and supplement each other. Should any Work be required, which is not denoted on the Plans or in the Specifications because of an omission, but which is nevertheless necessary for the proper performance and completion of the Project, such Work shall be fully performed as if it were described and delineated. Should any misunderstanding arise as to the intent or meaning of said Plans and Specifications, refer to Subsection 104.4.4, Requests for Information.

The silence of the Specifications, Plans, or other supplemental documents as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only material and workmanship of excellent quality are to be used.

105.2.3 Joint Duty Regarding Safety

The first sentence is amended as follows:

The “Contractor’s TCP” is deleted and replaced with “Traffic Control Plan”.

This Subsection is amended by the addition of the following:

Nothing in the foregoing paragraphs shall be construed as relieving the Contractor from full responsibility for safe prosecution of the Work at all times. The Resident is not responsible for jobsite safety.

The following Subsection is added:

105.2.4.1 Lockout/Tagout Procedures

Prior to the start of Work, the Contractor and the Maine Turnpike Authority shall exchange and review the other party's Lockout/Tagout Procedures for the control of hazardous energy. If the Lockout/Tagout Procedures are similar and neither party has concerns, the two parties shall agree to abide by the procedures of the other party. Only the authorized individual who locked or tagged-out a circuit or piece of equipment is permitted to remove the lockout/tagout, except as provided for in the respective Lockout/Tagout Procedures.

Should either the Contractor or the Maine Turnpike Authority have concerns with the other party's Lockout/Tagout Procedures, the Safety Officers of the Contractor and the Maine Turnpike Authority shall meet, discuss and resolve the areas of concern. The Authority reserves the right to have the Contractor comply with the restrictions and prohibitions of the Maine Turnpike Authority's Lockout/Tagout Procedures if the Authority determines the Contractor's Lockout/Tagout Procedures are inadequate to protect the Authority's employees and patrons.

105.4.1 Maintenance During Construction

This Subsection is amended by the addition of the following:

Paved Surface - The Contractor is responsible for maintaining the existing paved shoulder, ramps, and travel lanes on the Maine Turnpike in good condition. The presence of tracked-dirt on the paved surfaces is unacceptable. The Resident shall have the sole authority to determine the acceptability of the paved surfaces. The use of stabilized construction entrances and frequent sweeping of the shoulder are the responsibility of the Contractor and shall be completed at no additional costs to the Authority.

Gravel Surface - The Contractor is responsible for maintaining gravel surfaces that are used for traffic in good condition. Potholes and wheel ruts are unacceptable. The Resident shall have the sole authority to determine the acceptability of the surfaces. Repairing the surfaces are the responsibility of the Contractor and shall be completed at no additional costs to the Authority.

Signs and Delineators - The Contractor is responsible for maintaining all mile markers, delineator, and signs including regulatory, warning, and guide signs during construction. Maintenance of signs shall mean that signs are clearly visible to motorists at the required height during construction. These items shall be kept in their existing location as long as is practicable. At no time shall any signs not be visible to the

driver. Construction material or equipment shall not obscure signs. This Work shall be accomplished at no additional cost to the Authority.

Erosion and Sedimentation Control - The Contractor shall plan their operations to protect existing Work from erosion. The Contractor is responsible for the inspection and maintenance of all erosion and sedimentation control devices until final acceptance. No payment will be made to repair failed areas if the Best Management Practices had not been utilized prior to a weather event.

105.4.3 Maintenance During Winter Construction

This Subsection is amended by the addition of the following:

The Maine Turnpike Authority will be responsible for winter maintenance including snow removal and application of salt on Maine Turnpike pavement open to traffic.

105.5.1 General Requirements

This Subsection is amended by the addition of the following:

Toll Free Passage on the Turnpike

The Contractor shall be granted free use of the turnpike for movement of vehicles, labor and equipment and for delivery of material essential to the Work. The Contractor will be issued cards with the Contract Number and Contractor Name while working on the Project. The cards shall be transferable and distributed by the Contractor to employees and vehicles working on the Project. The cards may only be used while working on the Project designated on the cards. Such free use shall be limited to the portion of the turnpike between the site of the Work and the nearest practicable exit including movement of vehicles, labor, equipment and materials from one site to another Work site. All vehicles must stop at a manned lane at the toll plazas to present the cards to the toll attendant. Vehicles without the required cards shall pay the required toll. This shall not be a reimbursable expense. The Contractor shall advise the Resident of the number of cards that are required. All cards shall be returned to the Resident at the completion of the Project. The use of the cards for toll free travel shall be revoked if the cards are misused. The Contractor shall nevertheless comply with regulations of the Authority relating to use of the turnpike and with established controls for non-revenue vehicles.

Existing Access

All existing access from local roads to the Maine Turnpike shall remain passable to emergency vehicles at all time. At no time shall construction equipment or material block these roads. Any misuse of this privilege will result in the Contractor's loss of access through these gates. The Contractor shall provide a lock and a piece of chain to link to the existing padlock on the gate allowing access to the Contractor and emergency vehicles.

Access From Local Roads

The Contractor shall not impact wetlands or streams to construct access to the Project. The Contractor may construct temporary access to the turnpike to facilitate the Project. Any damage caused to private property or local roads as a result of the access shall be repaired at the Contractor's own expense. The Contractor shall prepare a written plan outlining the proposed access.

At a minimum, the plan shall outline the following:

- Estimated number of vehicles;

- Time and duration of operation;
- Types of vehicles to use the access;
- Plans to construct a stabilized construction entrance;
- Plan to keep the local road free of tracked-mud and dust;
- Plan to control access to prevent unauthorized use;
- Restoration plan; and,
- Written permission from private property owners (if required).

The Contractor is required to retain the services of qualified flaggers to control the Contractor's operation at the local road access. Flaggers shall be present whenever construction vehicles are utilizing the access. The Contractor shall be responsible for constructing a gate across the access point to prohibit unauthorized access. The Contractor shall also construct a stabilized construction entrance in accordance with the MaineDOT Best Management Practices. All cost associated with the access including, but not necessarily limited to, the construction, restoration, flaggers, gate, and stabilized construction entrance shall be the responsibility of the Contractor. Failure to utilize flaggers will result in termination of permission to use local roads for access. Failure to keep local roads clear of tracked-mud will result in termination of permission to use local roads for access.

Construction Access

The Contractor shall construct a stabilized construction entrance in accordance with the Best Management Practices at all locations where construction vehicles will exit the mainline and/or enter the existing paved shoulder from a non-paved area. The Resident shall approve of the locations. The stabilized construction entrance shall be constructed in conjunction with the clearing activities or other early activities. Additional stabilized construction entrances may be required due to the Contractor's operations as well as site conditions. The construction and maintenance of the stabilized construction entrance shall be incidental.

Change of Direction

The Contractor will not be permitted to reverse directions (U-turns) at the toll plazas or at interchanges. All vehicles must exit the turnpike prior to reversing directions.

The Contractor shall not use the median openings on the turnpike unless the opening is located within passing lane closures on both roadways. The Contractor will be assessed a fine every time any employee of the Contractor, Subcontractor or supplier is observed using a median opening by a Resident or turnpike employee anywhere on the Maine Turnpike throughout the duration of the Contract. The fine will be deducted from monies owed to the Contractor.

The fines will be levied on a per occurrence basis as follows:

<u>NUMBER OF OCCURRENCES</u>	<u>FINE</u>
First	\$100

For the second occurrence, and any occurrence thereafter, the fine is increased by \$100 per each occurrence. The number of occurrences is not specific to a Contract, an individual or a vehicle, but based solely on the number of times any employee of the Contractor, Subcontractor or supplier is observed using a median opening anywhere on the Maine Turnpike. The Contractor shall be notified in writing of the violation by the Authority.

105.6 Construction Surveying

This Subsection is deleted in its entirety and replaced with the following:

105.6.1 Authority Provided Services

The Authority will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Authority, within the Project Limits, for full construction Projects and other Projects where survey control is necessary. For Projects of 1,500 feet in length, or less: The Authority will provide three points. For Projects between 1,500 and 5,000 feet in length: The Authority will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length: The Authority will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Authority will not set any control points and, therefore, will not provide description and coordinates of any control points: Upon request of the Contractor, the Authority will provide the Authority's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Authority's Projects.

105.6.2 Contractor Provided Services

Utilizing the survey information and points provided by the Authority, described in Subsection 105.6.1, Authority Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not necessarily be limited to, reestablishing all points provided by the Authority, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all utility facility relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Authority of any errors or inconsistencies regarding the data and layout provided by the Authority as provided by Subsection 104.3.3, Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Quality Control

The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations or checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of the layout process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Quality Assurance

It is the Authority's prerogative to perform construction survey quality assurance. Construction survey quality assurance may or may not be performed by the Authority. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality control written documentation. If the Authority elects to physically check the

Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Authority will provide a minimum notice of 48-hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Authority.

105.6.4 Boundary Markers

The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the right-of-way or abutting parcels that are outside the area that must be disturbed in order to perform the Work. The Contractor indemnifies and holds harmless the Authority from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Subsection 104.3.11, Responsibility for Property of Others.

105.7.1 General

The following paragraphs are added:

Within ten (10) days after the date of execution of the Contract, the Contractor shall inform the Resident in writing of the sources from which he proposes to obtain the materials required for the Project and statements of quality of these materials as hereinafter required in Subsection 106.01, Roles Regarding Quality. Information or materials not required to be incorporated in the Work within six (6) months after said date of execution, may be furnished within thirty (30) days.

Prior to the approval of the submittal, any Work done or materials ordered shall be at the Contractor's own risk. All submittals shall be stamped and signed by the Contractor verifying their approval of the Shop Drawings.

Prior to forwarding submittals to the Resident for review and approval, the Contractor shall mark the Item Number on each submittal for identification, thoroughly check the submittals for compliance with the Contract Documents, and place its stamp of approval on each sheet certifying that the Contractor has so checked each submittal. The Contractor shall certify that "This Shop Drawing has been thoroughly checked and complies with the Contract Documents and field measurements and the item fits with adjoining Work except as noted". Submittals which do not contain this stamp of approval and certification, or which are incomplete, have not been checked, have been checked only superficially, or contain numerous errors, will be returned un-reviewed by the Resident for resubmission by the Contractor. Delays in obtaining approvals, other than those caused by the Authority, are not grounds for granting an extension of time. Disclaimers by the Contractor, any Subcontractor, or supplier of responsibility for any requirements of the Contract Documents, will not be accepted by the Authority and will be deemed invalid.

The following submissions are required if applicable to the Work:

- Construction plans for access
- Project master schedule
- Updated schedules as required
- Shop Drawings
- Spill Prevention Control and Countermeasure (SPCC) Plan
- Traffic control plans
- Temporary earth support system submission
- Bridge beam or structural steel erection plan

105.7.4 Submittal Requirements

The second paragraph is deleted and replaced with the following:

For the first and subsequent submittals, the Contractor shall submit a minimum of seven (7) sets of drawings to the Resident on the size sheets required unless otherwise directed by the Resident.

105.8.1 Temporary Soil Erosion and Water Pollution Control

This Subsection is amended by the addition of the following:

Spill Prevention Control and Countermeasure (SPCC) Plan

Any areas where petroleum products, oils or hazardous materials are handled or stored will require a Spill Prevention Control and Countermeasure (SPCC) Plan. The Plan will be submitted to the Resident before construction begins for review and approval. At a minimum, the Plan shall provide the following information:

1. Name of person who is responsible for spill prevention;
2. Description of handling or storage location, noting setbacks from water bodies where relevant. Significant sand and gravel aquifers and other sensitive resources must be avoided wherever possible;
3. Description of storage and containment facilities;
4. Description of equipment and/or materials used to prevent discharges (including sorbent materials);
5. Preventative measures to minimize the possibility of a spill; and,
6. Contingency plan if spill should occur.

The approved plan must be posted at the jobsite. All personnel working in the area are required to read and be familiar with the plan.

There shall be no separate payment for preparation of a SPCC Plan acceptable to the Resident and preparation is considered incidental to the Work.

ENVIRONMENTAL STANDARDS

The Project will be performed in accordance with the MaineDOT Best Management Practices (BMP) latest issue. The Contractor shall fully comply with all erosion and sedimentation control requirements outlined in the BMP's or contained herein. Non-compliance with these requirements as determined by the Resident shall result in a financial penalty of \$1,000 per day, per violation. Any fines assessed to the Maine Turnpike Authority as a result of the Contractor's non-compliance shall be paid by the Contractor. If the Contractor fails to pay, the cost of the fine will be deducted from monies due, or which may become due to the Contractor under this Contract.

In the event of conflict between these Specifications and other erosion and pollution control laws, rules or regulations of other Federal, State and local agencies, the more restrictive law, rules or regulations shall apply.

The standards as described below shall be met on the Project:

1. Temporary erosion control measures shall be maintained until the site is permanently stabilized with vegetation or other permanent control measures.
2. The Contractor will immediately take appropriate measures to prevent erosion or sedimentation from occurring or to correct any existing problems regardless of the time of year.
3. Work in wetlands is prohibited except to the minimum extent necessary for completion of the Work as detailed on the Plans. Excavated and other material shall not be stockpiled in wetlands. Haybales, silt fence or other suitable barriers shall be used, where necessary, to prevent sedimentation from eroding materials.
4. Uncured concrete shall not be placed directly into the water body. Concrete may be placed in forms and shall cure at least one (1) week prior to form removal. No washing of tools, forms, etc. shall occur in or adjacent to the water body or wetland. Any additional requirements are outlined in Subsection 107.261 of the Special Provisions.
5. Disturbance of natural resources beyond the construction limits shown on the Plans is not allowed.
6. Bare earth slopes shall be roughened to dissipate sheet flow. This shall be accomplished by “tracking” the slope perpendicular to the centerline. No bare earth shall be maintained for more than five days without surface roughening. This Work will not be measured separately for payment, but shall be incidental to the Excavation item.
7. No wheeled or tracked equipment shall be operated in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may NOT cross streams.
8. Existing ditches shall be maintained until the new ditches are stabilized. Stone check dams shall be placed in existing ditches prior to construction as to prevent the release of sedimentation. Stone check dams shall be installed at the outlets of all existing and proposed ditches adjacent to all stream and wetlands.
9. The Contractor’s operation may require the placement of temporary pipes and fill over a ditch line to provide access to the Work area. The Resident shall approve the size of the pipe. The placement and removal of the temporary access will not be measured separately for payment, but shall be incidental to the Excavation item.

105.10 Equal Opportunity and Civil Rights

105.10.1 Requirements Applicable to Federally Funded Contracts

This Subsection is deleted and not replaced.

105.10.2 Requirements Applicable to All Contracts

The following is added after Paragraph (A), Maine Code of Fair Practice and Affirmative Action, Paragraph 4).

The Maine Turnpike Authority is an equal opportunity employer and as such, requires all Contractors to pursue in good faith affirmative action programs.

THEREFORE;

The Contractor hereby agrees to the following requirements:

1. The Contractor will pursue an affirmative action program which includes procedures designed to increase the numbers of minorities, women, and handicapped at all levels and in all segments of the workforce where imbalances exist. Such a program should include an assessment of the existing situation, and the development of realistic goals for necessary actions. These goals and related procedures and timetables should not require rigid quotas but are commitments which the Contractor should make every good faith effort to achieve.
2. In connection with Contracts in excess of \$250,000, the Contractor will insure contractually that all Subcontractors shall also pursue an affirmative action program meeting the above requirements. The Contractor shall also ensure contractually that all Subcontractors with Contracts in excess of \$50,000 pursue an affirmative action program meeting the above requirements.
3. An affirmative action program will provide that no Contractor and/or Subcontractor will discriminate against an employee or applicant for employment because of race, color, religious creed, sex, national origin, ancestry, age, physical handicap or mental handicap unless based upon a bona fide occupational qualification. Such action shall include, but not necessarily be limited to, the following; employment, upgrading, demotions, transfers, recruitment or recruitment advertising, layoffs or terminations, rates of pay and compensation, and selection for training and apprenticeship.

Paragraph (D), Prevention of Sexual Harassment, is deleted and replaced with the following:

Contractors are responsible, under Maine State Law, for ensuring and maintaining a Work environment that is free from sexual harassment. The Contractor shall comply with all relevant provisions of Maine State Law in regard to sexual harassment including, but not necessarily limited to, 5 MRSA 4572, 26 MRSA 806-807, and the regulations of the Maine Human Rights Commission.

Subsections 105.10.2 (E), DBE Reporting Requirements, and (F), Certification of Continuing EEO Efforts, are deleted and not replaced.

105.11 Other Federal Requirements

This Subsection is deleted in its entirety and not replaced.

The following Subsection is added:

105.12 Limitations of Operations

The Contractor shall keep the existing shoulder clear of construction activity except for the period of shoulder reconstruction. The Contractor shall not park or store construction equipment, vehicles, or materials on the shoulder. Construction vehicles shall not enter the mainline travel lane until they can safely merge with the traffic in the travel lane. The construction access shall be in accordance with the details in the Plans. The Resident must approve all shoulder closures.

Existing drainage shall be maintained at all times. All ditches that discharge into wetlands shall have a series of stone check dams installed in the ditch near the outlet prior to the commencement of clearing activities in the area.

SECTION 106 – QUALITY

106.3.3 Sources

Paragraph A, General, is amended by the addition of the following:

Preference in the purchase of supplies and materials, other considerations being equal, shall be given in favor first of supplies and materials manufactured and sold within the State of Maine, and second, of supplies and materials manufactured within the United States. Materials and supplies sold outside the United States will be considered third in the preference order.

106.3.4 Storage

This Subsection is amended by the addition of the following:

The Contractor shall be responsible for the security of all storage areas. Materials and supplies that are stolen, damaged or otherwise made unacceptable while in storage shall be replaced in kind at the Contractor's own expense.

106.3.7 Sampling and Testing

The forth paragraph is deleted in its entirety and not replaced.

106.6 Acceptance

All paragraphs after the first paragraph are deleted and not replaced.

106.8.3 Unauthorized Work

The following paragraphs are added:

No omission or failure on the part of the Resident to disapprove or reject any Work or material shall be taken to be an acceptance of any defective Work or material. Within the time set by the Resident, the Contractor shall remove any Work or material condemned by the Resident and shall rebuild and replace the same without extra compensation and in default thereof the removal and replacement may be done by the Authority at the expense of the Contractor; or, in case the Resident should not consider the defect of sufficient importance to require the Contractor to rebuild or replace any imperfect Work or material, he shall have power, and is hereby authorized, to make an equitable deduction from the Contract price.

Materials which do not conform to the requirements of these Specifications shall be considered as defective and will be rejected, whether in place or not, and shall be removed from the Project. No material which has been rejected, the defects of which have been corrected or removed, shall be used until approved by the Resident in writing.

SECTION 107 – TIME

The following Subsection is added:

107.1.1 Substantial Completion

An 80 percent reduction of retainage will be considered by the Authority when the Project is substantially complete. The Contractor shall include an explanation of the outstanding Work, an estimate of the cost to complete the Work, and a schedule for completing the Work. Seasonal limitations as well as warranty and establishment periods (for vegetation) shall be addressed.

107.3.1 General

This Subsection is amended as follows:

See related Subsection 101.2, Definitions: Holidays.

Work that impacts traffic may be subjected to further restrictions. See related Special Provision Section 652.

107.3.2 Night Work

This Subsection is amended by the addition of the following:

- The Maine Turnpike encourages the Contractor to construct the Project cost effectively while maintaining quality and conformance with all Federal, State and local laws. To facilitate this process, the Maine Turnpike recognizes that the Contractor may choose to construct portions of the Project at night.
- The following is a partial list of activities that would be favorably considered for night construction. The final determination of applicability by the Authority will be based on the Contractor's plan of operation. The Contractor shall demonstrate that the Work can be accomplished in conformance with the appropriate regulations.

Highway Related Work

- Installation and removal of traffic control devices (drums, concrete barrier, impact attenuators)
- Installation and removal of painted pavement markings
- Placement of pavement
- Sawcutting of pavement
- Installation and removal of guardrail

Bridge Related Work

- Delivery of materials (except oversize loads)
- Placement and removal of pier forms
- Shielding of old and new bridge
- Installation and removal of deck and diaphragm forms
- Installation and removal of overhang brackets
- Field painting and preparation of damaged paint areas
- Application of penetrating sealers
- Installation of sign panels on sign bridges

107.3.3 Sundays and Holidays

This Subsection is amended by the addition of the following:

“Saturday” is added before Sunday.

Requests to work outside of the allowable periods must be submitted in writing and approved by the Resident prior to the start of Work. Approval for Work, that in the Authority’s opinion will not significantly impact traffic flow, will not be unreasonably withheld.

107.4.2 Schedule of Work Required

This Subsection is amended by the addition of the following:

No Pay Requisition will be approved for payment until the schedule requirement is fulfilled and accepted by the Maine Turnpike Authority.

In addition to the Schedule required hereinbefore, the Contractor shall submit, no later than 12:00-noon every Thursday, a detailed plan of his operations for the following week. This plan shall show the type of Work to be done and the traffic lanes that are to be impacted. This updated plan will be used by the Resident to schedule the appropriate resources and inform other interested parties of the proposed Work.

107.4.4 Schedule Revisions

This Subsection is amended by the addition of the following:

The progress of Work shall be compared against the Schedule of Work at a job meeting once every month. If the Authority determines that the Contractor’s actual progress is not in substantial conformity with the Schedule of Work, then the Contractor shall submit a revised Schedule of Work to the Authority depicting the increased or decreased variations in activity durations and milestones as compared to previously submitted schedule(s). If noted in the meeting minutes, or directed in writing by the Resident, the Contractor shall submit a revised Schedule to the Authority within one week of the request. If a revised realistic Schedule is not received within one week of the request, the monthly pay requisition will be withheld. Failure to modify completion dates without a commitment to modify Project resources shall be deemed an unrealistic Schedule unless the particular activity had adequate float.

107.7.2 Schedule of Liquidated Damages

The table of liquidated damages is deleted and replaced with the following:

Original Contract Amount From More Than	Original Contract Amount up to and Including	Amount of Liquidated Damages per Calendar Day
\$0	\$100,000	\$100
\$100,000	\$300,000	\$200
\$300,000	\$500,000	\$400
\$500,000	\$1,000,000	\$575
\$1,000,000	\$2,000,000	\$750
\$2,000,000	\$4,000,000	\$900
\$4,000,000	and more	\$1,875

This Subsection is amended by the addition of the following:

At the option of the Authority, the Contractor may be held responsible for all costs incurred by the Authority which are due to any Work that remains incomplete after the time specified for the completion of the Contract, in addition to the daily calendar day charge.

107.9.1 Final Clean-up and Finishing

This Subsection is amended by the addition of the following:

No separate payment will be made for final clean-up and restoration of property, but the cost thereof shall be included in the prices bid for the various items scheduled in the Proposal.

SECTION 108 - PAYMENT

108.1 Measurement of Quantities for Payment

This Subsection is amended by the addition of the following:

The quantities in the Schedule of Items are the approximate totals. The breakdown of quantities for various locations is approximate and is for information only. No change in the bid price will be considered for changes in the actual quantities at each location except as provided for in Subsection 109.1, Changes in Quantities.

108.1.2 General Measurement Provisions

The first sentence is deleted and replaced with the following:

The Maine Turnpike Authority will utilize the U.S. Customary system for all units of measurement.

108.1.3 Provisions Relating to Certain Measurements

This Subsection is amended by the addition of the following:

No allowance will be made for surface laid over a greater area than indicated on the Plans or otherwise authorized, or for excavation removed or embankment placed beyond the slope lines shown on the cross-sections, except as otherwise specifically noted or authorized by the Resident in writing.

108.2.1 Generation of Progress Payment Estimates

The first paragraph is deleted and replaced with the following:

The Resident will make current estimates in writing once each month, on or before the date set by the Resident at the time of starting Work, or from time to time as the Work progresses. Progress payments twice per month will not be allowed. The estimate shall include all materials complete in place and the amount of Work performed in accordance with the Contract, during the preceding month or period and the value thereof figured at the unit prices contracted together with estimates of the cost of Extra Work performed during the same period. Estimates or payments will not be made, if in the opinion of the Resident, the Work is not proceeding in accordance with the provisions of the Contract. The Contractor agrees to waive all claims relating to the timing and amount of such estimates.

108.2.2 Payment

The first two sentences are deleted and replaced with the following:

The Maine Turnpike Authority will make payment within 30 days of Contractor and Resident concurrence of progress payment.

108.2.3 Mobilization Payments

The second paragraph is deleted and replaced with the following:

- A. The first payment of 50 percent of the lump sum price for mobilization or five percent of the original Contract Amount, whichever is less, will be made with the first monthly estimate.
- B. The second payment of 25 percent of the lump sum price for mobilization or 2.5 percent of the original Contract Amount, whichever is less, will be made following completion of 25 percent of the proposed Contract Amount.
- C. The third payment of 25 percent of the lump sum price for mobilization or 2.5 percent of the original Contract Amount, whichever is less, will be made following completion of 50 percent of the proposed Contract Amount.
- D. Upon substantial completion of the Work on the Project, as determined by the Resident, payment of any amount bid for mobilization in excess ten percent of the original Contract Amount will be paid.

All payments are subject to standard retainage.

Demobilization will not be measured separately for payment, but shall be incidental to Item 659.10, Mobilization.

108.3 Retainage

This Subsection is deleted and replaced with the following:

From the total of the amounts so ascertained there will be deducted an amount equivalent to 7.5 percent of the whole, to be retained by the Authority until after the completion of the entire Contract in an acceptable manner, and the balance, or a sum equivalent to 92.5 percent of the whole shall be certified by the Resident to the Authority for payment.

If it became evident, on the basis of approved progress schedules, or otherwise, that the completion date for the Contract will not be met, the Authority reserves the right to retain the amount of the liquidated damages which have apparently accumulated, in addition to 7.5 percent of the value of the Work done to date.

If at any time there shall be evidence of any lien or claim for which, if established, the Authority might become liable and which is chargeable to the Contractor, the Authority shall have the right to retain out of any payment, then due or thereafter to become due, an amount sufficient to completely indemnify the Authority against such lien or claim.

If the Contractor elects to furnish to the Authority a surety bond in the amount of twice the amount of all liens or claims pending against the Contractor, then the Authority will not exercise the aforementioned right to make retention out of payments on account of such liens or claims.

The payment of any current estimates or of any retained percentages shall in no way affect the obligations of the Contractor to repair or renew any defective parts of the construction and to be responsible for all damage due to such defect.

All material estimates and payments shall be subject to correction in subsequent partial estimates and payments and on the final estimate and payment.

108.4 Payment for Materials Obtained and Stored

The first paragraph is amended as follows:

In the second sentence, the words "...Delivered on or near the Work site at acceptable storage places." are deleted and not replaced.

108.4.1 Price Adjustment for Hot Mix Asphalt

This Subsection is deleted and replaced with the following:

For Contracts containing an excess of 5,000 tons of bituminous pavement, an asphalt price adjustment will be made for all bituminous concrete placed six (6) months after the bid date of the Contract. No asphalt price adjustment will be allowed for Contracts containing less than 5,000 tons. For Contracts containing more than 5,000 tons, no adjustment will be made for asphalt placed at any time within six months of the bid date.

Price adjustment will be based on the variance in cost for the performance-graded binder component of the hot mix asphalt. The quantity of hot mix asphalt for each pay item will be multiplied by performance graded binder given in the table below, times the difference in price in excess of ten percent between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease. The quantity of Hot Mix Asphalt will be determined from the quantity shown on the progress estimate for each pay period. The base price of performance graded binder to be used is the price per standard ton current with the bid opening date. The period price shall be determined by the Authority and shall be the price per standard ton current with the ending date of the progress estimate. The prices shall be determined by using the average N.E. Barge Price, FOB, as listed in the Asphalt Weekly Monitor.

Plant Mix B Pavement	4.0%
Hot Bituminous Pavement Grading B	4.5%
Hot Bituminous Pavement Grading C	5.5%
Hot Bituminous Pavement Grading D	5.5%
Hot Bituminous Pavement Grading E	5.5%

108.5 Right to Withhold Payment

This Subsection is amended by the addition of the following:

- L. Contractor's failure to, or refusal to, remove within 24-hours after receipt of proper notice, any employee or person engaged in Work under Contract.
- M. Contractor's failure to submit required schedule or schedule updates.

108.6 Taxes, Fees, Allowances, and Notices

This Subsection is amended by the addition of the following:

The Maine Turnpike Authority, an agency of the State of Maine, is exempt from payment of sales tax, under the present Maine Sales Tax Law, on any property purchased by it at retail for consumption. The Maine Tax Bureau has interpreted this to mean that all materials purchased by the Contractor which ultimately remain the property of the Maine Turnpike Authority, even though in a changed form, are not subject to the sales tax.

108.8 Final Payment

This Subsection is amended by the addition of the following:

Before final payment is made, the Contractor shall furnish to the Authority, on the forms prescribed (Sheet F-1), a sworn affidavit to the effect that no claims are pending. If such affidavit that claims have been paid cannot be given because of a dispute as to the amount or legality of such claim, the Contractor's affidavit shall clearly set out the facts as to the name, address, amount, and nature of the dispute. The Authority will review the matter and will make payment that the Authority deems is appropriate to the Contractor.

SECTION 109 – CHANGES

109.1.1 Changes Permitted

The following is added to the end of the paragraph:

There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s).

109.1.2 Substantial Changes to Major Items

The following is added to the end of the paragraph:

Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Authority.

109.3 Extra Work

The following paragraphs are added:

No Extra Work shall be performed except pursuant to the written orders of the Resident, expressly and unmistakably indicating its intention to treat the Work described therein as Extra Work.

If the Contractor determines that Work directed by the Resident is Extra Work, he shall, within 48-hours, give written notice thereof to the Resident stating why he deems it to be Extra Work and shall furnish to the Resident daily time slips and memoranda for the purpose of affording to the Authority an opportunity to verify the Contractor's claim at the time and (if it desires to do so) cancel promptly such order, direction or requirement of the Resident.

Accordingly, the failure of the Contractor to serve such notice or to furnish such time slips and memoranda shall be deemed to be a conclusive and binding determination on his part that the direction,

order or requirement of the Resident does not involve the performance of Extra Work, and shall be deemed to be a waiver by the Contractor of all claims for additional compensation or damages by reason thereof.

Refer to related Subsections 104.4.2, Preconstruction Conference, and 109.7.5, Force Account Work.

109.4 Differing Site Conditions

109.4.1 Definition

This Subsection is amended by the addition of the following:

Paragraph (A) is the definition of Differing Site Conditions. Paragraphs (B), (C) and (D) are not all required along with Paragraph (A) to prove Differing Site Conditions. However, they will be considered by the Maine Turnpike Authority as part of the evaluation of Differing Site Conditions. See related Subsection 102.3, Examination of Documents, Site, and Other Information.

109.4.4 Investigation / Adjustment

This Subsection is amended as follows:

In the third sentence, delete the words “Subsections (A) - (E)”.

109.5.1 Definitions - Types of Delays

This Subsection is amended as follows:

B. Compensable Delay -

Replace (1) with the following:

1(A) a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration.

1(B) a weather related Uncontrollable Event of such an unusually severe nature that the Contractor’s critical path schedule is disrupted.

109.5.2 Entitlement to Adjustments

This Subsection is amended as follows:

A. Types of Adjustments -

Paragraph 2. is deleted and replaced with the following:

2. If a Compensable Delay 1(A), (2), or (3), the Contractor is entitled to an extension of time and an equitable adjustment as set forth in Subsection 109.7, Equitable Adjustment to Compensation. If a Compensable Delay 1(B), the Contractor is entitled to an extension of time and an equitable adjustment as set forth in Subsection 109.7, Equitable Adjustment to Compensation, except that Cost of extended jobsite overhead and time will not be allowed.

109.5.5 Documenting the Delay and Request for Adjustments

The last paragraph is deleted and replaced with the following:

The Authority may require that all cost shown in the report be certified by an accountant.

109.5.6 Decision by Program Manager

This Subsection is deleted and not replaced.

Refer to related Subsection 104.4.2, Preconstruction Conference.

109.5.7 Additional Consideration by Department

This Subsection is deleted and not replaced.

Refer to related Subsection 104.4.2, Preconstruction Conference.

109.6.1 Overview - General Requirements

This Subsection is amended by the addition of the following:

The Maine Turnpike will not participate in any costs borne by the Contractor that are not in accordance with Maine Turnpike policies. All money paid to a business or resident as compensation for impacts created by the Contractor's operation will not be reimbursed by the Authority. All Contractor costs must be documented. Monies paid by the Contractor to others must be documented by a receipt for the cost to be considered as part of the VECP. Copies of all receipts shall be submitted to the Resident.

109.7.2 Basis of Payment

This Subsection is deleted in its entirety and replaced with the following:

Equitable Adjustments will be established by mutual Agreement for compensable items listed in Subsection 109.7.3, Compensable Items, based upon Unit or Lump Sum Prices. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Subsection 109.7.5, Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment.

109.7.3 Compensable Items

This Subsection is deleted and replaced with the following:

The Contractor is entitled to compensation for the following items, with respect to agreed upon Unit or Lump Sum Prices:

1. Labor expenses for non-salaried workers and salaried foremen.
2. Costs for Materials.
3. A markup on the totals of Items 1 and 2 of this Subsection (109.7.3) for home office overhead and profit of the Contractor, its Subcontractors and suppliers, and any lower tier Subcontractors or suppliers, with no mark-ups on mark-ups.

4. Cost for Equipment, based on Blue Book Rates or leased rates, as set forth in Subsection 109.7.5(C), or the Contractor's Actual Costs.
5. Costs for extended jobsite overhead.
6. Time.
7. Subcontractor quoted Work, as set forth below in Subsection 109.7.5, Force Account Work.

109.7.5 Force Account Work

This Subsection is amended by the addition of the following:

C. Equipment

When the Contractor is paid for furnishing and operating equipment on an hourly or daily basis, it shall be operated as approved by the Resident in such a manner as to obtain maximum production under the prevailing conditions. The Resident may order the removal and require replacement of any unsatisfactory equipment.

The first sentence of the second paragraph, which begins: "Equipment leased...", is deleted.

The second sentence of the sixth paragraph is changed from "The Contractor may furnish..." to read "If requested by the Authority, the Contractor will produce cost data to assist the Authority in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records."

The following sentence is added:

Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10 percent markup for administrative costs.

The following sentence is added:

F. Subcontractor Quoted Work - When accomplishing Force Account Work that utilizes Subcontractor quoted Work, the Contractor will be allowed a maximum markup of five percent for profit and overhead.

SECTION 110 - INDEMNIFICATIONS, BONDING AND INSURANCE

110.2.1 Bonds

The first three paragraphs are deleted and replaced with the following:

The Bidder to whom the Contract is awarded shall furnish a Surety Corporation Bond, satisfactory to the Authority, on the form of the Contract Bond bound herewith, as security for the faithful performance of the Work. The Contract Bond must be executed or countersigned on the part of such Surety by the Resident Agent of the Surety for the State of Maine.

The Bond shall be in an amount not less than the Total Amount bid in the Proposal and shall be maintained by the Contractor until the final payment under the Contract is made. In the event of insolvency

of the Surety, the Contractor shall forthwith furnish and maintain as above provided, other security satisfactory to the Authority.

If the Contractor is unable to continue the Work, then the completion of the Contract shall be the sole responsibility of the Surety. The Surety shall assume the role of and become the Contractor. Work shall not commence until the Authority has approved, in writing, the Subcontractor's employed by the Surety. All Work to complete the Contract will be paid for at Contract bid prices as shown on the Proposal bid sheets. All payments made by the Authority will be paid directly to the Surety who in turn will then pay the Subcontractors and suppliers. Regardless of the amounts previously paid to the Contractor as Progress Estimates for Work reported to have been put in place by the Contractor or his Subcontractors, the full Scope of the Contract Work shall be completed by the Surety and its designates for compensation not to exceed the Contract Price less the aggregate of prior payments to the Contractor.

110.2.3 Bonding for Landscape Subcontractors

This Subsection is deleted and replaced with the following:

110.2.3 Bonding for Landscape Establishment Period

The Contractor shall provide a signed, valid, and enforceable Performance, Warranty, or Maintenance Bond complying with the Contract, to the Department at Final Acceptance.

The Bond shall be in the full amount for all Pay Items for Work pursuant to Section 621, Landscape, made payable to the Maine Turnpike Authority.

The Contractor shall pay all premiums and take all other actions necessary to keep said Bond in effect for the duration of the Landscape Establishment Period as described in Special Provision 621.0036, Establishment Period. If the Surety becomes financially insolvent, ceases to be licensed or approved to do business in the State of Maine, or stops operating in the United States, the Contractor shall file new Bonds complying with this Subsection and within 10 days of the date the Contractor is notified or becomes aware of such change.

All Bonds shall be procured from a company organized and operating in the United States, licensed or approved to do business in the State of Maine by the State of Maine Department of Business Regulation, Bureau of Insurance, and listed on the latest Federal Department of the Treasury listing for "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies."

By issuing a Bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time for performance, quality, warranties, and the Department's self help remedy as provided in Subsection 112.1, Default, to the same extent as if all terms of the Contract are contained in the Bond(s).

Regarding claims related to any obligations covered by the bond, the Surety shall provide, within 60 Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the 60-day period constitutes the Surety's waiver of any right to deny or contest payment and the Surety's acknowledgment that the claim is valid and undisputed.

110.3 Insurance

This Subsection is amended by the addition of the following:

Each policy shall be signed by the President and Secretary of the insurance company and shall be countersigned by a licensed Resident Agent of the State of Maine as an authorized representative of the company.

Before Work is commenced pursuant to the Agreement, the Contractor shall file with the Authority a Certificate of Insurance, executed by an insurance company or companies satisfactory to the Authority and licensed or approved by the State of Maine Department of Business Regulation, Bureau of Insurance to do business in the State of Maine, stating that the Contractor carries insurance in accordance with the requirements of the Contract.

If at any time, any of the said policies shall be or become unsatisfactory to the Authority, the Contractor shall promptly obtain new and satisfactory policies and furnish certificates therefor as required above. All policies shall contain a valid provision or endorsement providing that the insurance company will notify the Authority in writing at least thirty (30) days prior to the termination of any policy or before any changes are made in any policies. The policy shall also indicate which exclusions have been deleted and any additional coverages.

Neither approval by the Authority, nor a failure to disapprove insurance furnished by a Contractor, shall release the Contractor of full responsibility for liability, damages and accidents as set forth herein.

No separate payment shall be made for any insurance that the Contractor may be required to carry, but all costs thereof shall be included in the prices bid for the various items scheduled in the Proposal.

The following Subsection is added:

110.3.05 Umbrella Liability

An Umbrella Liability Policy in excess of Employer's Liability, General Liability, and Automobile Liability shall be provided with a limit of \$4,000,000.

110.3.2 Commercial General Liability

This Subsection is amended by the addition of the following:

Where the Work to be performed has to do with railroads, then railroad Protective Liability Insurance shall be provided, with the Maine Turnpike Authority as a named insured.

The Contractual Liability Insurance shall cover the Contractor's obligation to indemnify the Authority as provided in Subsection 110.1, Indemnification.

110.3.4 Professional Liability

The first sentence is deleted and replaced with the following:

Contractors who engage in design Work, preliminary engineering Work, and environmental consulting Work for the Authority shall maintain a Professional Liability policy for errors and omissions with a minimum limit of liability of \$5,000,000. The Authority reserves the right to require increased insurance limits for certain major Projects.

110.3.5 Owner's and Contractor's Protective Liability

This Subsection is deleted and replaced with the following:

For Projects with a Contract price in excess of \$500,000, an "Owner's Protective" policy in the name of the Maine Turnpike Authority, with a \$5,000,000 limit, shall also be provided.

110.3.6 Builder's Risk Insurance

This Subsection is amended by the addition of the following:

The Contractor shall provide Builder's Risk Insurance if the Project requires it. This determination will be made by the Authority and shall be so stated in the Special Provisions. The insurance coverage shall be shown on a special form and provide for transient and off-premise coverage and materials intended for use at the Project site. Any exclusion related to design, materials, or workmanship shall not apply to resulting damage.

110.3.8 Administrative and General Provisions

A. Additional Insured

This paragraph is deleted and replaced with the following:

Each policy, with the exception of Workers' Compensation and Professional Liability Insurance, shall name the Authority as an additional named insured. The Maine Turnpike Authority Contract Number shall be clearly stated on each policy.

SECTION 111 - RESOLUTION OF DISPUTES

111.1.2 Escalation Process

This Subsection is deleted and replaced with the following:

To resolve Issues and Disputes, the Contractor and the Maine Turnpike Authority will develop a Decision Matrix at the preconstruction or partnering meeting. See related Subsection 104.4.2, Preconstruction Conference. If an issue is not resolved, the matter becomes a Dispute and is eligible for settlement by an Alternate Dispute Resolution (ADR) process as outlined in this Section. Either the Authority or the Contractor may request an ADR process. If a Contractor is dissatisfied with an ADR recommendation, the decision may be appealed to the MTA Executive Director. A decision by the MTA Executive Director may be appealed to either Mediation or Arbitration. All costs of ADR, including Neutral Evaluations, Dispute Review Boards (DRBs), Mediation or Arbitration shall be shared equally.

ALTERNATIVE DISPUTE RESOLUTION

Preliminary ADR:

The purpose of the optional use of ADR is to assist the consenting parties to resolve disputes in a manner that complies with the Contract, that is fair, impartial, less expensive, faster and less formal than litigation. A Project issue becomes a Dispute eligible for ADR only when mutually acceptable resolution can not be achieved within the Decision Matrix-prescribed time period at the level of the Authority's Chief Operating Officer (COO), and the Contractor's Principal.

The Contractor and the Authority shall select a mutually acceptable form of Preliminary ADR from the following options, with the preference expressed in the order of listing.

1. NEUTRAL EVALUATION: Jointly selected by the disputing parties, the Neutral would conduct a third party, neutral investigation of both sides of the dispute, resulting in the submission of a Report of Recommended Settlement to the disputing parties.
2. DISPUTE REVIEW BOARD (DRB): The parties would jointly select two to three mutually acceptable experts who would hear and weigh a presentation of positions and evidence by the parties; resulting in the issuance by the DRB of a Recommended Settlement of the matter.

Recommendations by either a Neutral or a DRB will be non-binding unless the parties mutually agree in writing at the time of process selection that such recommendations will be binding.

Appeal to the Executive Director:

If either party rejects a recommendation resulting from ADR, the Dispute may be appealed to the Executive Director of the Authority. Once a dispute has been submitted to ADR, no party shall discuss the elements of the dispute with the Executive Director.

Final ADR - Mediation or Arbitration:

At the request of the Contractor, appeal decisions rendered by the Executive Director may be appealed by the Contractor to a Final ADR process of either Mediation or Arbitration. The costs of Mediation or Arbitration shall be borne equally by the Contractor and the Authority. Decisions by either a Mediator or an Arbitrator(s) will be non-binding unless the parties mutually agree in writing at the time of process selection that such recommendations will be binding.

NOTE: It is the intent of this Specification to retain maximum flexibility for the specific procedures for either Preliminary or Final Alternative Dispute Resolution. The processes shall follow the guidelines of construction industry ADR practices in general. The Authority and the Contractor will contribute equal input to the selection of location, methods, experts and timing of such processes. When a Dispute Review Board is utilized, the Authority and the Contractor shall have equal veto power in the selection of DRB composition.

111.1.8 Commissioner Communications Before Appeal

This Subsection is deleted and not replaced.

111.2 Project Level Negotiation to 111.6 Judicial Review

These Subsections (inclusive) are deleted and not replaced.

SECTION 112 - DEFAULT AND TERMINATION

112.2 Termination

This Subsection is amended by the addition of the following:

When the Contract is terminated, the Contractor shall, if so required by the Authority, promptly remove any or all of his/her equipment and supplies from the Project site or from other property of the

Authority, failing which the Authority may remove such equipment and supplies at the expense of the Contractor.

SECTION 203 - EXCAVATION AND EMBANKMENT

203.01 Description

The following is added at the end of the last paragraph:

Unclassified bids are submitted at the sole risk of the Bidder. The Contractor shall only be entitled to compensation at the unit prices submitted for the actual quantity of Common Excavation and Rock Excavation. No additional compensation shall be considered for changes from the estimated quantities to the actual quantities regardless of the reason for the change.

203.18 Method of Measurement

The seventh paragraph is amended as follows:

Elevations for final cross sections shall be determined as shown and calculated on the Plans. Measurements shall be determined at the bottom of loam line unless otherwise noted.

SECTION 502 - STRUCTURAL CONCRETE

502.10 Forms and False Work

D. Removal of Forms and False Work

The first paragraph is amended as follows:

In the first, second, and third sentences, "forms and false work" are replaced with "forms".

502.11 Placing Concrete

G. Concrete Wearing Surface and Structural Slabs on Precast Superstructures

The last paragraph is amended as follows:

In the third sentence, replace "The temperature of the concrete shall not exceed 24°C [75°F] at the time of placement." with "The temperature of the concrete shall not exceed 24°C [75°F] at the time the concrete is placed in its final position."

502.15 Curing Concrete

The first paragraph is amended as follows:

The first sentence is replaced with: "All concrete surfaces shall be kept wet with clean, fresh water for a curing period of at least seven (7) days after concrete placing, with the exception of vertical surfaces as provided for in Subsection 502.10 (D), Removal of Forms and False Work.

The second paragraph is amended as follows:

The first two sentences are deleted.

The third paragraph is amended as follows:

The entire paragraph, which starts "When the ambient temperature....", is deleted.

The fourth paragraph is amended as follows:

Delete "approved" to now read "...continuously wet for the entire curing period...".

The fifth paragraph is amended as follows:

The second sentence is changed from "...as soon as it is possible to do so without damaging the concrete surface." to: "...as soon as possible."

The seventh paragraph is amended as follows:

The first sentence is changed from "...until the end of the curing period." to "...until the end of the curing period, except as provided for in Subsection 502.10(D), Removal of Forms and False Work."

SECTION 503 - REINFORCING STEEL

503.06 Placing and Fastening

The second paragraph is amended as follows:

The third sentence is changed from "All tack welding shall be done in accordance with Section 504, Structural Steel." to "All tack welding shall be done in accordance with AWS D1.4, Structural Welding Code - Reinforcing Steel."

SECTION 504 - STRUCTURAL STEEL

504.09 Facilities for Inspection

The following is added to the last paragraph:

Failure to comply with the above requirements will be consider to be a denial to allow access to Work by the Contractor. The Department will reject any Work done when access for inspection is denied.

504.18 Plates for Fabricated Members

The second paragraph is amended as follows:

The first sentence is changed from "...ASTM A 898/A 898 M..." to "...ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and...".

504.31 Shop Assembly

The following is added to the last sentence:

The minimum assembly length shall include bearing centerlines of at least two substructure units.

Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09

SECTION 605 - UNDERDRAINS

605.05 Underdrain Outlets

The first paragraph is amended as follows:

In the second sentence, the words "metal pipe" are deleted.

SECTION 606 - GUARDRAIL

606.02 Materials

The fourth paragraph, which reads "Retroreflective beam guardrail delineators..." is deleted and replaced with the following:

Reflectorized sheeting for Guardrail Delineators shall meet the requirements of Subsection 719.01, Reflective Sheeting. Delineators shall be fabricated from high-impact, ultraviolet and weather resistant thermoplastic.

The eighth paragraph, which reads "The sole patented supplier of multiple mailbox..." is deleted and replaced with the following:

Acceptable multiple mailbox assemblies shall be listed on the Department's Approved Products List and shall be NCHRP 350 tested and approved.

606.09 Basis of Payment

The second and third sentences in the first paragraph are deleted in their entirety and replaced with the following:

Butterfly-type guardrail reflectorized delineators shall be mounted on all W-beam guardrail at an interval of every 10 posts [62.5 feet] on tangents sections and every five posts [31.25 feet] on curved sections as directed by the Resident. On divided highways, the delineators shall be yellow on the left hand side and silver/white on the right hand side. On two-way roadways, the delineators shall be silver/white on the right hand side. All delineators shall have retroreflective sheeting applied to only the traffic facing side. Reflectorized guardrail delineators will not be paid for directly, but will be incidental to the guardrail items.

SECTION 615 - LOAM

615.02 Materials

This Subsection is amended as follows:

One hundred percent of the loam material must pass the two inch sieve.

<u>Organic Content</u>	<u>Percent by Volume</u>
Humus	"5% - 10%", as determined by Ignition Test

SECTION 618 - SEEDING

618.01 Description

The first sentence is amended to read:

This Work shall consist of furnishing and applying seed.

The words "and cellulose fiber mulch" are deleted from 618.01(a).

618.03 Rates of Application

The last sentence in 618.03(a) is deleted and replaced with the following:

These rates shall apply to Seeding Method 2, 3, and Crown Vetch.

In 618.03(c), "1.8 kg [4 lb]/unit." is deleted and replaced with "1.95 kg [4 lb]/unit."

618.09 Construction Method

In 618.09(a) 1, sentence two, "100 mm [four inches]" is replaced with "25 mm [one inch] (Method 1 areas) and 50 mm [two inches] (Method 2 areas)".

618.15 Temporary Seeding

The Pay Unit is changed from "Unit" to "Kg [lb]".

SECTION 620 - GEOTEXTILES

620.03 Placement

Section (c): Replace "Non-woven" in title with "Erosion Control".

The word "Non-woven" in the first paragraph is replaced with "Woven monofilament".

The word "Non-woven" in the second paragraph is replaced with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric

Section (a): the second sentence is replaced with the following:

Damaged geotextiles, as identified by the Resident, shall be repaired immediately.

620.09 Basis of Payment

Pay Item 620.58: "Non-woven" is replaced with "Erosion Control".

Pay Item 620.59: "Non-woven" is replaced with "Erosion Control".

SECTION 621 - LANDSCAPING

621.0036 Establishment Period

In the fourth and fifth paragraphs, "time of Final Acceptance" is replaced with "end of the period of establishment".

In the seventh paragraph, "Final Acceptance date" is replaced with "end of the period of establishment"; and "date of Final Acceptance" is replaced with "end of the period of establishment".

SECTION 626 - HIGHWAY SIGNING

626.034 Concrete Foundations

The following is added to the end of the second paragraph:

Pre-cast and cast-in-place foundations shall be warranted against leaning and corrosion for two years after the Project is complete. If the lean is greater than two degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at his own cost.

SECTION 639 - ENGINEERING FACILITIES

639.04 Field Offices

This Subsection is amended by the addition of the following:

The Field Office location shall be approved by the Resident and shall be provided when the Contract starts and shall remain until the Contract is complete. The Contractor shall be responsible for furnishing and maintaining electricity, heat, facsimile machine and appliances for the entire duration of the Contract, which includes periods of time which Work has been suspended.

The Contractor shall provide a plain paper (8-1/2" x 11") fax/copier machine with a 10 page (minimum) auto document feeder, 15 page (minimum) fax memory, 50 sheet (minimum) paper capacity, and a transmission speed of six pages (minimum) per minute for the Resident's use during the Project. All maintenance and supplies shall be the responsibility of the Contractor. The fax machine shall be connected to a separate telephone line so that the fax machine operates independent of the telephone and answering machine. A total of three phone lines shall be provided by the Contractor. All of the costs associated with the above shall be the responsibility of the Contractor except for the monthly telephone charges.

The following are not required:

- Accessible route conforming to the Americans with Disabilities Act
- Wheelchair accessible toilet

639.09 Telephone

This Subsection is amended as follows:

The Contractor shall be reimbursed at cost for the monthly telephone service charges. Telephone service shall remain throughout the Contract including periods of seasonal shutdowns.

639.11 Basis of Payment

The following is added after the first paragraph:

The Contractor shall be reimbursed at cost for the monthly telephone service charges. No additional markup will be allowed. The Contractor shall submit copies of the monthly bills to the Resident for payment.

SECTION 652 - MAINTENANCE OF TRAFFIC

652.2 Materials

The first sentence in the second paragraph is replaced with the following:

All construction signs shall be fabricated with super high intensity (ASTM 4956 – Type VII) retroreflective sheeting. All construction signs and construction sign packages shall have the Type VII sheeting material. 3924 Diamond Grade fluorescent orange sheeting manufactured by 3M conforms to ASTM 4956 – Type VII.

652.2.4 Other Devices

The eighth paragraph is amended by the addition of the following:

The Portable Message Signs shall be capable of being programmed remotely by telephone, of monitoring the speed of traffic in a travel lane, and of displaying a message in response to a vehicle exceeding an allowable speed threshold. The Contractor shall submit a catalog cut to the Resident for approval, establish a cellular account so that signs may be programmed remotely and provide training for the operation of the sign to the Resident.

The portable-changeable message signs may be moved throughout the Project area as required to provide advance warning of construction operations which may impact the flow of traffic as well used during lane closures to display messages relative to the speed of traffic. The Contractor shall remove, transport and maintain the signs as directed and approved by the Resident.

The Authority will be responsible for the actual programming of the signs.

A deduction will be made from money due the Contractor for signs that fail to operate for extended periods of time.

The following Subsection is added:

652.2.5 Safety Vests

All jobsite personnel shall wear a safety vest labeled as ANSI 107-199 standard performance for Class 2 risk exposure or an equivalent.

652.3.1 Responsibility of the Department

The first paragraph is deleted and replaced with the following:

The Authority will provide Project specific traffic control requirements and traffic control plans for use by the Contractor. The specific traffic control requirements for the Project are identified in Special Provision Section 652, Maintenance of Traffic (Specific Project Maintenance of Traffic Requirements). No

revisions to these requirements or Plans will be permitted unless the Contractor can thoroughly demonstrate an overall benefit to the public and a Contract Modification is approved.

The following sentence is added to the end of this Subsection:

The Maine Turnpike Authority may erect lane closures on the mainline within the Project area to collect survey, provide layout, and for any other reasons deemed necessary by the Resident.

652.3.2 Responsibility of the Contractor

The first paragraph is amended as follows:

The Contractor shall provide continuous and effective traffic control and management for the Project that is appropriate to the means, methods and sequencing allowed by the Contract; and consistent with the Traffic Control Plans and Maintenance of Traffic Specifications. The Contractor is responsible for ensuring a safe environment for the Contract workforce, local road users, and turnpike users; and maintaining the safe efficient flow of traffic through the construction zone at all times during the Contract. The protocols and requirements outlined in the Contract shall be strictly enforced.

The following paragraph is added:

The Contractor shall designate a supervisor to be responsible for the safe placement and maintenance of all traffic control devices. This individual shall be trained to safely install and maintain the devices. The Contractor shall submit to the Resident, in writing, documentation stating that this individual has reviewed and understands the traffic control requirements of the Contract and the Manual of Uniform Traffic Control Devices.

652.3.3 Submittal of Traffic Control Plan

This Subsection is deleted and not replaced.

652.3.4 General

This Subsection is deleted in its entirety and replaced with the following:

Prior to starting any Work on any part of the Project adjacent to or being used by the traveling public, the Contractor shall install the appropriate traffic control devices in accordance with the Plans, Specifications and the latest edition of the Manual of Uniform Traffic Control Devices, Part VI. The Contractor shall continuously maintain the traffic control devices in their proper position, and they shall be kept clean, legible and in good repair throughout the duration of the Work. The Contractor shall correct all problems or violations upon observation by the Contractor or upon notification by the Resident. Failure to correct a problem within one hour of notification during non-working hours or to respond immediately to a problem during Work hours, shall result in a penalty of \$150.00 per occurrence. The Resident shall be the sole judge as to the time and response.

No equipment or vehicles of the Contractor, their Subcontractors, or employees engaged in Work on this Contract shall be parked or stopped on lanes carrying traffic, or on lanes or shoulders adjacent to lanes carrying traffic, at any time, except as required by ongoing Work operations. Contractor equipment or vehicles shall never be used to stop, block, or channelize traffic.

Vehicles parked on the shoulder shall be located so all portions of the vehicle(s) are a minimum of one foot from the traveled way. No operation (including loading or unloading vehicles) shall be conducted

on or near the traveled lanes or shoulders without first setting up the proper lane closure and traffic control devices. These precautions shall be maintained at all times while this Work is being performed.

The Contractor shall keep all paved areas of the highway as clear as possible at all times. No materials shall be stored on any paved area of the highway or within 30 feet of the traveled way (unless protected by concrete barriers and specifically approved by the Resident). Private vehicles owned by Contractor's employees shall be parked close together in a group no closer than 30 feet from the traveled way in pre-approved areas.

Channelization devices shall include Vertical Panel Markers, Barricades, Cones, and Cones and Drums. These devices shall be installed and maintained at the spacing shown on the Traffic Control Plans, or determined by the MUTCD, through the Work area.

No lane closures will be allowed during non-working hours, weekends and/or holiday periods unless included in the Contract as long-term traffic control requirement or approved by the Resident.

Any special signs, barricades or other devices deemed necessary by the Resident shall be furnished and maintained by the Contractor. Extra care shall be taken so that the traffic flow will not be disturbed. The use of construction signs and warning devices not shown on the Plans or in the MUTCD, unless approved by the Resident, will be prohibited.

The Contractor's personnel and equipment shall avoid crossing traffic whenever possible. No Contractor's vehicle may slow down or stop in a traffic lane unless said lane has previously been made safe with signs and barricades as required by the Resident.

No vehicle will move onto the traveled way at such a time or in such a manner so as to cause undue concern or danger to traffic approaching from either direction. The Contractor or his employees are not empowered to stop traffic.

The Contractor shall take necessary care at all times, in all operations and use of his equipment, to protect and facilitate traffic. During periods of idleness, the equipment shall not be left in a way to obstruct the traffic artery or to interfere with traffic.

The following Subsection is added:

652.3.41 Local Road General Requirements

Channelization devices consisting of barricades or drums, at a maximum spacing of 50 feet, shall be used in guardrail areas when neither the existing nor the new guardrail is in place. The Contractor shall not remove guardrail until absolutely necessary for construction operations in that area. The guardrail shall be replaced as soon as possible thereafter.

All excavation areas adjacent to the roadway shall be channelized continuously in both directions for the length of the Project in all areas where the centerline strip is not effective in accordance with the latest edition of MUTCD.

Where the roadway is adjacent to an area being excavated or filled, a minimum two foot shoulder should be maintained and the effective slope of the earth excavation or fill slope, beyond the two foot shoulder, shall not be steeper than 1-1/2 horizontal to 1 vertical. The effective slope of rock excavation shall not be steeper than 1 horizontal to 1 vertical beyond the two foot shoulder. In the case of cuts over five feet deep, an earth berm or other approved barrier shall be placed between the travel lane and the excavated area. In this instance, travel speeds shall be limited by specific advisory signing to 20 miles per hour in all cases. When excavation does not leave sufficient usable widths to maintain two-way traffic as provided in

Subsection 105.4, Maintenance of Work, one-lane traffic controlled by a traffic signal or continuous flagging may be considered. Closely spaced vertical panels, drums or other channelizing devices shall be used on any of these types of areas that are left exposed for short durations.

When paving operations or shoulder grading leave a three inch or less exposed vertical face at the edge of the traveled way, channelization devices shall be placed two feet outside of the pavement at intervals not exceeding 600 feet and a 48 inch by 48 inch W8-9 “Low Shoulder” sign shall be placed at a maximum spacing of 1/2 mile. When paving operations or shoulder grading leave a three inch or greater exposed vertical face at the edge of the traveled way, the Contractor shall place shoulder material for a width of at least four feet to meet the pavement grade, and place channelizing devices as above, before the lane is opened to traffic.

652.3.5 Installation of Traffic Control Devices

The first paragraph is deleted and replaced with the following:

Portable signs shall be erected on temporary sign supports approved crashworthy devices in conformance with NCHRP 350 requirements so that the bottom is either 1) 300 mm [12 inches]; or 2) greater than 1.5 m [five feet] above the traveled way. Post-mounted signs shall be erected so the bottom is no less than 1500 mm [five feet] above the traveled way, and 2100 mm [seven feet] above the traveled way in business, commercial, and residential areas. All post-mounted signs on the turnpike mainline shall be erected so the bottom is no less than 2100 mm [seven feet] above the traveled way. Post-mounted signs must also be erected so that the sign face is in a true vertical position. All signs shall be mounted within four feet of the existing edge of pavement. All signs shall be placed so that they are not obstructed in any manner and immediately modified to ensure proper visibility if obstructed. Due to Contractor or Project staging, it may be necessary to relocate previously erected portable or post-mount signs so they are clearly visible. Signs may be mounted lower or higher to fit the situation when authorized by the Resident. Cones shall either be weighted or nailed. Tires will not be allowed as weights.

The following is added to the end of the third paragraph:

NHCRP 350 tested drums with tire sidewall ballasts are acceptable. During winter periods, drums shall be placed on the grass shoulder or removed from the roadway so winter maintenance operations will not be impacted. This requires the placement of drums behind the median guardrail. Drums shall not be placed on snow banks.

The following is added to the end of the fifth paragraph:

The method of covering existing signs must be approved by the Resident. The use of adhesives on the sign face is prohibited.

The sixth paragraph is deleted and replaced with the following:

The Contractor shall replace damaged or missing traffic control devices with similar devices of acceptable quality.

The following paragraph is added to the end of this Subsection:

The Contractor is required to cover all existing signs, including regulatory and warning signs, within the Work zone which may conflict with the proposed construction signs. The Contractor is also required to cover all permanent construction signs when they conflict with a daily traffic control setup.

652.3.6 Traffic Control

The first sentence of the first paragraph is deleted and replaced with the following:

The minimum roadway width for local road one-way and two-way traffic, and minimum number of lanes and lane widths for the Maine Turnpike, are identified on the Project's traffic control plans and/or in Special Provision Section 652, Maintenance of Traffic (Specific Project Maintenance of Traffic).

The last sentence of the third paragraph is deleted and not replaced.

652.41 Traffic Officers

The first paragraph is deleted and replaced with the following:

Local road traffic officers, if required, shall be uniformed police officers. State Police officers and vehicles shall be used to warn and stop traffic on the Maine Turnpike. All State Police shall be scheduled through the Maine Turnpike Authority. The Authority will make payment for the State Police officers and vehicles directly to the State Police.

The Contractor will not be entitled to additional compensation if scheduled Work is not completed due to the unavailability of State Police.

652.6 Night Work

The sixth and seventh paragraphs are deleted and not replaced.

The following Subsection is added:

652.61 Construction Vehicles

The Contractor shall furnish approved signs reading "Construction Vehicle - Keep Back" to be used on trucks hauling to the Project. The signs shall be a minimum of 30 inch by 60 inch, Black and Orange, Type VII. The older type "Construction Vehicle - Do Not Follow" may be used until the end of their service life.

All vehicles used on the Project shall be equipped with amber flashing lights, visible from both front and rear, or by means of a single, approved type, revolving, flashing or strobe lights mounted so as to be visible 360 degrees. The vehicle flashing system shall be in continuous operation while the vehicle is on any part of the Project. Dump trucks and utility trucks shall have a strobe light mounted on each side of the vehicle.

652.7 Method of Measurement

The following is added to the end of the first paragraph:

The per unit measurement for payment of the portable-changeable message sign shall include the establishment and payment of a cellular phone account so that the portable-changeable message sign may be programmed remotely.

The following is added to the end of the second paragraph:

The number and locations of Flaggers will be determined by the Resident. Flaggers used during the Contract, for the convenience of the Contractor, will not be measured separately for payment, but shall be

incidental to the various pay items. The Authority will make payment for the State Police officers and vehicles directly to the State Police when utilized for mainline traffic control activities. State Police escorts, if required to move oversized material or equipment loads to the jobsite, will not be paid separately, but shall be incidental to the various pay items.

652.8.2 Other Items

The last paragraph is deleted and replaced with the following:

There will be no payment made under any 652 pay items after the expiration of the adjusted total Contract time.

SECTION 653 - POLYSTYRENE PLASTIC INSULATION

653.05 Placing Backfill

In the second sentence, "...shall be not less than 150 mm [six inches] loose measure." is changed to "...shall be not less than 250 mm [10 inches] loose measure."

In the third sentence "...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure..." is changed to "...crawler type bulldozer of not more than 4875 kg/m² [2000 lb/ft²] ground contact pressure..."

653.06 Compaction

In the final sentence "...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure..." is changed to "...crawler type bulldozer of not more than 4875 kg/m² [2000 lb/ft²] ground contact pressure..." it]."

SECTION 656 - TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

Section 656 is deleted in its entirety and replaced with the following:

656.01 Description

This Work shall consist of providing temporary erosion control during construction in accordance with these Specifications, standard details, Best Management Practices, or as otherwise directed.

All temporary erosion control devices shall be in place and approved by the Resident prior to any embankment and excavation operations. The Contractor is responsible for repairing and replacing damaged or missing sandbags, haybales, and silt fence material. The Contractor shall maintain these devices in a clean and properly operating condition as described herein.

The Contractor is responsible for all temporary drainage and erosion control measures. The Contractor shall review his construction operations and staging to determine if additional erosion control measures are required. The Resident may also request additional erosion control measures. The cost for all erosion control devices necessary, due solely to the Contractor's construction operations and are not shown on the Plans, shall be borne solely by the Contractor. The frequency of inspection of these devices by the Contractor and the Erosion Control Compliance Officer (ECCO) shall be bi-weekly and immediately following a rainfall of greater than 1/2 inch in a 24-hour period.

In areas of ledge or frozen ground only, the Contractor may opt to furnish and install an erosion control filter berm in lieu of silt fence. The erosion control filter berm shall be a water permeable windrow of a composted bark mix to remove suspended soil particles from water moving off the site. Erosion control filter berm shall be considered an erosion control device. This material and specific application shall be submitted to the Resident for approval.

656.02 General

Baled hay shall be bales at approximately 350 by 450 by 750 mm [14 by 18 by 30 inch], or an equivalent, securely tied to form a firm bale.

Sandbags shall consist of heavy cloth or woven plastic bags, approximately 0.03 m³ [one cubic foot] capacity, filled with sand or gravel.

Dumped stone shall be a graded mixture of large and small stone with approximately 50 percent of the stones larger than 150 mm [six inch].

Flexible drainage pipe shall consist of collapsible neoprene pipe, a minimum of 12 inches in diameter or equal.

656.03 Silt Fence

(a) Posts

Either hardwood posts or steel posts shall be used.

Hardwood posts shall be straight, at least 450 mm [18 inches] longer than the height of the silt fence and at least 32 mm by 32 mm [1 inch by 1 inch].

Staples shall be of No. 9 wire.

Steel posts shall be at least 450 mm [18 inches] longer than the height of the silt fence and have the means provided for fastening wire to the fence.

(b) Wire Support Fence

If required, wire support fence shall be at least 50 mm [2 inches] higher than the height of the silt fence. Horizontal and vertical wires shall be spaced no more than 150 mm [6 inches] apart. The top and bottom wires shall be at least 10 gauge; all other wires at least 12 gauge.

(c) Silt Fence

The woven geotextile fabric and components shall be made from polypropylene, polyester, polyamide or other chemically stable material and be resistant to ultraviolet radiation degradation for at least 12 months of installation. Silt retention capacity shall be no less than 75 percent. The fabric shall have a Mullen burst test of no less than 1790 kPa [260 pounds per square inch] with a maximum average sieve opening size of 850 µm to 250 µm [No. 20 to No. 60]. Roll width of the fabric shall be no less than 150 mm [6 inches] wider than the height of the fence, except fabric for boom supported floating silt fence which shall be no less than 600 mm [two feet] wider than the design width.

(d) Flotation Devices

The flotation boom and weighing devices for boom supported floating silt fence shall be sufficient to hold the fence in an approximately vertical position.

656.04 Temporary Erosion Checks

Temporary erosion checks shall be constructed in ditches and at other locations designated. Checks shall be in accordance with the Standard Detail unless otherwise directed.

Baled hay, sandbags, or both, shall be used in other areas as necessary to inhibit soil erosion.

Sediment deposits behind haybales and silt fence shall be removed when the depth of sediment reaches 50 percent of the erosion control device height.

The Contractor is also required to have on-site, at all times, 25 percent additional Contract quantities of silt fence for use as backup devices.

656.041 Erosion Control Filter Berm

The erosion control berm shall be placed uncompacted, in a windrow in locations approved by the Resident. The cross section of the berm shall be four feet wide at the base and 1-1/2 feet high at the center. The erosion control filter berm shall be removed when no longer required, as determined by the Resident, and shall be distributed over an adjacent area.

656.05 Temporary Berms

When designated, temporary barriers shall be constructed along the edge of the embankment. The barriers shall be of embankment earth material, gravel or sand as available and shaped approximately as shown in the Standard Details. The barriers shall be compacted with the wheels of construction equipment. When placed on pavement, the berms shall be constructed of asphalt grindings or other non-erodible soil material as approved by the Resident, and shaped as shown in the Standard Details.

At designated intervals, temporary slope drains shall be constructed with a crescent shaped barrier placed at each slope drain to direct the water into the inlet pipe.

656.06 Temporary Slope Drains

Collapsible pipe with corrugated metal pipe inlet shall be placed down the embankment slopes at designated locations and in accordance with the Best Management Practices.

At the outlet end of the drain, dumped stone shall be placed to prevent scoring unless otherwise directed.

656.07 Dumped Stone

Dumped stone shall be placed at designated locations and shaped to the extent necessary to spread the stone over the area and in sufficient depth to prevent soil erosion.

656.08 Silt Fence

The silt fence shall be installed at all environmentally sensitive areas as shown on the Plans or as directed. The Contractor shall have the option to provide a reinforced filter fabric or an unreinforced filter fabric attached to a wire fence.

The fence posts shall be spaced as specified by the Resident, however, not to exceed a maximum of 2.5 m [eight feet] apart when either type of silt fence is used and be driven a minimum of 450 mm [18 inches] into the ground.

The geotextile fabric shall be secured to the post or fence by suitable staples, tie wire or hog rings in such a manner as to prevent tearing and sagging of the fabric. The bottom of the geotextile fabric shall be entrenched into the ground a minimum depth of 150 mm [six inches] to prevent water from flowing under the fence. The geotextile shall be spliced together only at support posts with a minimum 150 mm [six inches] overlap and secure post connection which prevents leakage of silt. The top of the geotextile shall be installed with a reinforced top end section.

The Contractor shall maintain the silt fence in a functional condition at all times. All deficiencies shall be immediately corrected by the Contractor. The Contractor shall make a daily inspection of the silt fences in areas where construction activity causes drainage runoff, to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, additional silt fences shall be installed as approved or directed.

Sediment deposits shall be removed when sediments reach 50 percent of the height of the device. All sediment deposits remaining in place after the device is no longer required shall be graded to conform with the existing ground, seeded, and mulched immediately.

Geotextile fabric which has decomposed or has become ineffective and is still needed shall be replaced with material equal to the original design.

656.081 Boom Supported Floating Silt Fence

The silt fence fabric shall be securely attached to the flotation boom with a continuous weight placed the entire length of the fence to maintain the fence in a vertical submerged position from the surface of the water to the design depth.

Anchor's shall be placed at the ends of the fence, and intermediate locations if necessary, to hold the fence securely in place.

656.082 Maintenance

The erosion control devices will be cleaned, repaired, or replaced as necessary. All deficiencies shall be corrected immediately by the Contractor.

656.085 Erosion Control Compliance Officer

The Contractor shall designate an Erosion Control Compliance Officer (ECCO) on this Project who shall accompany the Resident's ECCO in the inspection of all erosion control devices. An inspection log shall be maintained by the Resident and the log shall be signed by the Resident's ECCO and the Contractor's ECCO after each inspection. Failure to comply with the erosion and sedimentation control requirements herein or as directed by the Resident's ECCO within 24-hours after the violation is noted in the inspection log, will result in the \$1,000 per day per violation penalty until the violation is corrected to the satisfaction of the Resident.

656.09 Removing and Disposing

When no longer needed, material and devices for temporary erosion control shall be removed or may be left in place and dispersed over an adjacent area, as directed.

When removed, such devices may be reused in other locations provided they are in good condition and suitable to perform the erosion control for which they are intended.

When dispersed over adjacent areas, the material shall be scattered to the extent that it causes no unsightly conditions nor creates future maintenance problems. Dumped stone shall be dispersed or covered in such a manner that it will not interfere with future mowing operations.

656.10 Method of Measurement

Baled hay and sandbags will be measured for payment by the number of bales or bags satisfactorily placed. Dumped stone will be measured for payment by the cubic meter [cubic yard] in vehicles.

Temporary berms and temporary slope drains will be measured for payment by the meter [linear foot] measured parallel with the flow line including the pipe inlet.

Temporary silt fence will be measured by the meter [linear foot] along the gradient of the fence, end post to end post.

Boom supported floating silt fence will be measured by the meter [linear foot] not including anchorages.

Erosion control filter berm shall be measured by the linear foot.

The quantity of additional haybales and silt fence material required herein will be measured for payment only when and if they are actually put to use as additional measures on the Project as directed by the Resident. Haybales and silt fence material used for maintenance or replacement of existing devices will not be measured for payment.

The removal of silt and other material from behind the haybales and silt fence will not be measured separately for payment, but shall be incidental to the Erosion Control items.

656.11 Basis of Payment

The accepted quantity of baled hay or sandbags will be paid for at the Contract unit price each for each bale or bag which price shall be full compensation for furnishing and placing the bales or sandbags, for furnishing and driving the stakes for baled hay and for the removing and disposing of the bales, stakes and sandbags when no longer needed.

The accepted quantity of temporary berms will be paid for at the Contract unit price per meter [linear foot] of berm which price shall be full compensation for furnishing, placing and compacting material, for maintaining and for removing the berm when no longer needed.

There will be no separate payment for excavation done in the construction of temporary erosion control items under this Section and all necessary excavation shall be incidental to the Work.

The accepted quantity of dumped stone will be paid for at the Contract unit price per cubic

meter [cubic yard] which price shall be full compensation for furnishing the stone, transporting, placing and shaping. Payment for removal or for covering will be made under Item 629.05, Hand Labor, and the appropriate equipment rental items.

The accepted quantity of temporary silt fence and boom supported floating silt fence will be paid for at the Contract unit price per meter [linear foot] complete in place. Payment shall be full compensation for furnishing, installing, maintaining, for replacing deteriorated geotextile and clogged geotextile when required and for removing and disposing of the fence when no longer needed.

The accepted quantity of erosion control filter berm will be paid for at the Contract unit price per linear foot under Item 656.632, 30 Inch Temporary Silt Fence, which price shall be full compensation for furnishing, placing, and removing the erosion control filter berm.

The removal of sediments and debris that accumulate around erosion control devices, when directed by the Resident, will be paid for under the appropriate Contract items.

Cost of seeding and mulching the area after removal of the temporary silt fence will be paid for at the Contract unit prices for Item 618, Seeding, and Item 619, Mulch.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
656.50 Baled Hay, in place	Each
656.51 Sandbag, in place	Each
656.55 Dumped Stone	Cubic Meter [Cubic Yard]
656.60 Temporary Berms	Meter [Linear Foot]
656.62 Temporary Slope Drains	Meter [Linear Foot]
656.631 375 mm [15 inch] Temporary Silt Fence	Meter [Linear Foot]
656.632 750 mm [30 inch] Temporary Silt Fence	Meter [Linear Foot]
656.64 Boom Supported Floating Silt Fence	Meter [Linear Foot]

SECTION 701 – STRUCTURAL CONCRETE RELATED MATERIALS

701.10 Fly Ash - Chemical Requirements

All references to “ASTM C311’ are changed to “ASTM C114”.

SECTION 703 - AGGREGATES

703.06 Aggregate for Base and Subbase

The first paragraph is deleted and replaced with the following:

The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [1/2 inch] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used.

703.22 Underdrain Backfill Material

The first paragraph is amended as follows:

"...for Underdrain Type B..." is changed to "... for Underdrain Type B and C..."

SECTION 706 - NON-METALLIC PIPE

706.06 Corrugated Polyethylene Pipe for Underdrain, Option I and Option II in Culvert Pipe

The first sentence is changed from "...300 mm diameters to 900 mm" to "...300 mm diameters to 1,200 mm".

The last sentence which begins "This pipe and resins..." is deleted in its entirety and replaced with the following:

The manufacturing plants of polyethylene pipe shall be certified by the Eastern States Consortium. Polyethylene pipe shall be accepted based on third party certification by the AASHTO's National Transportation Product Evaluation Program.

SECTION 709 - REINFORCING STEEL AND WELDED STEEL WIRE FABRIC

709.03 Steel Strand

The second paragraph is changed from "...shall be 12mm [1/2 inch] AASHTO M203M/M203 (ASTM A416/A416M)..." to "...shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)..."

SECTION 712 - MISCELLANEOUS HIGHWAY MATERIALS

The following Subsections are added:

712.07 Tops and Traps

These metal units shall conform to the Plan dimensions and to the following Specification requirements for the designated materials:

Gray iron castings shall conform to the requirements of AASHTO M105, Class 30, unless otherwise designated.

Carbon steel castings shall conform to the requirements of AASHTO M103/M103M. Grade shall be 450-240 [65-35] unless otherwise designated.

Structural steel shall conform to the requirements of AASHTO M183/M183M or ASTM A283/A283M, Grade B or better. Galvanizing, where specified for these units, shall conform to the requirements of AASHTO M 111.

712.08 Corrugated Metal Units

The units shall conform to Plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M 190 Type A.

712.09 Catch Basin and Manhole Steps

Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B21 1] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights

Flashing lights shall be power operated or battery operated as specified.

- (a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from three to 90 m [10 to 300 feet] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotateable sun visor not less than 175 nun [seven inches] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [eight inches].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [eight inches]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

- (b) Battery operated flashing lights shall be self- illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex reflective elements built into the lens to enable it to be seen by reflex reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30°C [minus 20°F] to plus 65°C [plus 150°F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be five degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336-hours of continuous flashing. The illuminated lens shall appear to be uniformly

bright over its entire illuminated surface when viewed from any point within an angle of nine degrees each side of the vertical axis and five degrees each side of the horizontal axis. The lens shall not be less than 175 mm [seven inches] in diameter including a reflex reflector ring of 13 mm [1/2 inch] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this Specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these Specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Authority. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing

Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible

Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid

Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D 1785. Fittings shall be of the same material.

712.341 Metallic Pipe

Metallic pipe shall be ANSI, Standard B36. 10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin

Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy

resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb

The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01, Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture. Bituminous material for curb shall meet the requirements of Section 403, Hot Bituminous Pavement.

712.37 Precast Concrete Slab

Portland Cement concrete for precast slabs shall meet the requirements of Section 502, Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the Plans and cross section and in accordance with the Standard Detail Plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab

Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [1/2 inch] under a 600 mm [two foot] straightedge or over 25 mm [one inch] under a 1200 mm [four foot] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [3/4 inch] shall show in the joint for the full exposed height.

Lift pin holes in all sides will be allowed except on the exposed face.

SECTION 717 - ROADSIDE IMPROVEMENT MATERIAL

717.03 C. Method #3 - Roadside Mixture #3

Seed proportions are amended as follows:

Crown Vetch	25.0%
Perennial Lupine	25.0%

Red Clover	12.5%
Annual Rye	37.5%

717.05 Mulch Binder

The third sentence is amended as follows:

"Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit]."

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II – SPECIAL PROVISIONS

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II - SPECIAL PROVISIONS

All work shall be governed by the Maine Department of Transportation Standard Specifications except for that work which applies to sections of the Maine Department of Transportation Standard Specifications which are amended by the Maine Turnpike General Provisions and the following modifications, additions and deletions.

General Description of Work

The work consists of the partial painting of the steel superstructures with a high-ratio calcium sulfonate alkyd paint system as shown on the Contract drawings, maintenance of traffic, and all other work incidental thereto in accordance with the Plans and Specifications.

Plans

The drawings included in these Contract Documents, and referred to as the Plans; show the general character of the work to be done under this Contract. They bear the general title "Maine Turnpike – Bridge Painting Saco River Overpass Mile 33.0". The right is reserved by the Resident to make such minor corrections or alterations in the Plans as he deems necessary without change in the unit prices on the Schedule of Prices of the Proposal.

101.2 Definition

Holidays

The following is added after Memorial Day in the General Provisions:

Independence Day 2014 (Fourth of July)	06:00 a.m. preceding Thursday to 06:00 a.m. the following Monday.
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103.4 Notice of Award

The following sentence is added:

The Maine Turnpike Authority Board is scheduled to consider the Contract Award on February 27, 2013.

104.3.8 Wage Rates and Labor Laws

The fourth paragraph under Records on GP Page 7 of 53 has been amended as follows:

A copy of each record must be filed monthly with the Maine Turnpike Authority. This information shall be sent directly to the Maine Turnpike Authority, Director of Engineering and Building Maintenance, Attention: Wage Rate Records, 2360 Congress Street, Portland, ME 04102. The records shall note the Maine Turnpike Contract Number.

The fair minimum hourly rates determined by the State of Maine Department of Labor for this Contract are as follows:

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
 Wage and Hour Division
 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 laborers and workers employed on the below titled project.

Title of Project -----Saco River Bridge Painting-2014.04

Location of Project --Saco, York County

**2014 Fair Minimum Wage Rates
 Heavy & Bridge York County**

Occupation Title	Minimum			Occupation Title	Minimum		
	Wage	Benefit	Total		Wage	Benefit	Total
Backhoe Loader Operator	\$18.79	\$2.64	\$21.43	Ironworker - Structural	\$22.66	\$7.59	\$30.25
Boom Truck (Truck Crane) Operator	\$25.00	\$15.46	\$40.46	Laborers (Incl. Helpers & Tenders)	\$15.00	\$3.46	\$18.46
Bricklayer	\$28.01	\$17.04	\$45.05	Laborer - Skilled	\$16.83	\$4.87	\$21.70
Bulldozer Operator	\$17.98	\$2.55	\$20.53	Line Erector - Power/Cable Splicer	\$24.39	\$6.74	\$31.13
Carpenter	\$19.50	\$5.49	\$24.99	Loader Operator - Front-End	\$19.45	\$3.28	\$22.73
Carpenter - Rough	\$18.00	\$4.50	\$22.50	Mechanic- Maintenance	\$21.00	\$5.12	\$26.12
Communication Equip Installer	\$18.00	\$1.77	\$19.77	Mechanic- Refrigeration	\$23.22	\$3.27	\$26.49
Comm Trans Erector-Microwave & Cell	\$20.14	\$6.53	\$26.67	Millwright	\$23.00	\$5.17	\$28.17
Concrete Pump Operator	\$20.50	\$3.53	\$24.03	Oil/Fuel Burner Serv & Installer (Licensed)	\$20.33	\$4.04	\$24.37
Crane Operator <15 Tons	\$19.50	\$4.66	\$24.16	Painter	\$18.00	\$0.00	\$18.00
Crane Operator =>15 Tons)	\$23.00	\$5.37	\$28.37	Paver Operator	\$17.25	\$1.63	\$18.88
Crusher Plant Operator	\$17.00	\$4.06	\$21.06	Pile Driver Operator	\$22.41	\$6.63	\$29.04
Diver	\$25.00	\$16.38	\$41.38	Pipe/Steam/Sprinkler Fitter	\$24.50	\$6.25	\$30.75
Driller - Rock	\$18.00	\$3.53	\$21.53	Pipelayer	\$18.05	\$13.25	\$31.30
Dry-Wall Taper & Finisher	\$20.00	\$1.04	\$21.04	Propane & Natural Gas Servicer & Inst	\$23.00	\$3.44	\$26.44
Electrician - Licensed	\$26.44	\$9.48	\$35.92	Pump Installer	\$21.00	\$2.77	\$23.77
Electrician Helper/Cable Puller (Licensed)	\$17.25	\$9.44	\$26.69	Rigger	\$20.50	\$5.32	\$25.82
Excavator Operator	\$19.75	\$3.02	\$22.77	Roller Operator - Earth	\$19.36	\$22.45	\$41.81
Flagger	\$11.50	\$0.00	\$11.50	Roller Operator - Pavement	\$17.25	\$5.41	\$22.66
Grader/Scraper Operator	\$16.73	\$2.98	\$19.71	Truck Driver - Light	\$15.50	\$1.93	\$17.43
Hot Top Plant Operator	\$20.75	\$9.69	\$30.44	Truck Driver - Medium	\$15.90	\$2.71	\$18.61
Heating	\$22.66	\$4.51	\$27.17	Truck Driver - Heavy	\$13.75	\$0.85	\$14.60
Insulation Installer	\$22.00	\$9.75	\$31.75	Truck Driver - Tractor Trailer	\$18.00	\$2.00	\$20.00
Ironworker - Reinforcing	\$22.00	\$7.20	\$29.20				

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.

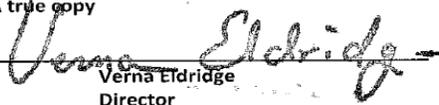
Welders are classified in the trade to which the welding is incidental.

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 with the Secretary of State.

Determination No: HB-007-2014
 Filing Date: January 6, 2013
 Expiration Date: 12-31-2014

A true copy
 Attest: 
 Verna Eldridge
 Director
 Wage and Hour Division

BLS 424HB (R2014) (Heavy & Bridge York)

104.4.4 Request for Information (RFI)

This Subsection is amended by the addition of the following:

RFI's shall be submitted on company letterhead or on a standard company form with a tracking number. The General Contractor shall maintain a corresponding RFI log.

RFI's may be attached to an e-mail, but shall not be in the form of an e-mail, and at a minimum, must reference the subject Plan or Specification in question.

RFI's with multiple questions may be treated as a submittal and the allowed 21 calendar days for review and response will govern.

104.4.6 Utility Coordination

This Subsection is amended by the addition of the following:

These Special Provisions outline the arrangements which have been established by the Authority for coordination of the work to be accomplished by the utilities. The scope and schedule of utility relocation work is noted herein. The Contractor shall plan and conduct his work accordingly.

General

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

The Contractor shall plan and conduct his operations in accordance with the following utility schedule. The Contractor must comply with all OSHA regulations pertaining to work adjacent to utility wires. The Contractor shall plan and conduct his work accordingly.

Construction access will need to be constructed to avoid the utilities and keep the lines below the scaffolding or any platforms. The utilities cannot be above the staging. Care shall be taken to not damage the utility.

The following utilities are located within the Project limits. The Contractor shall ascertain the location of the existing utilities and any other necessary information by direct inquiry at the office of the following utility owners:

104.4.7 Cooperation With Other Contractors

This Subsection is amended by the addition of the following:

Contract 2014.01 Paving – Mile Marker 23.3 to Mile Marker 30.0 will be under construction in 2014 with a contract completion date of September 19, 2014.

Contract 2012.01 Paving – Mile Marker 30.0 to Mile Marker 35.5 (Note: This work involves pavement repairs on the Saco River Northbound and Saco River Southbound bridge decks in Fall 2014. See Subsection 104.4.7.1 for additional information).

Contract 2013.04 Saco River Bridge Repair – Mile Marker 33.0 (Note: This work involves final cleanup of the Saco River Northbound and Saco River Southbound bridge repairs in Spring 2014. See Subsection 104.4.7.1 for additional information).

These contracts shall be considered adjacent Contracts.

The following Subsection is added:

104.4.7.1 Coordination With Other Contractors

The Painting Contractor shall coordinate with the Contract 2012.01 Paving Contractor to provide the Paving Contractor with access to the Saco River bridge worksite northbound and southbound to complete bridge deck pavement repairs in Fall 2014, or before. The pavement repairs are required in Lane 1 northbound and Lane 1 southbound and will require a minimum of two (2) daytime work shifts after the concrete barrier is removed but before the lanes are restriped to their original position. The Painting Contractor shall permit the Paving Contractor to utilize the project maintenance of traffic control devices (PCMSs, signs, arrow boards, drums) to complete required pavement repair work. The Paving Contractor shall be responsible for the maintenance of traffic control devices that are actively being used by the Paving Contractor to complete his work at the Saco River Bridge worksite. The Painting Contractor shall be responsible for the maintenance of traffic control devices at all other times. The Painting Contractor shall make the roadway and project maintenance of traffic control devices available to the Paving Contractor for a minimum of two (2) weeks in each bound with the time starting the day after the concrete barrier is removed from the deck and ending in 14 calendar days, but no later than the dates specified in Subsection 107.1, Contract Time and Contract Completion Date.

The Painting Contractor shall coordinate with the Contract 2013.04 Bridge Repair Contractor and provide the Bridge Repair Contractor with access to the Saco River bridge worksite northbound and southbound to undertake re-seeding and re-mulching, if required, in Spring 2014, or later. The Painting Contractor shall permit the Bridge Repair Contractor to enter the Painting Contract works zone to complete the work required at times acceptable to both Contractors.

The following Subsection is added:

105.2.4.2 Lead Paint

The Contractor shall note that the existing bridge structure contains lead based paint. A copy of the Lead Determination Report is attached as **Appendix A**. The Contractor shall institute every precaution when working with materials coated with lead based paints.

Lead Paint Removal

The Contractor is required to remove and dispose of lead based paint and paint residue before cutting, grinding, drilling and sandblasting existing materials in preparation of completing

the work except as provided under the Drilling of Lead Based Paint subsection in this Special Provision. All lead based paint and paint residue shall be removed, handled, stored and disposed of in conformance with all local, State and Federal laws and regulations governing lead based paint. The Contractor may use his own properly trained employees to abate the lead based paint in accordance with applicable regulations and requirements; or he may hire a licensed lead abatement subcontractor to abate the lead based paint in accordance with applicable regulations and requirements.

The Contractor, or licensed lead abatement subcontractor, shall submit a Project specific Health and Safety (OSHA) Plan and a Hazardous Waste Management Plan (EPA/DEP) a minimum of two (2) weeks prior to undertaking the removal of lead based paint.

Drilling of Steel, and Busting Rivets with Lead Based Paint

The Contractor may drill steel and bust rivets that contain lead based painted steel, without lead based paint removal, provided the Contractor collects and recycles the drill cuttings and/or paint chips at a licensed metal recycling facility. If the Contractor chooses not to collect and recycle the drill cuttings at a licensed metal recycling facility he will be required to abate the area where drilling is to occur in full accordance with the lead based paint removal, storage and disposal requirement of this Special Provision.

The Authority will require a signed statement from the Contractor stating the drill cuttings and paint chips from rivet busting operations were collected and recycled at a licensed metal recycling facility and the name the recycling facility.

Health and Safety Plan

The Health and Safety Plan submittal shall describe how the Contractor/licensed lead abatement subcontractor intends to remove the lead based paints; and shall outline how the Contractor/licensed lead abatement subcontractor will adhere to all Federal, State and local ordinances which govern worker (including authorized representatives of the Authority) exposure to lead based paints, and ensure the safety of the workers performing lead removal. Copies of current worker training certificates (OSHA), medical screenings, and respirator fit up shall be included in the submittal.

Hazardous Waste Management Plan

The Hazardous Waste Management Plan submittal shall describe how the Contractor/licensed lead abatement subcontractor intends to manage the hazardous waste that will be generated, temporarily accumulated, stored, transported off-site and disposed; adhere to ordinances associated with the management of hazardous wastes; and ensure protection of the environment.

The Hazardous Waste Management Plan shall:

- Be signed by the Contractor;
- State whether Contractor or licensed lead abatement subcontractor will be undertaking the work; and,

- State whether abated lead materials will be accumulated and stored on-site (required if Contractor is not licensed by DEP/EPA to transport and temporarily store lead based hazardous waste), or be removed in HEPA vacuums daily to the removal Contractor's licensed waste storage facility (permitted only if Contractor is licensed by DEP/EPA to transport and temporarily store lead based hazardous waste).

If abated lead materials are to be accumulated and stored on-site, the Hazardous Waste Management Plan shall include (at a minimum) the following:

- Container size and labeling standards:
 - Containers must be 55 gallons or less
 - Containers must have the labeled "HAZARDOUS WASTE"
- Accumulation requirements:
 - Labels will include accumulation start date and container full date
 - On-site storage will not exceed 180 days from full date
 - Total on-site storage shall not exceed 55 gallons or 220 pounds
- Inspections (including frequency and checklist):
 - Inspections shall be performed each day the Contractor works
 - Inspection checklist shall be similar to MaineDEP format (Refer to Appendix A1 of MaineDEP Handbook for Hazardous Waste Generators – January 2003)
- Transport and DOT "pre-transport requirements":
 - Specify the licensed hazardous waste transporter to be used
 - Obtain Generator's EPA ID No. (typically a provisional ID # is obtained through the licensed hazardous waste transporter)
 - USDOT – approved containers must be used for shipment
 - Schedule MTA for signing Hazard Waste Manifest
- Recordkeeping requirements:
 - Describe where at the jobsite the required records (e.g., inspection logs, training records, Lead Determination report/hazardous waste characterization, etc.) will be maintained
 - Describe how and when copies of the required documents specified above will be transferred to the MTA Environmental Services Coordinator's office

The Contractor/licensed lead abatement subcontractor, shall provide documentation to the MTA that the employees who will be removing, handling, managing and/or directly supervising the hazardous waste operations have received required Resource Conservation and Recovery Act (RCRA) hazardous waste management training, and all training is current.

The lead based hazardous waste must remain on-site, unless the removal is being performed by a licensed lead abatement subcontractor that collects the paint residue in HEPA vacuums and is licensed by DEP/EPA to transport and temporarily store lead based hazardous waste at the removal Contractor's licensed waste storage facility. Both on-site and licensed off-site lead based hazardous waste storage facilities require secure storage and daily inspection of the stored waste.

If the removal Contractor is not licensed by DEP/EPA to transport and temporarily store lead based hazardous waste off-site, then an EPA licensed Hazardous Waste transporter(s) shall be used to remove hazardous waste from the site. All removal and disposal documentation will be required when the hazardous waste leaves the site. As the Generator, only the Authority's Environmental Services Coordinator or his trained designee shall sign waste manifests when material is removed from the Project site.

The removal, storage, handling, transporting, and disposal of lead based paint and lead based paint residue will not be measured separately for payment, but shall be incidental to the various Contract work items.

The following Subsection is added:

105.3 Traffic Control and Management

See Special Provision Section 526, Concrete Barrier.

See Special Provision Section 652, Maintenance of Traffic.

105.5.1 General Requirements

This Subsection is deleted from the General Provisions and replaced with the following:

Construction Access

The Contractor shall construct a stabilized construction entrance in accordance with the Best Management Practices at all locations where construction vehicles will exit and/or enter existing paved shoulders or travel ways from non-paved areas. The Resident shall approve of the locations. The stabilized construction entrance shall be constructed in conjunction with the clearing activities or other early activities. Additional stabilized construction entrances may be required due to the Contractor's operations as well as site conditions. The construction and maintenance of the stabilized construction entrance including frequent sweeping of the paved surfaces shall be incidental to the Contract.

105.7.4 Submittal Requirements

The following paragraph is added:

In addition to the hardcopy requirements, the Contractor shall also make submittals in PDF electronic file format via email. Submittals shall be accompanied by a cover sheet, which identifies the submittal number, subject, date, and any revision numbers associated with the submittal.

This Subsection in the General Provisions is deleted and replaced with the following:

105.8.1 Temporary Soil Erosion and Water Pollution Control

The Contractor shall certify in writing to the Resident that an On-Site Responsible Party (OSRP) has been trained and is knowledgeable in erosion and sediment control (ECS) through the

MaineDEP's Non-Point Source Training Center, or an equivalent program, or is licensed in the State of Maine as a Professional Engineer, Landscape Architect or Soil Scientist. Proof of certification for the OSRP, and any other Contractor employees charged with conducting ESC inspections, must be submitted to the Authority's Environmental Coordinator prior to starting work.

Spill Prevention Control and Countermeasure (SPCC) Plan

Any areas where petroleum products, oils or non-petroleum hazardous materials are handled or stored will require a Spill Prevention Control and Countermeasure (SPCC) Plan. These materials may not be stored or handled in areas of the site draining to an infiltration area. The Plan will be submitted to the Resident before construction begins. In addition to petroleum products and hazardous materials, controls must be used to prevent additional pollutants (i.e., fertilizers, pesticides, salt/brine, litter, construction demolition debris, etc.) from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation. The Plan shall provide the following information at a minimum:

1. The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention and response;
2. Description of handling or storage location noting setbacks from water bodies where relevant. Significant sand and gravel aquifers and other sensitive resources, including infiltration areas, must be avoided wherever possible;
3. Description of storage and containment facilities, such as dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater or surface water;
4. Description of equipment and/or materials used to prevent discharges (including sorbent materials);
5. Preventative measures to minimize the possibility of a spill; and,
6. Contingency plan if spill should occur.

The approved plan must be posted at the Project site. All personnel working in the area are required to read and be familiar with the plan.

There shall be no separate payment for preparation of a SPCC Plan acceptable to the Resident and preparation shall be incidental to the work.

Notification of Authority of Hazardous Material Spills

In addition to MaineDEP reporting requirements for spills greater than five (5) gallons, the Contractor shall notify the on-site Resident Inspector. The on-site Resident Inspector shall notify the Maine Turnpike Radio Room at 207-871-7701. When the on-site Resident Inspector

is not available, the Contractor shall notify the Maine Turnpike Radio Room directly at 207-871-7701.

In addition to MaineDEP reporting requirements for all spills where any stream or water body is threatened, the Contractor shall notify the on-site Resident Inspector. The on-site Resident Inspector shall notify the Maine Turnpike Radio Room at 207-871-7701. When the on-site Resident Inspector is not available, the Contractor shall notify the Maine Turnpike Radio Room directly at 207-871-7701.

These notification procedures shall be incorporated into the Spill Prevention Control and Countermeasure (SPCC) Plan.

Responsibility for Control and Cleanup of Hazardous Material Spills

The Contractor shall be responsible to control spills and properly cleanup, containerize, and dispose of petroleum and/or other hazardous material waste that results from the actions and/or equipment of the Contractor or his employees, subcontractors and suppliers. Chemicals, exposed to stormwater must be prevented from becoming a pollutant source.

The Contractor shall also be responsible for all direct and indirect costs associated with the control of spills and proper cleanup, containerization, and disposal of petroleum and/or other hazardous material waste that results from the actions and/or equipment of the Contractor or his employees, subcontractors and suppliers.

The following Subsections are added:

105.8.1.1 Environmental Standards

The Project will be performed in accordance with the MaineDOT Best Management Practices (BMP) latest issue. The Contractor shall fully comply with all erosion and sedimentation control requirements outlined in the BMP's or contained herein. Non-compliance with these requirements as determined by the Resident shall result in a financial penalty of \$1,000 per day, per violation. Any fines assessed to the Maine Turnpike Authority as a result of the Contractor's non-compliance shall be paid by the Contractor. If the Contractor fails to pay, the cost of the fine will be deducted from monies due, or which may become due, to the Contractor under this Contract.

In the event of conflict between these Specifications and other erosion and pollution control laws, rules or regulations of other Federal, State and local agencies, the more restrictive law, rules or regulations shall apply.

The standards as described below shall be met on the Project:

105.8.1.11 Water Pollution Control Requirements

(a) General

1. The Contractor must comply with the applicable Federal, State and local laws and regulations relating to prevention and abatement of water pollution.

2. Except as allowed by an approved permit or otherwise authorized by the Authority in writing, pollutants containing construction debris including excavated material, aggregate, residue from cleaning, sandblasting or painting, cement mixtures, chemicals, fuels, lubricants, bitumens, raw sewage, wood chips, and other debris shall not be discharged into water bodies, wetlands or natural or manmade channels leading thereto and such materials shall not be located alongside water bodies, wetlands, or such channels such that it will be washed away by high water runoff. Furthermore, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in the areas of the site draining to an infiltration area, unless these portions of the site (where storage and handling of these materials) are isolated using dikes, berms, sumps and other forms of secondary containment that prevent discharge to groundwater.
3. Temporary winter stabilization must be used between November 1st and April 15th or outside of said time period if the ground is frozen or snow covered. Temporary winter stabilization involves, at a minimum, covering all disturbed soils and seeded ground that is not Acceptable Work with an approved method. Use of these methods for over-winter temporary erosion control will be paid for under the appropriate Erosion Control items included in the Contract.
4. Construction operations in water bodies or wetlands shall be restricted to the construction limits shown on the Plans and to those areas that must be entered for the construction of temporary or permanent structures, except as allowed by approved permit or otherwise authorized by the Authority in writing. Mechanized equipment shall not be operated in water bodies or wetlands except as allowed by approved permit or otherwise authorized by the Authority in writing.
5. Upon completion of the work, water bodies or wetlands shall be promptly cleared of all falsework, piling, debris or other obstructions caused by the construction operations, except as allowed by approved permit or otherwise authorized by the Authority in writing.

(b) Earthwork

If earthwork disturbance is part of the Project scope:

1. Newly disturbed earth shall be mulched or otherwise stabilized by the end of each workday. Mulch shall be maintained on a daily basis.
2. All disturbed ditches shall be stabilized by the end of each workday. Stabilization shall be maintained on a daily basis.
3. Erosion control blanket shall be installed in the bottom of all ditches except where a stone lining is planned. Seed shall be applied prior to the placement of the blanket.
4. Permanent slope stabilization measures shall be applied within one (1) week of the last soil disturbance. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be reworked and restabilized if germination is sparse, plant coverage is spotty, or topsoil erosion is evident.

5. Dust control items, other than those under Standard Specification Section 637, Dust Control, if applicable, shall be included in the plan.

105.8.1.12 Construction Requirements

1. The Contractor, to the maximum extent practicable, shall install temporary and permanent sedimentation control measures prior to conducting clearing and grubbing operations.
2. The Contractor shall conduct inspections of disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspections shall be conducted (1) at least once a week as well as before and after a storm event and prior to completing permanent stabilization measures; and (2) by a person knowledgeable of erosion and stormwater control, including the standards and conditions in the permit.
3. The Contractor shall maintain all measures in effective operating condition until areas are permanently stabilized. If BMPs need to be modified (i.e., corrective action, additional BMPs installed, etc.), implementation must be completed within seven (7) calendar days and prior to any storm event.
4. Temporary erosion control measures shall be maintained until the site is permanently stabilized with vegetation or other permanent control measures.
5. The Contractor will immediately take appropriate measures to prevent erosion or sedimentation from occurring or to correct any existing problems regardless of the time of year.
6. During periods of approved suspension, the Contractor shall inspect and maintain temporary and permanent erosion and sedimentation controls.
7. Work in wetlands is prohibited except to the minimum extent necessary for completion of the work as detailed on the Plans. Excavated and other material shall not be stockpiled in wetlands. Haybales, silt fence or other suitable barriers shall be used, where necessary, to prevent sedimentation from eroding materials.
8. Disturbance of natural resources beyond the construction limits shown on the Plans is not allowed.
9. Existing ditches shall be maintained until the new ditches are stabilized. Stone check dams shall be placed in existing ditches prior to construction as to prevent the release of sedimentation. Stone check dams shall be installed at the outlets of all existing and proposed ditches adjacent to all stream and wetlands.
10. For proposed ditches, stabilize the outlet first and build from the bottom up. Only excavate what can be stabilized or protected by the end of the work day.
11. Before permitting permanent channels to carry water, they shall be stabilized. This may require the installation of temporary erosion control BMP's or temporarily diverting flows.
12. All cross culvert outlets shall be armored before the end of the work day.
13. The Contractor's operation may require the placement of temporary pipes and fill over a ditch line to provide access to the work area. The Resident shall approve the size of the pipe. The placement and removal of the temporary access shall not be measured for payment and shall be incidental to the Excavation item.
14. Bare earth slopes shall be roughened to dissipate sheet flow. This shall be accomplished by "tracking" the slope perpendicular to the centerline. This work will not be measured separately for payment, but shall be incidental to the Excavation item.

15. Uncured concrete shall not be placed directly into the water body. Concrete may be placed in forms and shall cure at least one (1) week prior to form removal. No washing of tools, forms, etc. shall occur in or adjacent to the water body or wetland.
16. The Contractor shall contain all demolition debris (including debris from wearing surface removal, sawcut slurry, dust, etc.) and shall not allow it to discharge to any resource. Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source. The Contractor shall dispose of debris in accordance with Maine Solid Waste Law, Title 38 M.R.S.A., Section 1301 et. seq.
17. No wheeled or tracked equipment shall be operated in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may NOT cross streams.
18. The Contractor shall not remove rocks from below the normal high water line of any wetland, great pond, river, stream or brook, except to the extent necessary for completion of the work and as allowed by environmental permits.

105.8.2 Permit Requirements

The Project is subject to the requirements of the Maine Pollutant Discharge Elimination System (MPDES) General Permit for Stormwater Discharge from Construction Activity, as promulgated by the US Environmental Protection Agency (US EPA) and Administrated by the Maine Department of Environmental Protection (DEP) if the limit of disturbance equals or exceeds one acre.

A Notice of Intent (NOI) was not submitted by the Authority to the DEP for coverage under the Maine Construction General Permit (MCGP) since the estimated Limit of Disturbance (LOD) is under the permitting threshold and the work is classified as maintenance and, therefore, is exempted.

The Contractor shall prepare a LOD plan illustrating the Contractor's proposed limit of earthwork disturbance. The LOD plan shall show all construction access locations, field office locations, material and temporary waste storage locations, as well as include the Contract limits of earthwork disturbance. All applicable erosion and sedimentation control devices needed shall be detailed on the Contractor's LOD plan and are not limited to those devices shown on the Contract LOD plan. This plan shall be submitted for review and approval, to the Resident within 14 days of Contract award. Payment for creating, revising, and completing this plan shall be incidental to Item 659.10, Mobilization.

The Contract Work LOD has been estimated to be 0.0 acres. The Contractor's LOD Area for Access and Storage has been estimated to be 0.52 acres.

At any time during the Contract, if the Limit of Disturbance needs to be adjusted to accommodate construction activities, the Contractor shall resubmit the LOD plan (including any additional erosion and sedimentation control measures needed) to the Resident for review and approval prior to any additional disturbance taking place:

- If the cumulative area of disturbance at all sites exceeds the estimated LOD noted above, by less than 0.48 acre, the Resident shall have a minimum of five (5) working days to approve the revised LOD plan.

- If the cumulative area of disturbance at all sites exceeds the estimated LOD noted above, by over 0.48 acre, the Resident shall first approve of the plan and then possibly submit the NOI for MaineDEP approval. The approval may take a minimum of 21 working days.

Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.

This Project is also subject to the requirements of the Maine Pollutant Discharge and Elimination System (MPDES) General Permit for the Discharge of Stormwater from MTA’s Municipal Separate Storm Sewer Systems (MS4), because it is located within an Urbanized Area (UA) as defined by the 2000 Census by the U.S. Bureau of the Census. MS4 compliance requires all Contractors to be properly trained in Erosion and Sedimentation Control (ESC) measures (as per Special Provision Subsections 105.8.1 and 656.07) and implement measures to reduce pollutants in stormwater runoff from construction activities.

105.8.3 Wetland and Water Body Impacts

The following locations are classified as streams:

Saco River	1605+00
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The Contractor is not permitted to stage construction activities or place construction equipment in the water at any time during this Contract.

106.9 Warranty Provisions

This Subsection is deleted in its entirety and replaced with the following:

The Contractor unconditionally warrants and guarantees that the Project will be free from warranty defects for one (1) year from the date of Final Acceptance. Final Acceptance includes receipt of all conforming closeout documentation.

If the Authority discovers any warranty defects during the warranty period, the Contractor agrees to promptly perform all remedial work at no additional cost or liability to the Authority.

See Section 506.29 Field Coating System Q. Warranty for additional warranty requirements.

106.9.1 Warranty Defects

The warranty applies to the entirety of the structural steel paint system applied by the Contractor. The warranted items will be assessed by visual inspection and destructive inspection as needed at the discretion of the Authority.

The structural steel paint system is considered defective if any of the following conditions are discovered within the specified warranty period:

1. The occurrence of visible rust or rust breakthrough, paint blistering, peeling, scaling or un-removed slivers.
2. Paint applied over dirt, debris, blasting media or rust products not removed during blasting operations.
3. Material deficiencies, application deficiencies, incomplete coatings (holidays), or coating thicknesses outside the thickness limits specified in the manufacturer's product data sheet submittals.
4. Damage to the coating system caused by the Contractor while removing scaffolding, forms, hanger brackets, safety wires, or performing other work.

Exclusions to the warranty will be damage to the coating resulting from vehicle damage, fire, or other damage not caused by the Contractor or subcontractor.

106.9.2 Remedial Work Procedure and Requirements

The painting system will be inspected by an Authority representative the last month of the warranty period. Within (30) days of being notified of warranty defects, the Contractor shall submit to the Authority for approval a Remedial Work Plan including scope of work, conceptual work methods, schedule, construction phasing, and other significant aspects of the work. Unless otherwise provided by the Authority in writing, any work commenced prior to the Authority's approval of the Work Plan will be at the Contractor's sole risk. All warranty work shall be completed within (60) days of the Authority's acceptance of the Contractor's Remedial Work Plan or by June 1, 2015 (if the plan is accepted between October 14, 2013 and April 11, 2014) for accommodating weather conditions.

Upon final inspection satisfactory to the Authority, the Authority will issue a written acceptance of the remedial work. The Contractor warrants and guarantees all remedial work to be free from warranty defects for one (1) year after such acceptance.

107.1 Contract Time and Contract Completion Date

This Subsection is amended by the addition of the following:

The Contract Start Date shall be March 17, 2014. Work on the site shall commence on or before the Contract Start Date at the discretion of the Authority.

The Substantial Completion Date for the northbound bridge shall be September 19, 2014. The Substantial Completion Date for the southbound bridge shall be September 26, 2014.

The Contract Completion Date shall be October 17, 2014.

107.1.1 Substantial Completion

This Subsection is amended by the addition of the following:

Substantially complete shall be defined by the Authority as the following:

- All painting except for touch-up and punch list items is complete;

- All concrete barrier has been returned to the MTA (temporary lane shifts shall remain in place for a minimum of two (2) weeks after the barrier has been removed);
- Painting Contractor's lane closures are limited to daily lane closures for punch list activities; and,
- Bridge decks are available to MTA's Paving Contractor to complete bridge deck pavement repair work.

Supplemental liquidated damages of One Thousand Five Hundred (\$1,500.00) Dollars per calendar day per bridge shall be assessed for each calendar day that each bridge is not available to the Paving Contractor after the Substantial Completion dates noted in Subsection 107.1. The assessments shall continue until the bridges are available to the Paving Contractor.

If the work remains incomplete at the Contract Completion Date, liquidated damages on a calendar day basis in accordance with Subsection 107.7.2 shall be assessed for each calendar day that Contract completion is not achieved.

The following Subsection is added:

107.4.2 Schedule of Work Required

The weekly detailed schedule submitted by the Contractor shall show all lane closures that are anticipated for the following week. Lane closures that are not shown on this schedule will only be allowed if they are deemed emergency lane closures by the Resident.

The following Subsection is added:

107.4.7 Limitations of Operations

The Contractor shall maintain a minimum clearance of 12.0 feet between the normal water elevation of the Saco River and the underside of all bridge scaffolding, containment systems and other temporary works. No activities or equipment shall encroach into the 12.0 foot clearance envelope unless approved by the Resident.

The Contractor is required to maintain solar powered warning lights at the bottom of the bridge scaffolding/containment system in all spans open to boating traffic.

The Contractor shall set, maintain and remove navigational aids in the river, as requested by the Resident. The navigational aids, furnished by the State of Maine to the Authority, shall be positioned to advise boaters of the construction hazards ahead. Additional navigational aids may be needed depending on Contractor activities. Payment for obtaining, setting, maintaining, and removing the navigational aids shall be made using the appropriate hourly pay items included in the Contract.

The Contractor shall maintain an active construction site when lane closures with temporary concrete barrier are in place and at no time shall inactivity transpire for more than three (3) days. When extended periods of inactivity are anticipated, such as but not limited to winter break, the Contractor shall remove the temporary concrete barrier and lane closure.

There shall be no grinding of existing pavement marking lines. Temporary pavement markings shall be completed with tape.

Care shall be taken when working over or adjacent to the Saco River to ensure foreign material and contaminants are contained and do not enter the stream or adjacent wetlands. If foreign material and/or contaminants enter the stream or adjacent wetlands, they shall be immediately removed. Removal shall be completed to the satisfaction of the Resident and payment shall be incidental to the Contract.

The Contractor shall take all precautions necessary to prevent any damage to the existing pavement by vehicles, equipment, materials, concrete barrier and work zone crash cushions, etc. If the Contractor's protections are deemed inadequate by the Resident, the Authority reserves the right to require additional protections at no cost to the Authority be implemented to safeguard the condition of the bridge and approach pavement.

The Contractor shall remove the temporary concrete barrier from the roadway by the dates specified in Subsection 107.1.1, Substantial Completion, and leave the lane shift striping in place for a minimum of two (2) weeks after the barrier has been removed. Access to the Saco River Bridge worksite, and the use of the Painting Contractor's and Maintenance of Traffic Control devices, shall be provided to the Contract 2012.01 Paving Contractor in accordance with Special Provision 104.4.7.1, Coordination With Other Contractors.

The Painting Contractor shall coordinate with the Contract 2012.01 Paving Contractor to provide the Paving Contractor with access to the Saco River bridge worksite northbound and southbound to complete bridge deck pavement repairs in Fall 2014, or before. The pavement repairs are required in Lane 1 northbound and Lane 1 southbound and will require a minimum of two (2) daytime work shifts after the concrete barrier is removed but before the lanes are restriped to their original position. The Painting Contractor shall permit the Paving Contractor to utilize the project maintenance of traffic control devices (PCMSs, signs, arrow boards, drums) to complete required pavement repair work. The Painting Contractor shall make the roadway and project maintenance of traffic control devices available to the Paving Contractor for a minimum of two (2) weeks in each bound with the time starting the day after the concrete barrier is removed from the deck and ending in 14 calendar days, but no later than the dates specified in Subsection 107.1, Contract Time and Contract Completion Date.

107.4.9 Failure to Stop Work When Directed

In the event the Authority determines that the safety of the turnpike users (public) might be unduly compromised if work on the Project is not halted; the Resident Engineer, Resident Inspector, or other authorized Authority representative will notify the Contractor to stop work. This may include directives to the Contractor to remove lane closures due to significant traffic delays. If the Contractor refuses to stop work within the time frame determined by the Authority, the Contractor will not be allowed to recommence work until after the Contractor meets with the Authority. In addition, work completed after the time allotted by the Authority to stop work, will not be measured for payment.

107.7.2 Schedule of Liquidated Damages

This table in the General Provisions is deleted and replaced with the following:

Original Contract Amount From More Than	Original Contract Amount up to and Including	Amount of Liquidated Damages per Calendar
\$0	\$100,000	\$225
\$100,000	\$300,000	\$350
\$300,000	\$500,000	\$475
\$500,000	\$1,000,000	\$675
\$1,000,000	\$2,000,000	\$900
\$2,000,000	\$4,000,000	\$1,000
\$4,000,000	and more	\$2,100

108.4 Payment for Materials Obtained and Stored

This Subsection in the General Provisions is deleted and not replaced.

This Subsection of the Standard Specifications is deleted and replaced with the following:

Acting upon a request from the Contractor, accompanied by the required documentation, the Authority will pay for all or part of the value of acceptable, non-perishable Materials that are to be incorporated in the Work, including Materials that are to be incorporated into the Work not delivered on the Work site, and stored at places acceptable to the Authority (e.g. at a facility controlled by the Contractor or his Subcontractor\Fabricator). Examples of such Materials include steel piles, structural steel, prestressed concrete beams and slabs, stone masonry, curbing, timber and lumber, metal culverts, and other similar Materials. The Authority will not make payment on living or perishable Materials until acceptably planted in their final locations.

For structural steel fabrication, the Authority will not make partial payments for expenses such as shop drawing development, overhead, transportation, rent, storage, heat, Contractor mark-ups or other items until after fabrication has commenced. Payment will be based on the Authority's determination of percent complete at the close of the period.

As a condition of payment, the Contractor or his Subcontractor\Fabricator shall provide the following:

1. Proof that all Materials are stored in a secure location acceptable to the Authority.
2. Detailed invoices from the material supplier including a summary of the Materials provided, quantities shipped and received, unit costs, taxes, transportation fees, and all other charges included in the invoice total.
3. Copies of mill certifications, or other material certifications, as required by the Specifications relevant to the Materials.
4. Right of access for the Authority, or its duly authorized agent, to inspect and quantify the Materials at the approved storage site.
5. Proof of insurance for the stored Materials. The Contractor or his Subcontractor\Fabricator shall carry insurance, equal to 100% of the replacement value of the Materials, for all stored Materials. The Maine Turnpike Authority shall be named as an Additional Insured on the insurance policy.

If payment for Materials obtained and stored by the Contractor's Subcontractor\Fabricator is made to the Contractor, then the Contractor must provide proof of payment from his Subcontractor\Fabricator within 14 calendar days of the date the Contractor receives payment for the Materials. Failure by the Contractor to provide timely proof of payment for these Materials will result in the paid amount being withheld from the subsequent progress payment, or payments, until such time proof of payment is received by the Authority.

Materials paid for by the Authority will become the property of the Authority, but the risk of loss shall remain with the Contractor. Payment for Materials does not constitute acceptance of the Material. If Materials for which the Authority has paid are later found to be unacceptable, then the Authority may withhold amounts reflecting such unacceptable Materials from payments otherwise due the Contractor.

In the event of Default, the Authority may use, or cause to be used, all paid-for-Materials in any manner that is in the best interest of the Authority.

109.7.3 Compensable Items

The following is added to Item 3:

3. "A maximum 15% markup will be allowed on the total..."

The following is added to the end of the paragraph:

4. ..."if determined by the Authority to be lower."

SPECIAL PROVISION

SECTION 202

REMOVING STRUCTURES AND OBSTRUCTIONS

(Removing Rumble Strips)

202.01 Description

The following paragraph is added:

This work shall consist of grinding existing rumble strip locations to a depth of 1-1/2 inches, coating vertical and horizontal surfaces with bituminous tack coat, and installing 1-1/2 inches of hot mix asphalt, 9.5 mm over the entire milled area. Locations and lengths of removal shall be as shown on the Plans or as approved by the Resident.

The following Subsections are added:

202.011 Materials

Grinding shall be done in accordance with Section 202. Bituminous tack coat shall conform to Section 409.

Hot mix asphalt, 9.5 mm shall conform to Section 401.

202.025 General

Existing rumble strips are approximately 16 inches long, seven inches wide, 1/2 inch deep, and spaced approximately every five inches.

202.07 Method of Measurement

The following paragraph is added:

Removing Rumble Strips shall be measured by the linear foot removed and accepted. Measurement shall be parallel to the baseline.

202.08 Basis of Payment

The following sentences are added:

Removing Rumble Strips shall be paid for at the Contract unit price per linear foot which includes all grinding, bituminous tack coat, pavement, equipment and labor necessary to satisfactorily complete the work.

Payment will be made under:

Pay Item

Pay Unit

202.206 Removing Rumble Strips

Linear Foot

SPECIAL PROVISIONS

SECTION 504

STRUCTURAL STEEL

(Remove Rivet and Replace with High-Strength Bolt)

504.01 Description

The following paragraphs are added:

This work shall be completed in conformance with the Maine Department of Transportation Standard Specification, Section 504 - Structural Steel except as modified by the Contract Documents. It is the intent and purpose of this Special Provision to cover and include the tools, equipment, materials, supplies, and labor necessary to complete the work described herein. Any incidental equipment, materials, supplies, or labor, such as the erection of false work to gain access to a removal/repair location, which may be found necessary to complete the work in a satisfactory manner, shall be incidental to the respective pay item.

The locations of rivet removal and replacement are undefined. The Resident shall inspect the condition of all rivets on girder lines G5, G6, G7, G10, G11 and G12 for unacceptable section loss. Rivet removal and replacement shall be in accordance with the "Rivet Replacement Criteria" detail in the Contract Plans. The quantity of rivet replacement included in the summary of quantities is an estimate. The actual quantity of rivet replacement will be established in the field by the Resident.

Any rivets removed shall be replaced with high-strength bolts in accordance with the Plans and these Specifications. Shop drawings for rivet replacement will not be required. However, the material certification requirements of the Standard Specification, Division 700, shall be met.

504.02 Materials

The following sentences are added:

Materials shall meet the requirements specified in the following Sections of the Standard Specifications, Division 700 - Materials:

713.02, Heavy-Hex Structural Bolts, Washers, Nuts and DTI's.

All proposed bolts, nuts and washers shall be hot dip galvanized in accordance with Special Provision 506.

504.10 Mill Orders and Mill Test Reports

The following paragraph is added:

In addition to the requirements of Standard Specification Subsection 504.10, the Contractor shall provide the Manufacturer's Certified Test Report and the Distributor Certified Test Report (if applicable) for all high strength bolts used in structural connections. See related Standard Specifications Subsection 504.45 for Rotational Capacity Test requirements.

504.41 Methods and Equipment

The following paragraphs are added:

All the requirements of the Standard Specifications, Section 504 - Structural Steel shall be met, except as modified by the Contract Documents.

The Contractor shall provide the Resident with an acceptable means of access to all portions of the girders where painting will occur to allow the Resident to safely identify unacceptably deteriorated rivets for removal.

The Contractor is advised that the existing paint system(s) on the existing bridge contains lead-based paint (LBP) and contains hazardous concentrations of lead. The Contractor shall perform field surface preparation, containment, and disposal in conformance with Special Provision Subsection 105.2.4.2, Lead Paint.

Material removed under this Special Provision is designated to become the property of the Contractor. The material shall be entirely removed and disposed of out of sight and beyond the limits of the right-of-way. Such material shall not be deposited in the river. If the material is to be wasted then it shall be disposed of at an approved dump or other approved location in conformance with all local, state and federal regulations.

Extreme care shall be exercised during removal to avoid damaging the existing structure to remain. Any portion of the existing structure damaged by the Contractor shall be repaired in accordance with Subsection 504.411(c).

The following Subsection is added:

504.411 Item Specific Construction Requirements

a. Remove Rivet and Replace with High Strength Bolt

Work under this item includes removal of rivets and replacement with high-strength bolts at locations shown on the Contract drawings and as designated by the Resident during construction.

1. Unless otherwise noted in the Contract Documents, all high-strength bolts shall be 7/8-inch diameter and hot dipped galvanized. If the diameter of the existing rivets is smaller than 7/8-inch diameter, then notify the Engineer immediately. Threads in bolts are to be excluded from all shear planes. The Contractor shall maintain an

- adequate inventory of bolt sizes and lengths such that rivet replacement operations may proceed in a timely fashion.
2. No more than two rivets shall be removed from any structural component at one time. New high-strength bolts shall be installed and fully tightened before removing additional rivets along the same member.
 3. Rivet removal and replacement with high-strength bolts shall be completed as follows:
 - i. The Resident shall inspect regions of the longitudinal girders and steel superstructure within the limits of the scaffolding at the onset of the Project. The Resident shall identify deteriorated rivets and mark these for removal and replacement with high-strength bolts.
 - ii. Once all rivets have been identified for replacement the Resident shall examine the surface of the existing steel surfaces for irregularities and cracks. Pre-existing surface irregularities and cracks shall be noted by the Resident.
 - iii. The removal of rivets shall be completed in accordance with Special Provision Subsection 105.2.4.2, Lead Paint.
 - iv. Replacement of unacceptably deteriorated rivets shall be performed prior to surface preparation and painting.
 - v. Mechanical & Pneumatic Rivet Removal Methods: All rivets shall be removed by drilling, grinding, mechanical cutting or by shearing the rivet head using a pneumatically driven rivet breaker (helldog) and the shank driven out using a pneumatic punch. The Contractor is advised of the following requirements:
 - a. Extreme care shall be used when employing pneumatic rivet breakers or any other mechanical means of rivet removal so as not to damage the base metal.
 - b. Upon removal of each rivet, the base metal shall be examined for surface irregularities and cracks, and the condition of the surface shall be compared to the pre-existing conditions noted by the Resident. All cracks shall be immediately brought to the attention of the Resident and the Engineer. If the Resident determines that the cracks were from a pre-existing condition, and the Engineer determines that remedial action is required, the Contractor shall perform the work in accordance with Subsection 109.3 - Extra Work. Otherwise, the Contractor shall be responsible to remediate the damage at no additional cost. Nicks, burrs, and foreign substances which may interfere with the seating of bolt head washer and nut washer shall be removed at no additional cost.
 4. Prior to installing the high-strength bolts, all areas of exposed steel shall be cleaned to remove loose paint and loose rust. When steel surfaces are prepared with water blasting, the surfaces shall be blown dried with oil-free air prior to application of the high-ratio calcium sulfonate primer in accordance with Section 506. Surface preparation may be performed with SSPC SP2 & SP3 hand or power tool cleaning

when water cleaning is not possible, provided the existing surfaces are also prepared in accordance with Subsection 105.2.4.2, Lead Paint. Surfaces cleaned shall be coated in accordance with Section 506. Paint coating compound shall be applied by brush or roller. See Section 506 for additional painting requirements.

5. Replacement bolts shall be in conformance with Subsection 504.45 of the Standard Specifications.
6. Installation, tensioning and inspection of high-strength bolts shall be done in accordance with Subsections 504.50 through 504.53 of the Standard Specifications, except as modified herein.
7. If the bolt will not fit in the hole, the hole shall be sufficiently reamed to accommodate the bolt. If the reaming results in a hole exceeding the diameter of the existing rivet, a larger bolt shall be substituted at no additional cost. If a hole is larger than 1-inch in diameter, then additional remediation will be required at no additional cost.

b. Repair of steel surfaces damaged by the Contractor's Operations

Damage to any steel superstructure element resulting from the work completed under this Specification shall be repaired at no additional cost to the Authority. Nicks, gouges and scrapes 1/16-inch or less in depth shall be ground smooth. Gouges greater than 1/16-inch in depth shall be repaired with an approved welding procedure. All welding repairs shall be in accordance with AWS D1.5 and shall be 100 percent ultrasonic tested. Prior to completing any welded repairs the Contractor shall submit a detailed repair procedure to the Resident for approval.

504.44 Connections Using High Strength Bolts

The following paragraphs are added:

In addition to the requirements outlined in Standard Specification Subsection 504.44, the following shall also apply:

Each wrench shall be accompanied with the necessary sockets, extension handles, and other related equipment and shall be acceptable to the Resident Engineer. No separate payments will be made for said testing. Any costs will be incidental to the bid items.

504.45 Bolts, Nuts, Washers and Direct Tension Indicators

The following paragraphs are added:

In addition to the requirements outlined in Standard Specification Subsection 504.45, the following shall also apply:

Should it prove to be impractical to obtain all nuts, bolts and washers for a Project from a single source, the Contractor shall submit a work plan for the Resident Engineer's approval that will ensure that all nut, bolts and washers in each individual main structural connection or group

of such connections (i.e., beam and girder splices, floor beam end connections, truss members end connections, etc.) will be from a single source. All DTI's will be from one manufacturer and one supplier.

504.50 Calibration, Installation and Tensioning of High Strength bolts

The following paragraphs are added:

In addition to the requirements outlined in Standard Specification Subsection 504.50 the following shall also apply:

Bolts that are too short for calibration in the tension measuring device may be tightened in a steel joint, using direct tension indicating washers (DTI's). The DTI's shall first be calibrated in a tension measuring device using longer bolts.

504.51 Installation

The following paragraphs are added:

In addition to the requirements outlined in Standard Specification Subsection 504.51 the following shall also apply:

Where the surface of the bolted parts has a slope of more than one to 20 with respect to a plane normal to the bolt axis, a smooth beveled washer shall be used to compensate for the irregular surface.

Connections using DTI's shall be brought to a "Snug Tight" condition as above except that, following snugging, no gap on any DTI in a connection shall exceed 0.040 inch, and no DTI shall have a gap less than 0.015 inch. Any DTI having a gap less than 0.015 inch following snugging of a connection shall be removed and the fastener assembly shall be re-snugged using a new DTI.

504.52 Tightening

The following sentences are added:

In addition to the requirements outlined in Standard Specification Subsection 504.52 the following shall also apply:

Item 1 is amended by the addition of the following:

Wrenches shall be recalibrated at any time significant changes are noted in the condition of bolt threads, nuts, washers, lubrication, hose length, environmental conditions, etc., which may affect calibration.

Subsection 504.65, Basis of Payment, is re-designated as Subsection 504.66, Basis of Payment.

The following Subsection is added:

504.65 Method of Measurement

The quantity of unacceptably deteriorated rivets replaced with high-strength bolts will be measured by the number of individual rivets replaced and accepted. No additional or special payment will be made for the reaming of holes or the removal of nicks, burrs, rust or foreign substances.

Providing access to the Resident for the inspection of rivets and the removal, containment, and disposal of lead-based paint, will not be measured for payment separately, but shall be incidental to Item 506.9108, Containment System and Pollution Control.

504.66 Basis of Payment

The following paragraphs are added:

Remove Rivet and Replace with High-Strength Bolt will be paid for at the Contract unit price for each deteriorated rivet removed, replaced, and accepted. The Contractor's bid price shall include rivet removal, grinding, punching and reaming (if necessary), and installation of high-strength bolts including the supply of all tools, labor, equipment, materials, transportation, and incidentals necessary for the satisfactory completion of the work.

Payment will be under the following pay items:

<u>Pay Item</u>	<u>Unit</u>
504.81 Remove Rivet and Replace with High-Strength Bolt	Each

SPECIAL PROVISION

SECTION 506

PAINTING OF STRUCTURAL STEEL

(Field Painting of Existing Structural Steel Girders)
(Surface Preparation of Existing Structural Steel Girders)
(Containment System and Pollution Control)
(Disposal of Hazardous or Toxic Materials)

506.01 Description

This Special Provision covers the field preparation and painting of existing structural steel, as outlined below and in the Plans. With the high-ratio calcium sulfonate paint system described herein, the degree of surface preparation for the existing steel shall be in accordance with the paint manufacturer's recommendations.

<u>Bridge Name</u>	<u>Square Feet of Steel</u>	<u>Mile</u>	<u>Town</u>
Saco River Overpass	97,100	33.0	Saco

The work shall consist of furnishing all supervisory personnel, including competent person(s), labor, tools, equipment, containment, scaffolding, protection of public and private property, Quality Control inspections, materials, and incidentals necessary for satisfactory completion of component of work. The components of the Project to be cleaned and painted are as designated below:

A. Select Areas of the Existing Structural Steel Superstructure

As shown in the Plans, Girders G5 through G-8 Southbound, and Girders G-9 through G-12 Northbound, shall be coated to the limits on the Plans. Longitudinal stringers, braces, gusset plates, connections, and all non-galvanized bearings within the limits of painting shown on the Contract drawings shall also be painted. These areas will require a water blast cleaning with a soluble salt removing chemical followed by a drying using 100 psi clean, dry oil-free air. The paint system shall be an Active High-Ratio Co-Polymerized Calcium Sulfonate coating system.

As shown on the Plans Girders G-15 through G-4 Southbound, and Girders G-13 through G-16 Northbound, which consist of rolled beams shall have their ends coated to the limits shown on the Plans. Longitudinal stringers, braces, gusset plates, connections, and all non-galvanized bearings within the limits of painting shown on the Contract drawings shall also be painted. These areas will require a water blast cleaning with a soluble salt removing chemical followed by a drying using 100 psi clean, dry oil-free air. The paint system shall be an Active High-Ratio Co-Polymerized Calcium Sulfonate coating system.

506.02 Materials

Protective coating materials shall comply with the requirements of the respective subsections of this Special Provision as follow:

Active High-Ratio Co-Polymerized Calcium Sulfonate.... Subsections 506.28 thru 506.30.

506.03 Submittals

The Contractor shall submit the following for review by the Resident:

A. Contractor's Qualifications:

The Contractor's Personnel shall have successfully completed National Association of Corrosion Engineers (NACE) Coating Inspector Program (CIP) Level 1, 2, and 3 – Peer Review training, or SSPC-PCI, with certifications in current standing, or shall provide evidence of successful inspection of three projects of similar size and scope and have been completed in the last two years. References shall include the name, address, and telephone number of a contact person employed by the bridge owner. The personnel performing the quality control tests shall be trained in the use of the Quality Control instruments. Documentation of training shall be provided to the Resident.

If the Quality Control personnel the Contractor engages for the Project does not follow and enforce the approved Quality Control Plan, the Resident may require the Contractor to retain the services of an independent, third party certified NACE inspector for the remainder of the Project, at no additional cost to the Authority.

B. Quality Control Plan:

The Contractor shall submit a Quality Control Plan (QCP) to the Resident for review a minimum of 21 days prior to initiating any removal of paint from the existing structure(s). The Quality Control Plan is the responsibility of the Contractor to ensure compliance with the Contract documents. Quality Assurance is the Authority's prerogative to verify the Quality Control is being performed by the Contractor. The QCP shall, at a minimum, include the names of all the Contractor's representatives on-site, which shall be responsible for the inspection and the acceptance of the Contractor's work prior to inspection by the Resident. The plan shall also define hold points, submittal of daily work reports, coating / DFT reports and the process for rework. Inspection by the Contractor's representative shall be incidental to the surface preparation.

The Contractor shall adhere to the approved QCP at all times. Violation of the QCP, including submittal of the daily work reports and/or coating and DFT reports, may result in a suspension of work. If suspension is ordered in writing by the Authority, work shall not resume until the Contractor provides a plan in writing, which is acceptable to the Authority, describing how compliance will be restored and maintained. A suspension resulting from the Contractor's failure to adhere to the approved QCP shall be at no additional cost to the Authority and shall not be cause for a time extension of the Contract.

The Contractor shall employ a Quality Control Inspector whose sole responsibility is to inspect all aspects of the work and supervise required testing. The QCI shall be a full-time employee of the Contractor and shall not have any other duties other than quality control activities. See Subsection 506.05 for additional requirements.

C. Surface Preparation / Painting Plan:

The Contractor shall submit to the Resident for review, written procedures (preparation plan) for the surface preparation, the remediation of soluble salts, and coating application and repair. This plan shall include a description of the equipment that will be used for surface preparation and painting. This plan shall also include the surface preparation methods to be used in areas in close proximity to utilities, bearings, etc. If any areas receive damage due to improper surface preparation methods, the Contractor shall be responsible for all damage at no additional cost to the Authority. The Contractor shall receive approval from the Resident before performing any removal methods when working in these areas.

This plan shall address methods for sequencing work to accommodate Maintenance of Traffic in accordance with Section 652 and as shown in the Maintenance of Traffic Plans.

This plan shall also identify the methods of protection or work isolation procedures that will be followed to protect surrounding structures, equipment, utility cables, etc., and property from exposure to surface preparation and paint debris. The Contractor is responsible for any damage caused by the surface preparation.

If the Contractor elects to use an abrasive grit material during the surface preparation operations, the plan shall identify the type and brand name of the abrasive to be used, as well as the water-to-grit ratio, and provide Material Safety Data Sheets (MSDS).

The Contractor shall submit documentation that the complete coating system meets the specified Coating system and a Certificate of Compliance for the paint material. The Contractor shall include the manufacturer's published data sheet(s) for the specified protective coating system in the submission to the Resident.

D. Material Safety Data Sheets:

The Contractor shall obtain material safety data sheets from all manufacturers, submit these to the Resident, and maintain a complete binder at the construction office trailer.

E. Containment Plan:

At least two (2) weeks prior to starting the surface preparation and/or painting of structures, the Contractor shall submit his proposed Containment Plan to the Resident for review. The Containment Plan shall address the Contractor's proposed containment and pollution control measures. Enclosures shall provide the level of containment commensurate with the discharge standard established by the MaineDEP for the Project location and for the type of blast material used by the Contractor. The plan shall be sufficiently detailed to show that conformance with the requirements herein and of Subsections 506.70 through 506.72 will be achieved.

Drawings detailing the proposed containment enclosure(s) shall illustrate the working platform, railings, walls, and methodology associated with staging, installing, moving, and removal of the enclosure. At a minimum, the drawings shall include the following details:

1. Containment walls with rigid and flexible materials.
2. Rigid supports and bracing for the floor and wall panels, rigid or flexible supports and bracing for flexible walls. Note that containment systems which utilize friction connections in tension members or non-redundant fasteners in tension members will not be approved.
3. Connections to the bridge(s), i.e., clamps, rollers. (Note: Welding and bolting is not allowed).
4. Lighting / illumination inside of the containment enclosure, if required.
5. Water collection/ diversion and filtration equipment, including the filter fabric data sheets.
6. Methods of access shall be clearly shown, including location of any required safety lines.
7. Location of equipment and impact on traffic.
8. Elevation view of the containment enclosure with indications of any encroachments on the surroundings.
9. Cross section view, Typical.

The Containment Plan shall also address methods for sequencing work to accommodate maintenance of traffic in accordance with Section 652 and as shown in the Maintenance of Traffic Plans.

The containment enclosure shall be designed to support an allowable uniform vertical construction load of 50 psf and shall be capable of withstanding wind forces in accordance with the requirements of the International Building Code and appropriate for the Project location.

The erection of containment enclosure(s), or conducting any paint removal activities, shall not begin until the Resident has reviewed the containment plan and authorized the Contractor to begin.

The Contractor is responsible for ensuring the containment meets all OSHA, Federal and State regulations. Reference information on enclosures can be obtained from the following SSPC sources:

1. Guide for Containing Debris Generated During Paint Removal Operations
2. Steel Structures Painting Manual, Volume 1

F. Hazardous Waste Management Plan:

A minimum of two (2) weeks prior to undertaking the removal of lead based paint, the Contractor, or licensed lead abatement subcontractor, shall submit a Hazardous Waste Management Plan (EPA/DEP) to the Resident, which shall be in conformance with the requirements of Special Provision Subsection 105.2.4.2, Lead Paint.

Procedures used for management and disposal of lead paint and associated hazardous materials shall conform to the latest requirements of SSPC Guide 7 “Guide for the Disposal of Lead-Contaminated Surface Preparation Debris”, and all Federal, State, and local requirements. The Contractor shall have a copy of the SSPC Guide 7 available on-site at all times. The Contractor shall also have a copy of the Maine Department of Environmental Protection’s (DEP’s) Handbook for Hazardous Waste Generators, and a copy of the State of Maine Hazardous Waste Management Rules, 06-096 CMR Chapters 850-857, on-site at all times.

The Contractor shall have an aid agreement with a hazardous waste spill responder. A copy of this agreement shall be provided to the Resident prior to generating any waste, in conformance with DEP Rules, Chapter 851, Section 13, Part C (7)(c)(ii) and OSHA 40 CFR Part 264.37. See Subsections 506.70 and 506.71 for additional requirements.

G. Environmental Protection Plan:

A minimum of two (2) weeks prior to the initiation of on-site work, the Contractor shall submit to the Resident for review and comment an Environmental Protection Plan which establishes programs for the monitoring activities on the Project. This plan shall include the following:

1. Ground (Soil) Evaluations: A written program for inspection of the ground and soil prior to commencement of the Project and upon completion to assure that the ground is not impacted by Project activities. The Contractor shall contract with an independent environmental monitoring firm to conduct sampling and analysis of the soil to determine whether it has been impacted by Project activities. All monitoring, calculations, documentation, and forms shall be provided directly to the Resident by the monitoring firm, with copies to the Contractor. Clearly identify proposed sampling locations. Identify the corrective action that will be taken in the event of unacceptable results. The Contractor shall provide the name of the independent environmental monitoring firm to the Resident for review.
2. Remediation of Ground (Soil): Include provisions in the Plan that in the event of post-Project inspection, sampling or analysis show unacceptable results, the Contractor will undertake the necessary clean-up or remediation of the ground (soil) as appropriate as to satisfy all necessary regulatory agencies. Any clean-up measures shall be at no additional cost to the Authority.
3. Final Cleaning / Clearance Evaluations: A written program identifying the procedures and methods that will be used to conduct and document final Project clean-up, and final visual cleanliness inspections and evaluations. The process is to assure that the Project area and surrounding equipment, structures, and soil have not been negatively impacted by Project activities.
4. Gray Water Monitoring Evaluations: When water blasting (either high pressure water cleaning or low pressure wet abrasive water cleaning) is employed as part of the surface preparation, a written program for inspection of the gray water produced shall be submitted to the Resident. Prior to

commencement of the pressure wash activities the Contractor shall be required to setup a test staging/containment area, no less than 10 feet in length, so as to obtain water samples prior to the pressure washing and after the water is used to blast clean and passes through the filtration system. The Contractor shall contract with an independent environmental monitoring firm to conduct sampling and analysis of the gray water. The results of the analysis shall be compared to MeDEP Chapter 584, Surface Water Quality Criteria for Toxic Concentrations, Table 1 – “Criteria for Priority Pollutant listed pursuant to 304(a) of the Clean Water Act”. The level of gray water pollutants shall not exceed the Criteria Maximum Concentration (CMC) acute concentrations listed therein to protect aquatic life. A summary of applicable CMC are listed below for reference.

<u>Priority Pollutant</u>	<u>CMC</u>	<u>Footnotes (See Table 1)</u>
Arsenic	340 µ/L	A, K
Barium	(Not a priority pollutant)	
Cadmium	0.42 µ/L	E, K, bb
Chromium III	48 µ/L	E, K
Lead	10.52 µ/L	E, bb, gg
Mercury	See Title 38 MSRA, Section 420 (1-B) and Section 413 (11)	
Selenium		L, R
Silver	0.23 µ/L	G, E

Should any of the Priority Pollutant levels exceed Criteria Maximum Concentration levels, then the Contractor will be required to make modifications to the proposed system and /or any additional processing, de-leading, etcetera until all Priority Pollutant levels are within acceptable criteria. Once it is established that the filtered gray water is acceptable to drip down to ground/ river, the Contractor will be allowed to start full prep and painting operations. The Contractor shall be required to collect a representative sample of gray water from each spans operations and expedite analysis. All monitoring, calculations, documentation, and forms shall be provided directly to the Resident by the monitoring firm, with copies to the Contractor. Clearly identify proposed sampling locations. Identify the corrective action that will be taken in the event of unacceptable results.

H. Health and Safety Plan:

A minimum of two (2) weeks prior to performing any work on the structure, the Contractor shall submit to the Resident a written site-specific Health and Safety Plan conforming to the requirements of Special Provision Subsection 105.2.4.2, Lead Paint.

Failure of the Contractor or his subcontractors to comply with the provisions for Health and Safety Plan defined in this Specification will affect whether the Contractor or his

subcontractor will be considered a responsible Contractor or subcontractor on future work involving structure rehabilitation and removal of lead paint coatings on projects for the Maine Turnpike Authority.

I. Spill Prevention Control and Countermeasure Plan:

Prior to the start of construction, the Contractor shall submit Spill Prevention Control and Countermeasure (SPCC) Plans in accordance with the requirements of Special Provision Subsection 105.8.1, Temporary Soil Erosion and Water Pollution Control.

J. Manufacturer Specifications and Application Sheets:

All manufacturer specifications and applications sheets shall be submitted to the Resident for review and approval. Any deviations from requirements of these Special Provisions shall be brought to the attention of the Resident.

506.04 General Requirements

It is the responsibility of the Contractor to test the existing coating to determine the toxic metal content and, based on those results, design and implement the appropriate plans for containment, environmental protection, waste disposal and worker safety. For informational purposes, a chemical analysis report of paint chip samples taken from the existing paint coating system indicates the presence of toxic metals. The full Report of Analytical Results can be found in **Appendix A**.

In reference to surface preparation, cleanliness, coating application, containment measures and waste management, the Contractor shall have the latest copies of the following reference on-site at all times:

1. Steel Structures Painting Council's Steel Structures Painting Manual, Volumes 1 and 2 (Good Painting Practice and Systems and Specifications).
2. SSPC Vis 1, Visual Standard for Abrasive Blast Cleaned Steel.
3. SSPC Vis 3, Visual Standard for Power and Hand Tool Cleaned Surfaces.
4. SSPC Vis 4, Visual Reference Photographs for Steel Cleaned by Water Jetting.
5. Maine Department of Environmental Protection's "Hazardous Waste Management Rules".
6. Maine Department of Environmental Protection – Handbook for Hazardous Waste Generators.
7. OSHA 29 CFR Part 1910 "Occupational Safety and Health Standards" and Part 1926, "Safety and Health Regulations for Construction".
8. OSHA 40 CFR Part 264 "Hazardous Waste Contingency Plan".
9. OSHA 42 CFR Part 84 "Respiratory Protective Devices".
10. SSPC Guide 6, Guide for Containing Surface Preparation During Paint Removal.
11. SSPC Guide 7, Guide to Disposal of Lead Contaminated Surface Preparation Debris.
12. SSPC Technical Guide TU-17 Conducting Air, Soil and water sampling during Surface prep and paint disturbance activities.

All surface preparation, containment, testing and field painting included in the Contract shall be sequenced to accommodate maintenance of traffic in accordance with Section 652 and as shown in the Maintenance of Traffic Plans.

506.05 Inspection

For the purpose of this Specification, the following definitions shall apply:

Resident Inspector: The Authority's authorized representative for field application.

Quality Control (QC) is the responsibility of the Contractor. The Contractor shall employ a full-time Quality Control Inspector (QCI) who shall inspect all aspects of the work and shall supervise required testing. The QCI shall have no other responsibilities on the work site other than performing quality control. The QCI shall record measurements and test results in a Job Control Record (JCR). The QCI shall reject materials and workmanship that do not meet Contract requirements. The results of all testing shall be documented and a copy made available to the Authority's Quality Assurance Inspector (QAI) on a daily basis or as requested by the QAI.

Typical test results to be recorded will include, but are not necessarily limited to:

1. Cleanliness - before application of the first or primer coat.
2. White blotter test in accordance with ASTM D4258 to verify the cleanliness of the compressed air.
3. Environmental conditions - prior to the application of each coat and at the conclusion of final coat.
4. Wet Film Thickness (WFT).
5. Dry film thickness (DFT) - after the coating has cured and before the application of subsequent coating.
6. Type of equipment, model, serial number and calibration data, if applicable.
7. Other job-specific test requirements specified herein shall be included in the JCR.
8. The JCR shall include the following, as applicable:
 - a. Type of application equipment
 - b. Type of containment, when required
 - c. Surface preparation - cleanliness and anchor profile
 - d. Environmental conditions – ambient temperature, surface temperature, relative humidity, dew point
 - e. Coating batch and/or lot number, date of manufacture and shelf life
 - f. Manufacturer's certification of conformance
 - g. Name(s) of applicator(s)
 - h. Dry Film Thickness (DFT) required / DFT measured
 - i. Cure data-time / temperature / relative humidity
 - j. Final inspection by the QCI and acceptance by the Resident

Quality Assurance (QA) is the prerogative of the Authority. The QAI will ensure that the QC is being performed properly, verify documentation, periodically inspect workmanship and witness testing. QA testing deemed necessary by the Resident in addition to the minimum test requirements shall be scheduled to minimize interference with the production schedule.

506.06 Quality Assurance Inspector's Authority

The QAI will have the authority to reject material or workmanship that does not meet the Contract requirements. The acceptance of material or workmanship by the QAI will not preclude subsequent rejection, if found unacceptable by other authorized representatives of the Authority.

506.07 Rejections

Rejected material or workmanship, as described above, shall be corrected or replaced by the Contractor at no additional cost to the Authority.

506.08 Contractor Qualification and Submittals

All Contractors and Subcontractors involved in the field application and touch-up of the protective coating systems shall be certified in accordance with SSPC QP 1 "Standard Procedure for Evaluating Qualifications of Painting Contractors: Field Application to Complex Structures".

All Contractor and Subcontractor SSPC certifications specified above shall be current and in-place prior to bid opening. The Contractor shall ensure that all required SSPC certifications are kept current throughout the duration of the Contract until final acceptance of the work. A copy of valid current certifications shall be transmitted with the Bid Package.

506.13 Topcoat Galvanized Surfaces

Topcoat, when required, shall be applied as specified in the Contract Documents. When the topcoat material is a High-Ratio Calcium Sulfonate Alkyd (HRCSA), the galvanized surface shall be prepared in accordance with the HRCSA paint manufacturer's instructions.

ACTIVE HIGH-RATIO CO-POLYMERIZED CALCIUM SULFONATE

506.28 Description

Work shall consist of the field application of coating systems in accordance with the Plans and Specification. Each step of the "one coat process" shall be applied in accordance with the manufacturer's published data sheet and this Specification.

506.29 Field Coating System

Field Coating system shall be an Active High-Ratio Co-Polymerized Calcium Sulfonate (HR CSA) Coating System. The topcoat must contain a minimum of 9.5% active sulfonate with the corresponding total base number at a ratio of 10 to 1 (i.e., as documented by an independent testing laboratory). The HR CSA penetrant sealer will be a minimum of 15% active sulfonate with the corresponding total base number as documented by an independent testing laboratory. The coating manufacturer must supply a minimum of a five-year material history for the specific material showing a minimum of 6,500 hours when tested under ASTM D 5894 with a 24-hour freeze thaw cycle and independent test results.

The above coating system has been approved for use on this Project. Performance characteristics of alternative products submitted shall meet or exceed those of the coating systems listed within this Special Provision. The following are manufacturers of Active High-Ratio Co-Polymerized Calcium Sulfonate (HR CSA) Coating Systems. Manufacturers, other than those listed below, may be submitted for review and approval.

Termarust Technologies, 1-888-279-5497 (www.termarust.com)

The topcoat color shall be Federal Standard 14272, "DOT Green". A sample of the topcoat color shall be submitted to the Authority for approval. Paint materials produced prior to written approval by the Authority may be rejected at no additional cost to the Authority.

The accumulation of empty coating cans, combustibles, and other debris will not be permitted.

MSDS sheets for all materials shall be maintained on file and provided to the Engineer prior to receipt of the material from the manufacturer.

A. Coating Schedule:

The following steps are to be done one after the other, wet-on-wet, with no waiting time between applications.

Application		Product *	Film Thickness
SPOT	Apply liberally to crevices and joints and/or spaces where a gap has been created between surfaces plates and around rivets, bolts, nuts and washers.	TR2200	Thoroughly wet surfaces
SPOT	Liberally apply a stripe coat to crevice corroded and pack rusted joints and connections, provide extra material to bolts, nuts and any gaps around rivets.	TR2100	15-18 mils (wet) 10-12 mils (dry)
SPOT	Over exposed metal areas and areas of tightly adhered contaminate free rust or flash rust apply a spot prime, including areas mentioned in previous SPOT application.	TR2100	7-10 mils (wet) 5-7 mils (dry)
FULL	Apply an additional 5 to 7 mils DFT over the previously treated areas and as shown in the Contract Documents.	TR2100	7-10 mils (wet) 5-7 mils (dry)

* Reference is made to Termarust products.

B. Water Used in Surface Preparation:

All water to be used in the surface preparation shall initially be potable water. Captured water shall be tested, and disposed of in accordance with Local, State and Federal regulations.

C. Manufacturer's Instructions:

At least ten (10) working days prior to the start of work the Contractor shall provide the Engineer with one copy of the coating manufacturer's current technical and safety data sheets for the materials/coatings furnished. Instructions, suggestions, and precautions contained in the data sheets shall be followed to the extent that they do not contradict the provisions of this specification.

D. Atmospheric Conditions:

The temperature limitations of both the substrate to be coated and the ambient air shall be as recommended by the coating manufacturer. However, in no case shall coating work be performed when the substrate temperature is less than 36°F or greater than 104°F, unless approved by the Engineer.

No coating materials shall be applied when the relative humidity, in the immediate area to be coated, exceeds 99%, or there is a temperature-dew point temperature spread of less than 5°F.

E. Surface Preparation:

Removal of existing debris - Remove and properly dispose of accumulated winter sand/salt, bird droppings, dirt, grease and debris from all areas to be prepared and painted prior to undertaking any paint removal or surface preparation operations. SSPC-SP-1, solvent cleaning will be required for removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants from steel surfaces.

Soluble salts (chlorides, nitrates, sulfates) from the surface of the steel also need to be removed. Any excess level will cause any / all paint coatings to fail. Chloride and ferrous salts should be expected to be present on the existing structural steel, especially where corrosion is present. Prior to painting these surfaces, these salts must be reduced to acceptable levels. The Contractor shall verify that residual soluble salts across the entire area of the bridge to be painted are at a surface cleanliness condition of SC-2 or better, in accordance with SSPC SP 12, as determined by the KTA SCAT Kit, Chlor-Rid Test, or an approved equal.

The Contractor shall test for soluble salts at a minimum of five (5) locations per span or one (1) location per containment enclosure used for each day's blast production area. Test locations are to be determined and witnessed by the Resident. If unacceptable levels of soluble salt remain, the Contractor shall steam clean the affected areas in accordance with SSPC SP 1 until acceptable results are achieved. All testing and retesting shall be incidental to the Surface Preparation and shall be at no additional cost to the Authority and shall not be just cause for a time extension.

The Contractor shall describe the proposed method(s) of soluble salt remediation, and other contamination in the Surface Preparation / Painting Plan.

Mechanical cleaning / removal of rust – Hand and power tool cleaning will be necessary if all loose rust and tightly adhered black oxides are not removed by water blasting. Pack

rust shall be removed as much as possible as determined by the Engineer from flat services, or unbounded seams along the edges of metal to metal; contact surfaces. If necessary, supplemental hand or power tool cleaning shall be used to remove pack rust. The tightly adhered black oxides have active corrosion cells that at the steel interface will cause delamination if not removed and reblasted prior to blasting. Remove all rust scale on any flat or unbounded surface and loose pack rust that has formed on structural members. Remove tight pack rust until the highest point is a minimum of 3 mm (1/8 inch) below the surface of the surrounding steel. Exercise care to avoid any nicking or gouging of the steel during rust removal. Nicks and gouges are cause for a suspension of activities until appropriate adjustments are made to prevent a reoccurrence. Damage to steel by the Contractor shall be repaired by the Contractor as approved by, and at no cost to, the Authority and no additional time will be added.

Note: Pack rust wedged in between the flange plates need not be mechanically removed, beyond efforts and results produced by high pressure water blasting. Tightly wedged pack rust shall remain in place.

Water Cleaning - The structure (or the portions of it to be coated) are to be cleaned using one of two methods:

- 1) A high-pressure water blast of no less than 5,000 psi HPWC (high-pressure water cleaning) at 180 °F at five gallons per minute with a zero degree rotating tip (at a maximum of a 4” standoff distance) to a SSPC – SP12 WJ4 - NV2 to remove loose paint and loose rust, (SSPC SP2 & SP3 hand or power tool cleaning maybe used in inaccessible areas or when water cleaning is not possible); or,
- 2) A low-pressure water blast of approximately 150 psi wet abrasive water cleaning using garnet abrasive and potable water. The standoff distance shall be no less than 6” and may be increased by the Resident if the existing tightly-adhered paint is unnecessarily being removed.

In some cases after cleaning there may be areas of tightly adhered black oxide which were not removed. Although this tightly adhered black oxide meets the WJ4 standard, it must be removed, because the active corrosion under it is highly contaminated with Chloride &/or Sulfates &/or Nitrates and if it is allowed to remain it will result in delamination of the black oxide, and the coating which has adhered to it. Special attention must be paid to the crevice corroded joints and connections. The connections must be flushed out during the cleaning process with the 5,000 psi HP WC (high-pressure water cleaning) at five Gallons per minute with a zero degree rotating tip (at a maximum of a 4” standoff distance).

Cleaning of the substrate will occur prior to the application of any stripe/primer. See drawings to determine location of structure components to be coated. The water used for pressure washing shall contain a soluble salt removing chemical, such as Chlor*Rid[®] (manufactured by CHLOR*RID International, www.chlor-rid.com (800-442-3217), or an approved equal).

It is required that even if the joints and connections look dry – that they be blown dry with clean, dry, oil free, high pressure (100 psi) compressed air.

Use the white blotter test in accordance with ASTM D4285 to verify the cleanliness of the compressed air used for blowout and drying. Conduct the test at least once per shift for each compressor system. Sufficient freedom from oil and moisture is confirmed if soiling and/or discoloration are not visible on the paper.

If air is contaminated, change filters, clean traps, add moisture separators or filters, or make adjustments as necessary to achieve clean, dry air.

If there is a question of whether all loose paint has been removed, adhesion testing of the remaining “tightly adhered” paint shall be done in accordance with ASTM D 4541-02 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers, with a minimum value of 300 psi.

Prior to installing the primer / sealer, stripe coat and topcoat (wet on wet) paint system, the Contractor will ensure that the amount of flash rust is no greater than moderate (M) as defined in SSPC-SP 12/ NACE No. 5. Should the amount of flash rust exceed moderate (M) as defined in SSPC-SP 12/ NACE No. 5 the Contractor shall remove the excessive flash rust before proceeding with the primer / sealer, stripe coat and topcoat (wet on wet) paint system.

Prior to placing the subsequent coats, the Contractor will ensure that the prior coat is clean of all foreign matter, such as grease, dirt, bird waste, etc., before application of the subsequent coat.

Surface preparation found to be deficient will be repeated at the Contractor’s expense as directed by the Engineer.

F. Mixing:

If required, coating shall be mixed in accordance with the coating manufacturer’s recommendations.

G. Thinning:

The primer, stripe and other coats may be thinned only if recommended by the manufacturer, done in compliance with the manufacturer’s instructions, approved by the Engineer, and mixed in the presence of the Engineer. If recommended by the manufacturer and approved by the Engineer, a measuring cup shall be used in the addition of thinner to any coating and have graduation in ounces. No “eye balling” during addition of thinner to coating will be allowed. Coating mixed with thinner by “eye balling” will be subject to rejection by the Engineer as ruined material.

H. Coating Application:

Provide paintbrushes, rollers, and spray equipment to conduct the work as specified in this Section.

Provide specialized equipment as required for the coating of “Limited Access” areas and for the other difficult-to-clean areas. Specialized equipment may include, but is not limited to:

1. Pole guns for spray coating.
2. Mitts, daubers, or other methods to supplement brush application.

Coating may be applied using spray, brush or roll methods as directed by the manufacturer, except that all stripe coating shall be finished using a brush.

Complete protection from coating spatter, spillage, overspray, wind-blown coating, or similar releases of coating shall be provided. Covers, tarps, mesh, and similar materials shall be placed around the work area to protect public and private property, pedestrian, vehicular, marine or other traffic, all portions of the bridge, highway appurtenances, waterways, and similar surrounding areas and property, upon, beneath, or adjacent to the structure.

Spray coating will be permitted only within a containment that will contain all of the sprayed material, as approved by the Engineer.

Penetrant/Sealer shall be applied liberally to all joints and connections, including around bolts, nuts and rivets where gaps exist. Care should be taken to minimize putting penetrant on surfaces other than in and around joints and connections. Excess penetrant (on the surface) must be brushed out, primarily because excess penetrant on the surface may retard curing of the topcoat and/or make the surface look cosmetically poor.

Stripe coating will be required on the following: girder flanges, web, floorbeam extensions, lateral bracing, longitudinal stringers, gusset plates and kicker braces as shown in the Contract Plans. This includes surfaces that have been cleaned: edges of plates, angles, connections (rivets and bolt heads) or other shapes, corners, crevices, back-to-back angles and built-up edges. The surfaces of existing steel members to which new steel may be connected (faying surfaces) shall also be cleaned and coated as herein described. The stripe coat shall have a band width of at least four inches to each side of the adjoining edges and is to completely coat the interior of all crevices. All stripe coating should be applied by spray, but immediately afterwards it must be ‘brushed in’ using a brush. No other method of coating application will be allowed for stripe coating.

As soon as the penetrant/sealer has been applied, the self-priming topcoat may be applied into joints and connections, bolts, nuts and gaps around rivets. This application may be immediately followed by spot priming over bare steel and tightly adhered contaminant free rust.

As soon as the stripe coat and spot prime have been applied, the ‘finish’ coat may be applied over all surfaces including tightly adhered, contaminant free paint.

Equipment – All of the following shall be provided throughout the duration of the work:

1. Sling Psychrometer and Tables
2. Inspection Mirror

3. VIS 1-3 and 4 Standards
4. Illuminated Magnifier
5. Hypodermic Needle Pressure Gauge
6. Calibration Standards (NIST Traceable)
7. Air Thermometer, pocket type, 30°F to 100°F (two)
8. Surface Thermometer, 30°F to 150°F (two)
9. Wet Film Thickness, prong type (one)
10. Positector 6000 F3 or equivalent fixed probe DFT (two)

I. Film Thickness:

1. Stripe, spots, sealer, and finish coats shall be applied in sufficient quantity so as to produce the minimum specified Wet Film Thicknesses (WFT).
2. Because of the nature of active calcium sulfonate coatings, that they cure slowly, it is suggested that wet film measurements be used as criteria for preliminary acceptance of the coating. WFT measurements shall be determined as the job progresses and corrections shall be made during coating application.
3. Dry film thicknesses should be determined using SSPC-PA2 – using a digital film thickness gage and a shim – after the coating has cured sufficiently to allow accurate measurements. [Note: Depending upon ambient air conditions, it may take more than one week before DFT measurements can be taken]

J. Recoating and Over-Coating:

Areas failing to meet the specified wet film thickness (WFT) range shall be over-coated with the same coating to produce at least the total WFT required. Coating applied containing unauthorized thinners, coating applied to contaminated surfaces, and coating applied contrary to this Specification shall result in the re-cleaning and re-coating of the surface. The work of re-cleaning, re-coating or over-coating, if required, shall be performed within 10 days following notification by the Engineer and shall be done by the Contractor to the satisfaction of the Engineer, at no additional cost to the Owner.

K. Material Storage:

Coating in storage shall be protected from damage and maintained between 40°F and 100°F. Coating shall be stored covered and off the ground to prevent damage by elements such as rain, etc. Any coating material found to be damaged or beyond its expiration date shown on the container shall be immediately removed from the Project site and will be considered as ruined material.

L. Testing of Coating Samples:

1. The Owner reserves the right to conduct tests of the materials at any time, and any number of times during the period of field coating.
2. The Engineer may sample the coating(s) being used. A representative size sample of each component of coating(s) at the construction site will be transferred to metal containers, identified, sealed and certified in the presence of the Contractor.

3. Tests on coating samples may be performed by the Owner in order to confirm the manufacturer's test results submitted with each batch of material.
4. If the laboratory test results show that the material being used does not comply with the requirements specified in this Section, the Contractor may be directed to stop coating work and remove non-complying coating; pay for testing; recoating surfaces coated with rejected coating; or remove rejected coating from previously coated surfaces if, upon re-recoating with specified coating, the two coatings are not compatible.

M. Repair of Damaged Coatings:

Care shall be taken to prevent damage to the new or existing coatings. HRCSA paint materials cure slowly and can be easily damaged during subsequent stages of construction. The Contractor shall inform its employees of the need to work cautiously around new and existing coats of paint, which shall include precautions when gripping, standing upon, or leaning upon painted areas. All damaged coatings, new or existing, shall be repaired prior to Project completion and acceptance in accordance with the above Specifications for Re-Coating and Over-Coating and as directed by the Engineer, at no additional cost to the Owner.

N. Engineering and Inspection:

The Engineer or his designated representative will inspect all phases of the work. The Contractor shall provide and maintain OSHA compliant access for the Engineer's inspectors. The presence of the Engineer/Inspector(s) shall not relieve the Contractor of the responsibility to provide adequate inspections of their own to assure compliance with this Specification.

O. Coating Manufacturer's Representative:

The Contractor/Applicator shall make arrangements for a representative of the Coating Manufacturer to be present on-site to at least get the Project started; to work together with the Contractor/Applicator and representatives of the owner; possibly including a third-party coating inspector – to provide comments and guidance that the cleaning, application and inspection procedures will properly be done – unless this is deemed not necessary, and approved by the Engineer.

P. Staging and Safety:

Nothing in any section of this Specification shall be construed as relieving the Contractor from full responsibility for safe execution of the work at all times.

The Contractor shall confine apparatus, storage of materials, and work operations to the limits prescribed by ordinances or permits, or as may be directed by the Engineer/Owner and shall not unreasonably encumber the premises or any other functions or activities.

The Contractor shall not load any structure or permit any part thereof to be loaded to such an extent as to endanger its safety.

The Contractor shall comply with and enforce any instruction of the Engineer/Owner, or local laws regarding signs, advertising, fire, and smoking.

The Contractor shall keep the premises clean of trash and combustible materials. Upon completion of the work, Contractor shall remove all temporary construction facilities and unused materials provided for the work.

The Contractor shall provide all electrical services needed.

Q. Warranty:

The Coating Manufacturer and the Contractor/Applicator shall jointly warrant the coating and its application against all defects in material and workmanship for the entire Project, which will commence on the date indicated on the Certificate of Substantial Completion.

The Contractor/Applicator shall supply a letter from the coating Manufacturer stating that the Manufacturer will jointly execute an agreement to provide a Joint Five-Year Coating System Failure Warranty. Note: the first two (2) years of the warranty shall be a 'bonded warranty' and the remaining three (3) years may be only a Coating Manufacturer/Contractor warranty.

Upon completion and final acceptance of the work (or) Project, the Engineer/Owner will receive from the Contractor/Applicator the "Joint Five-Year Coating System Failure Warranty." The warranty, jointly executed by the Contractor/Applicator and the coating system Manufacturer, will be forwarded to the Owner before final payment by the Owner is released.

Intermediate inspections by the Owner may be made and warranty repairs claimed and completed by the Contractor/Applicator each year of the Five-Year Warranty period. However, at least sixty (60) days prior to the warranty's expiration, the Owner will inspect the coating system and advise the Contractor/Applicator, in writing, of any defects or repairs that are required.

Failure of the coating system shall include, but not be limited to:

1. Any debonding or failure of adhesion of the coating either to the structural steel or inter-coat adhesion.
2. The appearance of any rust stains on the structure due to loss of coating.
3. Failure of the coating to resist chipping due to traffic-thrown sand or road debris.
4. Any loss of normal gloss or rapid change in color of the coating.
5. Damage to the coating due to vehicle impact, snow removal equipment, other mechanical devices and chemical spills will not constitute failure of the system.
6. Within the first two (2) years of completion of the work, any sign of rust bleeding through existing intact coating film.
7. From years three (3) through five (5) of the warranty period, any surface rusting greater than 0.03% (SSPC Vis. 2 Rust Grade 9) of the total area of any structural element or component, i.e., floorbeam, girder flange, girder web,

etc.

Repair under warranty includes the material, labor and equipment costs necessary to restore the coating to acceptable condition.

Warranty repairs shall be completed within 45 days of notification, or if this would place the repair in winter weather conditions, by May 30 of the following year.

R. References:

American Society for Testing Materials

ASTM D4285 Standard Test Method for Indicating Oil or Water in Compressed Air

ASTM D4414 Standard Practice for Measurement of Wet Film Thickness by Notch Gages

ASTM D4417 Standard Test Methods for Field Measurement of Surface Profile Blast Cleaned Steel.

506.30 Waste Management

Collect, store and dispose of all hazardous, special and solid waste in compliance with relevant Federal, State and local laws and requirements. The procedures used for management and disposal of lead paint and related waste shall conform to the latest requirements of Steel Structures Painting Council Guide 7, Guide for the Disposal of Lead-Contaminated Surface Preparation Debris. Have a copy of this guide available on-site at all times. Have a copy of the Maine Authority of Environmental Protection's (DEP's) Handbook for Hazardous Waste Generators and a copy of the State of Maine Hazardous Waste Management Rules, 06-096 CMR Chapters 850-857, on-site at all times. Thirty days prior to generating any waste, submit the Waste Management Plan which shall include the Spill Prevention Control and Countermeasure Plan (SPCCP), to the Authority for review and comment. Work shall not proceed until the Authority has reviewed and accepted this plan.

The Authority has "Small Quantity Generator-Plus (SQG-Plus)" hazardous waste status for all hazardous waste activities associated with this Contract, as defined by DEP in the Handbook for Hazardous Waste Generators. The Contractor shall perform all work on behalf of the Authority and comply with all Federal, State and local regulations. Except for an accumulation limits and site specific identification number, all requirements associated with SQG-Plus status applies. Given the temporary nature of the work, DEP has excluded the SQGPlus accumulation rate restriction and permanent identification number for these bridge maintenance efforts as long as all other SQG-Plus requirements are fully complied with.

Place impervious tarps under all equipment, storage areas and structures used for storage that are associated with hazardous/special waste.

All hazardous waste shall be stored in US DOT approved, 55-gallon, labeled, banded, sealed, drums in an approved locking structure (i.e.: lockable container box) which has firm, impervious, floor surface and secondary containment that is either 110% of the largest container or 20% of all containers, whichever is larger. All waste barrels must be labeled with the words "Hazardous Waste", the hazard (e.g., Toxic, flammable, etc.), the start date, full date, site location and generator information. The lockable container must be labeled

“Danger- Unauthorized Personnel Keep Out” and shall be locked at all times when not being accessed. No more than three, 55-gallon drums of hazardous waste, not to exceed a maximum total weight of 1,320 pounds, may be stored at the site at any time. The waste storage locker must be inspected each operating day and a log must be maintained by the Contractor, and provided to the Authority at the end of the Project. Store all hazardous waste, in conformance with all other DEP and Federal Rules, including Chapter 851, Section 13, Part C(7)(i) and 40 CFR 2674.14. Hazardous wastes are limited to an on-site storage time of 180 days following the filling of a drum.

Test paint debris (including paint chips, personnel protective equipment, gray water, and spent solvents) to determine the appropriate disposal options. A minimum of one composite sample representative of each waste type must be collected and tested for Toxicity Characteristic Leaching Procedure (TCLP) constituents, in accordance with the procedures outlined in EPA SW846 Method 1311. The Authority must be notified at least one week in advance of the date of sampling activities and provided the proposed protocol for sample collection. The Authority shall witness the sampling. Chain-of-custody must be adhered to for sample removal. TCLP test results shall be provided to the Authority upon receipt by the Contractor.

Inform the Authority at least one (1) week in advance of planned date(s) for removal of hazardous waste from the jobsite. The Authority shall obtain an Environmental Protection Agency Identification Number prior to shipping any hazardous waste for disposal. This number must be used by the Contractor to ship hazardous waste off site. Secure an Authority approved transporter (i.e., Enpro Services, Inc., or Environmental Projects, Inc. (EPI)) licensed by DEP for transportation of hazardous waste. Preparation of all necessary forms is the responsibility of the Contractor. The Hazardous Waste Manifest must be approved and signed by the Authority. A six part, pre-numbered Uniform Hazardous Waste Manifest (EPA Form 8700-22) shall be prepared when shipping hazardous waste. The appropriate original sheets of the multi-part hazardous waste manifest must be provided to the Authority and must be sent to the Authority’s Manager of the Groundwater and Hazardous Waste Division, Environmental Office, State House Station #16, Augusta, Maine, 04333-0016.

Select an Authority approved treatment, storage or disposal (TSD) facility (using Enpro or EPI) as soon as the waste has been tested and the results are known. Also, obtain approval for acceptance of the waste from the selected facility prior to transport.

Provide containers for the collection and retention of all waste water, including but not limited to, the water used for hygiene purposes, laundering of clothing if done on-site, and cleanup activities. Further, make disposal arrangements with the local POTW, sanitation company, or other appropriate permitted facility for this waste water. The Authority shall be provided with documentation signed by an official of the facility stating that the facility will accept the waste, or allow it to be discharged into the sanitary sewer system, and that the levels of any toxic metals remaining in the water are acceptable.

Hazardous/special paint debris and other waste shall not be placed or accumulated on unprotected ground or released to waters of the State. Work areas shall be adequately shielded at all times to prevent dispersion of debris by wind or rain. All of the Contractor’s equipment and storage areas used for the handling and storage of hazardous waste and hazardous materials shall have impervious materials placed under them. Any evidence of improper storage and handling shall be cause for immediate suspension of work in progress, and work will not be allowed until

corrective actions are taken. Emergency procedures to be taken in the event of a release of hazardous/special waste or hazardous matter to the environment shall be part of the Contractor's Spill Prevention, Control and Countermeasures Plan that is required as part of the Contractor's Waste Management Plan and by the Authority's Supplemental Specifications and Supplemental Standard Details for Construction, Section 656.3.4, f. Spill Prevention.

The Contractor shall have Aid Agreements with the local fire Authority, police Authority, hospital and hazardous waste spill responder. Copies of these agreements shall be provided to the Authority prior to generating any waste, in conformance with the DEP Rules, Chapter 851, Section 13, Part C (7)(c)(ii) and 40 CFR 264.37.

Failure of the Contractor to comply with this Section shall result in the following:

- A. First finding of non-conformity shall be a written warning which will include deadline for compliance.
- B. Second finding of non-conformity shall be documented in writing, and all operations by the Contractor, except those needed to restore compliance, will be immediately suspended, until full compliance has been restored.
- C. Third and subsequent findings of non-conformity will be documented in writing and all operations shall be immediately suspended, except those needed to restore compliance, until full compliance has been fully restored, and the Contractor assessed a penalty of \$10,000.00 per incident. If the Contractor fails to restore the Project into compliance, additional fines shall be assessed.

All penalties assessed shall be in addition to any fines assessed by DEP/EPA for failing to comply with the Federal, State, or local regulations. The Contractor shall not be granted additional time for suspensions of work due to noncompliance.

506.31 Observed Steel Defects

If any cracks or section losses are found during cleaning or painting operations, the Contractor shall immediately notify the Resident. When immediate notification is not possible, the Contractor shall place a piece of duct tape on the subject area for inspection by the Resident at a later time. The Contractor shall not work on the area in question until the Resident has approved of it.

506.32 Through 506.69 Vacant

CONTAINMENT SYSTEM / DISPOSAL OF HAZARDOUS MATERIALS

506.70 Description

The Contractor shall use all necessary means to prevent new pollution of the environment (air, soil, and water) in the Project area and the areas immediately adjacent to the Project area and to prevent exacerbating any pre-existing pollution that may be present in the above areas. The containment enclosure shall meet the Class requirements stipulated by the MaineDEP for the type of surface preparation selected by the Contractor. SSPC Guide 6, Guide for Containing

Debris Generated During Paint Removal Operations will be used as the reference which outlines the containment Class requirements.

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, rules, and regulations relating to the prevention of and/or abatement of pollution. The Contractor will not be held responsible for the abatement of any pre-existing conditions unless specified otherwise.

506.71 Hazardous Materials

A Hazardous Waste Management Plan shall be prepared in accordance with Special Provision Section 506.08(E). Potential hazardous material and pollutants such as fresh paint, old paint chips, blast cleaning debris, chemicals, fuels, lubricants, bitumen, and any other harmful or toxic material shall be contained and disposed of in such manner and in such place as will conform with all applicable Federal, State, and local regulations governing the disposal of such materials.

It shall be the Contractor's responsibility to provide documentation to the Resident that all hazardous or toxic materials were disposed of in an acceptable manner. The documentation shall consist of truck manifests, weigh-bills, or such other documentation that may be acceptable to the Resident. The documentation shall show the method and site used and the quantity of material disposed of.

Prior to starting the surface preparation and/or painting of structures, the Contractor shall submit his proposed containment and pollution control measures for the Resident's review. The proposal shall be sufficiently detailed to show that conformance with the requirements specified herein or elsewhere in the Contract will be achieved. See Special Provision Subsections 105.2.4.2, 506.08(D), and 506.08(E) for additional requirements.

Hazardous waste shall not be placed or accumulated on unprotected ground or released to waters of the State. Work areas shall be adequately shielded at all times to prevent dispersion of debris by wind or rain. All of the Contractor's equipment and storage areas used for the handling and storage of hazardous waste and hazardous materials shall be placed on an impervious surface in accordance with Maine DEP's Handbook for Hazardous Waste Generators. Any evidence of improper storage and handling shall be cause for immediate suspension of work in progress, and work will not be allowed until corrective actions are taken. Emergency procedures to be taken in the event of a release of hazardous material to the environment shall be part of the Contractor's Spill Prevention, Control and Countermeasures Plan that is required in accordance with Special Provision Subsection 105.8.1.

Non-compliance may expose the Contractor to fines assessed by DEP/EPA for failing to comply with Federal, State, or local regulations. The Contractor shall not be granted additional Contract time for suspensions of work due to non-compliance.

506.72 Containment Enclosure

Prior to starting the surface preparation and/or painting of structures, the Contractor shall submit his proposed Containment Plan to the Resident for review. The Containment Plan shall address the Contractor's proposed containment and pollution control measures, in conformance

with the requirements of this section and Subsection 506.08(D). The Containment enclosure(s) shall meet the criteria for the Class stipulated by the MaineDOT for the Contractor's surface preparation methods and in accordance with SSPC Guide 6, Guide for Containing Debris Generated during Paint Removal Operations.

Draped tarpaulins without any structural supports are not acceptable as a containment system for paint removal and cleaning debris. The minimum containment system that will be considered for review shall consist of platforms and side curtains fully enclosing the work area. Structural components within the containment system which utilize friction connections in tension members or non-redundant fasteners in tension members will not be approved

The Contractor's choice of equipment or system used for the collection of the paint removal and cleaning debris will be reviewed by the Resident to determine its suitability for the intended purpose and its probable environmental impact.

In the event that wind speeds at the site exceed the design wind speed for the containment enclosure(s), the Contractor shall immediately suspend use of and make provisions to properly relieve the containment wind loading. The process for relieving the wind loading shall not release any of the lead paint waste or blast-cleaning debris. The Contractor may redesign the containment enclosure(s) or suspend operations until the actual wind speeds fall to levels below the design wind speed. The cost of all wind monitoring shall be incidental to the Contract items. Any release of pollutants from the containment enclosure(s) to the surrounding environment due to containment failure requires the immediate suspension of work, clean-up of pollutants, and notification of appropriate authorities. Prior to resuming work, the Contractor shall take appropriate action to abate the discharge and obtain concurrence from the Resident on a plan of action to prevent reoccurrence. The costs of all delays, clean-up, modification of the containment structure and process, to prevent reoccurrence shall be borne in their entirety by the Contractor. Any delays due to the suspension of work due to high winds or containment failure as described above shall not relieve the Contractor from completing work on time.

Personnel working in a containment structure may be exposed to health hazards. The Contractor shall be responsible for supplying adequate protection for all personnel required to be in the containment structure. See Subsections 506.80 through 506.83 for specific requirements.

If the Resident deems emissions from the containment enclosure are unacceptable, all pressure washing, blasting or painting operations shall cease until the problem is resolved.

LEAD HEALTH PROTECTION

506.80 Description

The existing structural components on this Project are coated with lead-based paint. Any work which disturbs the paint coating may expose workers to health hazards. The Contractor is fully responsible for the protection of his employees, his subcontractor's employees, and Authority personnel and their representatives from exposure to lead under OSHA regulations.

The Contractor shall prepare and submit a written site specific Health and Safety Plan to the Resident. Requirements for the Health and Safety Plan are specified in Special Provision Subsections 105.2.4.2, Lead Paint, and 506.08(G).

Typical work tasks that pose a lead exposure risk consist of, but are not necessarily limited to, welding, burning paint, flame cutting, abrasive blast cleaning, grinding, chipping, needle gun cleaning, lead burning, manual scraping and sanding, manual demolition of structures, heat gun cleaning, peening on existing structural steel, abrasive blast cleaning debris cleaning, using lead containing mortar, abrasive blasting enclosure movement and removal, power tool cleaning, lead removal equipment cleaning, decontamination trailer cleaning, rehabilitation of existing structural steel, gouging, and rivet busting.

All Projects where employee lead exposure without regard to the use of respirators, may exceed the action level, that is employee exposure to an airborne concentration of lead of 50 micrograms per cubic meter of air ($50 \mu\text{g}/\text{m}^3$) averaged over an eight hour period (i.e., removal of paint containing lead, etc.) must have a decontamination facility and hand-wash facility on-site and available for use by the designated staff.

Authority personnel or their representatives shall be allowed access to each work site covered by the provisions of the Health and Safety Plan and shall be furnished upon request with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

506.81 Protection Devices

A. Protective Equipment:

Respiratory protective equipment shall conform to 42 CFR Part 84, OSHA Standard for Lead in Construction 29 CFR Part 1910.134, and 29 CFR Part 1926.62. Protective clothing shall be in conformance with 29 CFR Parts 1910.132 and 1910.133. The minimum protective clothing required shall be head covering, coveralls (reusable or disposable clothing), gloves, dedicated work-boots or disposable over-boots, eye protection, hearing protection, and hardhat.

B. Hand-Wash Facility:

The number of facilities to be provided will be dictated by the site(s) and approved by the Resident. Each facility shall be equipped with hot and cold clean water, hand soap or similar cleansing agents, individual hand towels or sections made of cloth or paper, warm air blowers or clean individual sections of continuous cloth toweling which the workers will use to wash and dry their hands, face and exposed skin prior to eating, drinking, smoking or applying cosmetics. Each facility shall be located as close to the work site as physically possible. Ownership of and liability for the facility shall remain with the Contractor throughout the duration of the Project. The facility shall comply with 29 CFR Part 1926.51.

Any wastewater generated shall be filtered/treated to be acceptable to current state and/or local standards for direct discharge into the existing public wastewater system.

Each facility shall be kept in a sanitary condition and clean as defined in the most recent OSHA requirements. At a minimum, the facility shall be cleaned after every shift in which it is used.

C. Decontamination Facility:

Facility(s) shall comply with 29 CFR Part 1926.51. The number of facilities to be provided will be dictated by the site(s) and approved by the Resident. The facility shall be located as close to the work site as physically possible. If the Contractor is unable to locate the decontamination facility close to specific work area, a designated shuttle vehicle shall be provided. This vehicle shall be classified as contaminated and shall remain at the jobsite in the decontamination zone. The vehicle shall be operated and maintained to eliminate cross-contamination with the support zone. The vehicle shall be cleaned as defined in the most recent OSHA protocols. Ownership of and liability for the facility and shuttle vehicle shall remain with the Contractor throughout the duration of the Project.

Any wastewater generated shall be filtered/treated to be acceptable to current state and/or local standards for discharge into the existing public wastewater system.

506.82 Construction Methods

The Contractor shall submit a written site-specific Health and Safety Plan to the Resident a minimum of two (2) weeks prior to performing any work on the structure(s). See Subsections 105.2.4.2, Lead Paint, and 506.08(G) for requirements for the Health and Safety Plan.

506.90 Method of Measurement

Surface Preparation of Existing Structural Steel Girders, excluding surface preparation of G-1 to G-4 Southbound beam ends and G-13 to G-16 Northbound beam ends, shall be measured for payment by lump sum, complete, and accepted. The limits shall be as shown on the Plans.

Field Painting of Existing Structural Steel Girders, excluding field painting of G-1 to G-4 Southbound beam ends and G-13 to G-16 Northbound beam ends, shall be measured for payment by lump sum, complete, and accepted. The limits shall be as shown on the Plans.

Containment System and Pollution Control Measures, excluding containment system and pollution control measures for G-1 to G-4 Southbound beam ends and G-13 to G-16 Northbound beam ends, shall be measured for payment by the lump sum, consisting of all work previously described, completed, and accepted.

Disposal of Hazardous or Toxic Material, excluding disposal of hazardous or toxic material for G-1 to G-4 Southbound beam ends and G-13 to G-16 Northbound beam ends, shall be measured for payment by the lump sum, consisting of all work previously described, completed, and accepted.

Preparation and Painting of Beam Ends for G-1 to G-4 Southbound and G-13 to G-16 Northbound shall be measured for payment by lump sum, complete, and accepted. The work shall include surface preparation, field painting, containment system and pollution control measures, and disposal of hazardous or toxic material of the sixteen identified beam ends. The limits shall be as shown on the Plans.

Lead Health Protection will not be measured for payment, and shall be incidental to the Contract.

The Contractor's full time Quality Control Inspector will not be measured separately for payment but shall be incidental to the Surface Preparation of Existing Structural Steel and Field Painting of Existing Structural Steel pay items.

506.91 Basis of Payment

All work for Surface Preparation of Existing Structural Steel Girders will be paid for at the Contract lump sum price. Payment will be full compensation all surface preparation, materials, labor, equipment, additional scaffolding, the full time Quality Control Inspector, and incidentals necessary for the satisfactory performance of the work. Progress payments will be prorated on the percentage of surface preparation completed each pay period.

All work for Field Painting of Existing Structural Steel Girders will be paid for at the Contract lump sum price. Payment will be full compensation all field painting, materials, labor, equipment, additional scaffolding, the full time Quality Control Inspector, and incidentals necessary for the satisfactory performance of the work. Progress payments will be prorated on the percentage of field painting completed each pay period.

Containment System and Pollution Control will be paid for at the Contract lump sum price which price shall be full compensation for furnishing all materials, labor, equipment, testing and incidentals necessary for the satisfactory performance of the above work. Progress payments will be prorated on the percentage of the containment and pollution control system satisfactorily installed each pay period.

Disposal of Hazardous or Toxic Material will be paid for at the Contract lump sum price, which price shall be full compensation for all permits, tests, transportation, tipping fees, and incidentals necessary for the satisfactory performance of the above work. Progress payments will be prorated on the percentage of surface preparation completed each pay period.

Containment, Prep, Disposal and Painting of Beam Ends will be paid for at the Contract lump sum price which price shall be full compensation for all surface preparation, field painting, containment system and pollution control measures, and disposal of hazardous or toxic material of the sixteen identified beam ends. The limits shall be as shown on the Plans. Progress payments will be prorated on the number of beam ends field painted each pay period.

Payment will be made under:

<u>Pay Items</u>	<u>Pay Unit</u>
506.141 Field Painting of Existing Structural Steel Girders	Lump Sum
506.17 Surface Preparation of Existing Structural Steel Girders	Lump Sum
506.9108 Containment System and Pollution Control	Lump Sum
506.9109 Disposal of Hazardous or Toxic Material	Lump Sum
506.9110 Containment, Prep, Disposal and Painting of Beam Ends	Lump Sum

SPECIAL PROVISION

SECTION 526

CONCRETE BARRIER

(Temporary Concrete Barrier Type I - Supplied by Authority)

526.01 Description

The following paragraphs are added:

This work shall consist of loading, transporting, setting, resetting, removing, transporting and stacking temporary concrete barrier Type I – supplied by Authority of a shape designated on the Plans, or as approved by the Resident. The barrier shall have attachments allowing individual sections to be connected into a continuous barrier.

The work also includes supplying connecting pins and furnishing and mounting retro-reflective delineators, per Subsection 526.03, on both Contractor-supplied and Authority-supplied temporary concrete barriers.

Concrete barriers supplied by Authority shall be available at the following location(s):

<u>Maintenance Area</u>	<u>Linear Feet of Barrier</u>
Crosby Maintenance Area Mile 46 Southbound	800 (on Contract award date)
Crosby Maintenance Area Mile 46 Southbound	900 (on or before 4/30/14)

Upon substantial completion of work, the Contractor shall remove and transport the concrete barrier - supplied by Authority to back to the Crosby Maintenance Area.

526.02 Materials

The following paragraphs are added:

- e. Delineators shall be bi-directional with a minimum effective reflective area of eight square inches as approved by the Resident. The reflectors shall be methyl methacrylate and the housing of acrylonitrile butadiene styrene. Color shall be in accordance with the MUTCD.
- f. Connecting pins shall be a one inch diameter A36 steel hot rolled round rod that has a 4” long 180 degree bend at the top (“J” shaped). The rod shall be 2’-11” long pre-bend and 2’-7” long post bend.

526.021 Acceptance

The Resident shall have the authority to accept or reject all temporary concrete barrier Type I and temporary concrete barrier Type I – supplied by Authority used on the Project.

526.03 Construction Requirements

The following paragraphs are added:

The Contractor shall notify the Resident prior to the scheduled pick-up and delivery of concrete barrier. No barrier shall be removed from or stacked at the Turnpike Maintenance Area without approval of the Resident.

The Contractor shall move and place barrier-utilizing methods that will not damage the barrier. Barrier that is damaged by the Contractor by failing to use proper methods shall be replaced by the Contractor at no additional cost to the Maine Turnpike Authority.

The Contractor shall provide and install 3/4 inch plywood under the full width and length of concrete barrier that is installed on the Saco River bridges. Plywood is not required on barrier installed off of the bridge decks.

Concrete barrier supplied by the Authority consists of several different styles. Not all barriers may be compatible. The Contractor shall utilize caution when setting barrier to use identical barrier types as adjacent barrier. Non-compatible barrier that cannot be attached together shall be overlapped by a minimum of 10 feet with the blunt end on the non-traffic side of the barrier. This work will not be measured separately for payment, but shall be incidental to the concrete barrier.

Concrete barrier placed at roadway low points shall be shimmed on 1" by 2" by 2' long wood planks to allow drainage to pass under the barrier. In addition, the Resident may direct the Contractor to shim the concrete barrier at other locations to provide for proper roadway drainage. All labor, material, and equipment necessary to shim the barrier will not be measured separately for payment, but shall be incidental to the Concrete Barrier.

Pins connecting the barrier shall be set flush with the top of the barrier.

The removal of concrete barrier from adjacent to the travel lane may be conducted without a lane closure if it is accomplished in accordance with the following requirements:

- Barrier is removed from the trailing end and the workmen and equipment involved in the operation are always behind the barrier. No workmen or equipment shall enter the travel lane.
- Barrier shall be dragged away from the travel lane to at least a 30-degree angle by the use of a cable.
- Barrier shall be lifted no more than six inches while within 10 feet of the travel lane.

Retro-Reflective Delineators shall be mounted as follows:

- One on top of each barrier.
- One on the traffic side of every barrier used in a taper.
- One on the traffic side of every other barrier at regularly spaced intervals and locations.
- Delineators shall be installed on both sides of the barrier if barrier is used to separate opposing traffic.

- Delineators shall be physically adhered so as to withstand the force of throw from a snow plow.
- If more than 25% of delineators in any 50 foot section of barrier fall off for any reason, the Contractor will be responsible for reinstalling all the delineators in that run at that their own cost.
- Contractor is required to submit the installation method for review and approval to the Resident.

526.04 Method of Measurement

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority shall be measured for payment by the lump sum.

The loading, transporting, setting, resetting, removing, transporting and stacking of the barrier; the furnishing, installation and maintenance of the barrier delineators; the furnishing, installation, maintenance, and removal of 3/4 inch plywood under the barrier installed on the bridge decks; and furnishing and installing connector pins will not be measured separately for payment, but shall be incidental to the cost of the Barrier. Temporary storage of Concrete Barrier between construction phases, if required, will not be measured separately for payment, but shall be incidental to the cost of the Barrier. All equipment required to load, unload, transport and stack Concrete Barrier shall be supplied by the Contractor.

Any Barrier lost or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the Authority.

526.05 Basis of Payment

The fifth paragraph is deleted and not replaced.

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority will be paid for at the Contract lump sum price, complete in place. Such payment shall be full compensation for loading, transporting, setting, resetting, temporary storage, removing, transporting and stacking at the area designated, furnishing all materials, and all other incidentals necessary to complete the work. Temporary Concrete Barrier Type I – Supplied by Authority and all connecting pins shall remain the property of the Authority, and shall be returned to the Turnpike Maintenance Area as designated in Subsection 526.01.

Payment of Concrete Barrier shall be based on a percentage of the work accomplished during that pay period.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
526.306 Temporary Concrete Barrier, Type I – Supplied by the Authority	Lump Sum

SPECIAL PROVISION

SECTION 527

ENERGY ABSORBING UNIT

(Work Zone Crash Cushion)

527.01 Description

The first paragraph is deleted in its entirety and replaced with the following:

The Contractor shall furnish and install work zone crash cushions where shown on the Plans, as specified herein, in Special Provision 652, or as approved by the Resident. Work zone crash cushions are required at each exposed end of temporary concrete barrier or guardrail.

The exposed end of the concrete barrier within 30 feet of the mainline travel lane shall be protected at all times. Barrier shall not be reset until after the work zone crash cushion(s) has been set to protect the exposed end of the barrier.

527.02 Materials

The following paragraph is added:

Only work zone crash cushions meeting the NCHRP Report 350 TL-3 crash test requirements may be used on the turnpike and local roadways with posted speeds of 45 MPH or greater. Work zone crash cushions meeting the NCHRP Report 350 TL-2 crash test requirements may be used on local roadways with posted speeds of 40 MPH or less. The Contractor shall provide the Resident with documentation of the proposed work zone crash cushion's NCHRP Report 350 Crash Test Results prior to installation at the jobsite.

527.03 Construction Requirements

The following is added to the end of the first paragraph:

The design speeds for work zone crash cushions shall be 35 mph for local roads and 65 mph for turnpike roadways unless otherwise noted on the Plans.

527.05 Basis of Payment

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
527.341 Work Zone Crash Cushions – TL-3	Unit

SPECIAL PROVISION

SECTION 619

MULCH

619.01 Description

The first paragraph is modified by the addition of the following:

“as a temporary or permanent erosion control measure” after the word “mulch”.

619.03 General

The first paragraph is deleted and replaced with the following:

Cellulose fiber mulch shall not be used within 200 feet of a wetland or stream. The limits shall be 200 feet upstation and downstation of the wetland or streams as well as the slopes adjacent to the stream. The application of hay or straw mulch with an approved binder shall be used at these locations to prevent erosion.

The use of cellulose fiber mulch will only be allowed at other areas with the approval of the Resident. The Contractor may be required to demonstrate that the material may be applied in a manner that will prevent erosion and will aid in the establishment of permanent vegetation. The Resident reserves the right to require the use of hay or straw mulch at all locations if he determines that the cellulose mulch is ineffective. Cellulose fiber mulch is not acceptable for winter stabilization.

619.04 Applying Mulch

The third paragraph is deleted and replaced with the following:

Newly disturbed earth and ditches shall be mulched or otherwise stabilized by the end of each work day and maintained on a daily basis as described in Subsection 105.8.1.11 (b) in the Special Provisions. The Contractor is responsible for applying temporary mulch as necessary, in accordance with the latest edition of the BMP's, to minimize soil erosion prior to the application of the final slope treatment.

Temporary mulch applied during the winter months of November 1st through April 15th shall be applied at twice the standard temporary stabilization rate or 150 lbs. per 1,000 square feet or three tons/acre. Mulch shall not be spread on top of snow and shall be anchored with mulch netting on slopes steeper than eight percent unless erosion control blankets or erosion control mix is being used on the slopes.

The Contractor shall review his construction operations and staging to determine how much temporary mulching is required.

619.06 Method of Measurement

The following sentence is added:

Temporary Mulch will be paid for by the lump sum.

619.07 Basis of Payment

The following paragraphs are added:

Temporary Mulch will be paid for at the Contract price per lump sum which shall be full compensation for furnishing and spreading the Temporary Mulch as many times as necessary as determined by the Contractor's operations and staging. The price shall also include the additional mulch netting and snow removal necessary during the winter months.

Payment will be made under:

Pay Item

Pay Unit

619.1202 Temporary Mulch

Lump Sum

SPECIAL PROVISION

SECTION 627

PAVEMENT MARKINGS

(Temporary Pavement Markings - Tape)

627.01 Description

The following sentence is added:

This work shall also consist of furnishing, placing, maintaining and removing temporary pavement marking tape at locations shown on the Plans or as directed by the Resident.

627.02 Materials

The following sentence is added:

Temporary pavement marking tape shall be Stamark Wet Reflective Removable Pavement Marking Tape Series 710 as manufactured by 3M of St. Paul, Minnesota.

627.04 General

The following paragraphs are added:

Work under this item shall be in accordance with the manufacturer's recommendations. A factory representative from 3M shall be present for the first application of all temporary pavement marking tape to insure proper application and product performance.

The pavement markings shall be applied mechanically to clean dry pavement as recommended by the manufacturer and approved by the Resident.

Temporary pavement markings shall consist of applying six inch solid white, six inch broken white, and six inch yellow reflectorized pavement marking tape for traffic maintenance during construction as shown on the Plans or as directed by the Resident.

Temporary pavement marking tape that loses reflectivity, becomes broken, dislodged or missing during the life of the Contract shall be replaced by the Contractor at no additional cost to the Authority.

627.06 Application

The following paragraphs are added:

For application of the tape, when the pavement temperature is below 50°F, heat shall be applied to the pavement surface, if deemed necessary by the factory representative or as directed by the Resident, at no additional cost to the Authority. Proper primer for the temperatures shall be used as directed by the manufacture.

The pavement mark tape shall be rolled over with a vehicle once application is complete and then scored every 20 feet when placed in long runs to prevent full length unraveling.

627.08 Removing Lines and Markings

The following sentence is added:

Removal of temporary pavement marking tape shall be accomplished without the use of heat, solvents, grinding or sandblasting and in such a manner that no damage to the pavement results.

627.09 Method of Measurement

The following paragraph is added:

Temporary Pavement Markings - Tape will be measured for payment by the linear foot. The measurement of broken lines will not include the gaps.

627.10 Basis of Payment

The following paragraphs are added:

Payment for the Temporary Pavement Markings - Tape will be made at the Contract bid price per linear foot, which price shall include furnishing, installing, maintaining and removing the temporary tape and all materials, labor, equipment and incidentals necessary to accomplish the work. Replacement of Temporary Pavement Markings - Tape, as described above, will be incidental and no separate payment will be made.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
627.73	Temporary 6 Inch Pavement Marking Tape	Linear Foot

SPECIAL PROVISION

SECTION 627

PAVEMENT MARKINGS

(Temporary Pavement Markings – Black Tape)

627.01 Description

The following sentence is added:

This work shall also consist of furnishing, placing, maintaining and removing temporary black pavement marking tape at locations shown on the Plans or as directed by the Resident. Temporary 6 Inch Black Pavement Marking Tape shall be used to cover conflicting existing pavement marking paint.

627.02 Materials

The following sentence is added:

Temporary pavement marking tape shall be Stamark Removable Black Line Mask Tape Series 715 as manufactured by 3M of St. Paul, Minnesota.

627.04 General

The following paragraphs are added:

Work under this item shall be in accordance with the manufacturer's recommendations. A factory representative from 3M shall be present for the first application of all temporary pavement marking tape to insure proper application and product performance.

The pavement markings shall be applied mechanically to clean dry pavement as recommended by the manufacturer and approved by the Resident.

Temporary pavement markings shall consist of applying six inch solid black pavement marking tape for traffic maintenance during construction as shown on the Plans or as directed by the Resident. The tape shall be cut to the varying lengths necessary to cover the conflicting painted pavement marking.

Temporary pavement marking tape that becomes broken, dislodged or missing during the life of the Contract shall be replaced by the Contractor at no additional cost to the Authority.

627.06 Application

The following paragraphs are added:

For application of the tape, when the pavement temperature is below 50°F, heat shall be applied to the pavement surface, if deemed necessary by the factory representative or as directed

by the Resident, at no additional cost to the Authority. Proper primer for the temperatures shall be used as directed by the manufacture.

The pavement mark tape shall be rolled over with a vehicle once application is complete and then scored every 20 feet to prevent full length unraveling.

627.08 Removing Lines and Markings

The following sentence is added:

Removal of temporary pavement marking tape shall be accomplished without the use of heat, solvents, grinding or sandblasting and in such a manner that no damage to the pavement results.

627.09 Method of Measurement

The following paragraph is added:

Temporary Pavement Markings - Tape will be measured for payment by the linear foot placed. The measurement of broken lines will not include the gaps.

627.10 Basis of Payment

The following paragraphs are added:

Payment for the Temporary Pavement Markings - Tape will be made at the Contract bid price per linear foot installed, which price shall include furnishing, installing, maintaining and removing the temporary tape and all materials, labor, equipment and incidentals necessary to accomplish the work. Replacement of Temporary Pavement Markings - Tape, as described above, will be incidental and no separate payment will be made.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
627.731	Temporary 6 Inch Black Pavement Marking Tape	Linear Foot

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(General)

652.2 Materials

Delete the first sentence in the second paragraph and replace with the following:

Super high intensity fluorescent retro reflective sheeting, ASTM 4956 – Type VII, Type VIII, or Type IX (Prismatic), is required on all construction signs.

652.2.3 Flashing Arrow Board

This Subsection is deleted and replaced with the following:

Flashing Arrow Panels (FAP) must be of a type that has been submitted to AASHTO's National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportation's Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels.

FAP units shall meet requirements of the current Manual on Uniform Traffic Control Devices (MUTCD) for Type "C" panels as described in Section 6F.56 - Temporary Traffic Control Devices. An FAP shall have matrix of a minimum of 15 low-glare, sealed beam, Par 46 elements capable of either flashing or sequential displays as well as the various operating modes as described in the MUTCD, Chapter 6-F. If an FAP consisting of a bulb matrix is used, each element should be recess-mounted or equipped with an upper hood of not less than 180 degrees. The color presented by the elements shall be yellow.

FAP elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. FAP shall be at least 2.4 M x 1.2 M [96" x 48"] and finished in non-reflective black. The FAP shall be interpretable for a distance not less than 1.6 km [1 mile].

Operating modes shall include, flashing arrow, sequential arrow, sequential chevron, flashing double arrow, and flashing caution. In the three arrow signals, the second light from the arrow point shall not operate.

The minimum element on-time shall be 50 percent for the flashing mode, with equal intervals of 25 percent for each sequential phase. The flashing rate shall be not less than 25 nor more than 40 flashes per minute. All on-board circuitry shall be solid state.

Primary power source shall be 12 volt solar with a battery back-up to provide continuous operation when failure of the primary power source occurs, up to 30 days with fully charged batteries. Batteries must be capable of being charged from an onboard 110 volt AC power source and the unit shall be equipped with a cable for this purpose.

Controller and battery compartments shall be enclosed in lockable, weather-tight boxes. The FAP shall be mounted on a pneumatic-tired trailer or other suitable support for hauling to various locations, as directed. The minimum mounting height of an arrow panel should be 2.1 M [7 feet] from the roadway to the bottom of the panel.

The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers.

A portable changeable message sign may be used to simulate an arrow panel display.

652.2.4 Other Devices

The eighth paragraph is deleted and replaced with Special Provision Section 652, Maintenance of Traffic (Portable Changeable Message Sign).

652.2.5 Safety Vests

This Subsection is amended by the addition of the following:

All jobsite personnel shall wear a safety vest labeled as ANSI 107-2004 standard performance for Class 3 risk exposures. This requirement also applies to truck drivers and equipment operators when out of an enclosed cab.

652.2.6 Signs

The use of temporary plaques to cover text or to change text will not be allowed. All signs shall have a uniform face.

652.4 Flaggers

The first paragraph shall be deleted and replaced 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 MaineDOT and administered by a MaineDOT-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer. Flaggers shall wear safety apparel meeting ANSI 107-2004 Class 3 risk exposure that clearly identifies the wearer as a person, and is visible at a minimum distance of 300 m [1000 ft], and shall wear a hardhat with 360° retro-reflectivity. Retro-reflective or flashing SLOW/STOP paddles shall be used, and the flagger station shall be illuminated to assure visibility in accordance with 652.6.2.

Second paragraph, first sentence; change "...have sufficient distance to stop before entering the workspace." to "...have sufficient distance to stop at the intended stopping point." Third sentence; change "At a spot obstruction..." to "At a spot obstruction with adequate sight distance,..."

Delete the fourth paragraph and replace with the following: Flaggers shall be provided as a minimum, a 10 minute break, every two hours and a 30 minute or longer lunch period away

from the work station. Flaggers may only receive one unpaid break per day; all other breaks must be paid. Sufficient certified flaggers shall be available onsite to provide for continuous flagging operations during break periods. If the flaggers are receiving the appropriate breaks, breaker flagger(s) shall be paid starting two hours after the work begins and ending two hours before the work ends. A maximum of one breaker per six flaggers will be paid. (One breaker flagger for two to six flaggers, two breaker flaggers for seven to 12 flaggers, etc)”.

652.6 Night Work

This Subsection shall be deleted and replaced with the following:

652.6.1 Daylight Work Times

Unless otherwise described in the Contract, the Contractor is allowed to commence work and end work daily according to the Sunrise/Sunset Table at: <http://www.sunrisesunset.com/usa/Maine.asp>. If the Project town is not listed, the closest town on the list will be used as agreed at the Preconstruction Meeting. Any work conducted before sunrise or after sunset will be considered Night Work.

652.6.2 Night Work

When Night Work occurs (either scheduled or unscheduled), the Contractor shall provide and maintain lighting on all equipment and at all work stations.

The lighting facilities shall be capable of providing light of sufficient intensity to permit good workmanship, safety and proper inspection at all times. The lighting shall be cutoff and arranged on stanchions at a height that will provide perimeter lighting for each piece of equipment and will not interfere with traffic, including commercial vehicles, approaching the work site from either direction.

The Contractor shall have available portable floodlights for special areas.

The Contractor shall utilize padding, shielding or other insulation of mechanical and electrical equipment, if necessary, to minimize noise, and shall provide sufficient fuel, spare lamps, generators, etc. to maintain lighting of the work site.

The Contractor shall submit, as a subset of the Traffic Control Plan, a lighting plan at the Preconstruction Conference, showing the type and location of lights to be used for night work. The Resident may require modifications be made to the lighting set up in actual field conditions.

Prior to beginning any Night Work, the Contractor shall furnish a light meter for the Residents use that is capable of measuring the range of light levels from 5 to 20 foot-candles.

Horizontal illumination, for activities on the ground, shall be measured with the photometer parallel to the road surface. For purposes of roadway lighting, the photometer is placed on the pavement. Vertical illumination, for overhead activities, shall be measured with the photometer perpendicular to the road surface. Measurements shall be taken at the height and location of the overhead activity.

Night Work lighting requirements:

Mobile Operations: For mobile-type operations, each piece of equipment (paver, roller, milling machine, etc) will carry indirect (i.e. balloon type) lights capable of producing at least 10 foot-candles of lighting around the work area of the equipment.

Fixed Operations: For fixed-type operations (flaggers, curb, bridge, pipes, etc.), direct (i.e. tower) lighting will be utilized capable of illuminating the work area with at least 10 foot-candles of light.

Hybrid Operations: For hybrid-type operations (guardrail, sweeping, Inslope excavation, etc.), either direct or indirect lighting may be utilized. The chosen lights must be capable of producing at least 10 foot-candles of light around the work area of the equipment.

Inspection Operations: Areas required to be inspected by the Department will require a minimum of five foot-candles of lighting. This may be accomplished through direct or indirect means.

All workers shall wear safety apparel labeled as meeting the ANSI 107-2004 standard performance for Class 3 risk exposure.

The Contractor shall apply two inch wide retro-reflective tape, with alternating red and white segments, to outline the front back and sides of construction vehicles and equipment, to define their shape and size to the extent practicable. Pickup trucks and personal vehicles are exempt from this requirement. The Contractor shall furnish approved signs reading "Construction Vehicle - Keep Back" to be used on trucks hauling to the Project when such signs are deemed necessary by the Resident. The signs shall be a minimum of 30 inches by 60 inches, Black and Orange, ASTM D 4956 - Type VII, Type VIII, or Type IX (prismatic).

All vehicles used on the Project, including pickup trucks and personal vehicles, shall be equipped with amber flashing lights, visible from both front and rear, or by means of single, approved type, revolving, flashing or strobe lights mounted so as to be visible 360°. The vehicle flashing system shall be in continuous operation while the vehicle is on any part of the Project.

The 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. Failure to follow the approved Lighting Plan will result in a Traffic Control violation.

Payment for lighting, vehicle mounted signs and other costs accrued because of night work will not be made directly but will be incidental to the related Contract items.”

652.63 Traffic Coordinator

The Contractor shall submit to the Resident for approval a list of traffic control personnel assigned to the Project including qualifications, certifications and experience.

The Traffic Coordinator duties shall include, but are not necessarily limited to:

- a. Developing, in conjunction with the Resident and Project Superintendent, a traffic control program for the days' work activities which will facilitate traffic in a safe and efficient manner;
- b. Insure that all traffic control implements (signs, arrow boards, barrels, etc.) are on-site so the traffic program can be implemented effectively;
- c. Insure a safe and effective setup or take-down of all signing implements to least impact the traveling motorist; and,
- d. Working knowledge of construction signing/traffic control requirements in conformance with the latest issued Manual on Uniform Traffic Control Devices.

652.8.2 Other Items

The first paragraph is replaced with the following:

“The accepted quantities of flagger hours will be paid for at the Contract unit price per hour for each flagging station occupied excluding lunch breaks, and for each approved breaker flagger. Overtime hours, as reported on the certified payrolls, will be paid an additional 30% of the bid price for 652.38. The computation and additional payment for overtime hours will occur during the Project closeout process and will be paid as additional hours of 652.38 to the nearest 1/4 hour. The Contract unit price shall be full compensation for hiring, transporting, equipping, supervising, and the payment of flaggers and all overhead and incidentals necessary to complete the work.”

The last paragraph is replaced with the following:

“There will be no payment made under any 652 pay items after the expiration of the adjusted total Contract time.”

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Specific Project Maintenance of Traffic Requirements)

This Specification describes the specific project maintenance of traffic requirements for this Project.

Lane Closures and shoulder closures shall be removed if construction is not ongoing. Unattended lane closures are not allowed.

Maine Turnpike Traffic Control Requirements – Saco River

Permanent lane shifts have been designed to permit the Contractor to work behind concrete barrier for the Project duration. The three lane northbound and southbound traffic shifts shall be in place prior to temporary concrete barrier being set in place. Double lane closures shall be used to install the lane shifts. The use of a single lane closure shall be in place to install the temporary concrete barrier. The northbound and southbound right shoulder shall be closed once the three lane shift is installed.

Temporary lane closures shall be removed daily or when work is not ongoing.

Lane closures are only allowed at the Saco River Bridges during the times noted in Table A in **Appendix B**. Lane closures are not permitted during holiday periods. Holiday periods are not noted in Table A.

Lane Closures shall be removed if construction is not ongoing. Unattended lane closures are not allowed.

652.7 Method of Measurement – Saco

The following paragraph is added:

Traffic control devices required to complete the work will be measured for payment under their respective pay items. Installation, maintenance, and removal of traffic setups and the Contractor's dedicated traffic employee will not be measured separately for payment, but shall be incidental to Item 652.361, Maintenance of Traffic Control Devices.

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Temporary Mainline Lane Closures)
(Lane Closure Installation and Removal Procedures)
(Temporary Mainline Shoulder Closures)
(Work Requiring Complete Stoppages of Traffic)
(Short-Term or Work Hour Speed)

This Section outlines the minimum requirements that shall be maintained for working on, over, or adjacent to the Maine Turnpike roadway.

General

Two travel lanes in each direction (each direction being 24 feet wide excluding shoulder) in the non-widened portion of the turnpike, and three travel lanes in each direction (each direction being 36 feet wide excluding shoulder) in the widened portion of the turnpike (Mile 0.0 to Mile 44.3) shall be maintained at all times except while performing work in a designated lane, directly over or adjacent to traffic, and during the placement and removal of traffic control devices.

Temporary Mainline Lane Closures

A minimum width of 15 feet is required for all lane closures.

A lane closure is required when a danger to the traveling public may exist. The potential of any material falling onto the roadway shall be considered a potential danger. This shall include, but not necessarily be limited to, demolition debris, water, tools, equipment and materials.

A lane closure will be required whenever men or equipment will be present within four feet of a travel lane. Dump trucks shall be parked at least six (6) feet from the travel lane when being loaded. Temporary lane closures will only be allowed at the times outlined in Special Provision Section 652, Specific Project Maintenance of Traffic Requirements. These hours may be adjusted based on the traffic volume each day by the Resident.

The lane closure setup may not begin until the beginning time specified. Lane closures that are setup early or that remain in place outside of the approved period shall be subject to a lane rental fee of \$500 per five minutes for every five minutes outside of the approved time. The actual restriction of a travel lane by an arrow board or other traffic control device shall be a lane closure. Construction signs shall be installed immediately prior to the start of the lane closure and shall be promptly removed when no longer required. The installation and removal of a lane closure including signs, channelizing devices and arrow boards shall be a continuous operation. The Authority reserves the right to order removal of an approved lane closure.

The Authority desires to minimize the number of daytime lane closures and the number of times that a complete stoppage of traffic is required. The Contractor is encouraged to schedule his work so that the interference with the flow of traffic will be minimized. Lane closures will not be allowed until traffic associated with complete stoppages of traffic has cleared. Complete stoppages of traffic or lane closures may not be allowed on a particular day if another complete stoppage of traffic has been previously approved for another project.

The following is a partial list of activities requiring lane closures. Lane closures may be required for other activities as well:

- Installation of traffic Loading of trucks within four feet of a travel lane.
- Bridge construction activities adjacent to a travel lane.
- Construction of stabilized construction entrances.

Lane closures shall be removed if work requiring the lane closure is not ongoing unless included in the Contract as a long-term traffic control requirement or approved by the Resident.

The Resident is required to receive approval from the Maine Turnpike Authority for all lane closures. The request shall be submitted to the Authority by the Resident at least two (2) working days prior to the day of the requested lane closure. All requests must be received by 12:00 p.m. to be considered as received on that day. Requests received after 12:00 p.m. shall be considered as received the following day. The Contractor shall plan the work accordingly.

Lane Closure Installation and Removal Procedure

The Contractor will follow the following procedures when closing any travel lanes on the turnpike roadways:

1. The sign package shall be erected starting with the first sign and proceeding to the start of the taper. The sign crew shall erect signs with the vehicle within the outside shoulder;
2. Position the arrow board with the proper arrow at the beginning of the taper; and,
3. When arrow board is in place, continue with the drums/cones to secure the work area.

To dismantle the lane closure, start with last drums/cone placed and work in reverse order until all the drums are removed. The arrow board which was installed first shall be the final traffic control device removed, excluding the sign package. The remaining sign package shall be picked-up starting with the first sign placed and continuing in the direction of traffic and with the vehicle in the outside shoulder.

Temporary Mainline Shoulder Closures

Temporary mainline shoulder closures will only be allowed as outlined in Special Provision Section 652, Specific Project Maintenance of Traffic Requirements. Temporary shoulder closures are anticipated at locations where Contractor access to the mainline is required.

Temporary shoulder closures with plastic drums shall be removed at the end of the workday. Temporary shoulder closures with plastic drums will not be allowed during periods of inclement weather as determined by the Authority.

Work Requiring Complete Stoppages of Traffic

Complete stoppages of traffic will only be allowed outlined in Special Provision Section 652, Specific Project Maintenance of Traffic Requirements, or as approved by the Resident.

The following is a partial list of activities requiring complete stoppages of traffic. Complete stoppages of traffic may be required for other activities as well:

- Moving of heavy or slow equipment across or on the travel lanes (stoppage less than five minutes).

State Police will be used to stop traffic. Cost for State Police will be the responsibility of the Authority. The times requested for trooper assisted equipment moves by on-duty troopers cannot be guaranteed. The MTA will not be held responsible for any delays or costs associated with the delay, postponement or cancellation of an on-duty trooper assisted equipment move.

Equipment Moves

The complete stoppage of traffic for an equipment move (including delivery of materials to the median) will be considered for approval if the action cannot reasonably be completed with the erection of a lane closure. Contractor shall be responsible for the installation of Signs CS-3, "Expect Stopped Traffic" and Signs W3-4 "Be Prepared to Stop", in accordance with the Single Lane Closure Detail immediately prior to the equipment move. These signs shall be covered when not applicable.

The maximum time for which traffic may be stopped and held for an equipment move at any single time shall be five (5) minutes. The duration shall be measured as the time between the time the last car passes the Resident until the time the Resident determines that all travel lanes are clear. The traffic shall only be stopped for the minimum period of time required to complete the approved activity. The Contractor shall reimburse the Authority at a rate of \$500 per minute for each minute in excess of the five-minute allowance.

Unapproved movement of heavy equipment across the travel lanes shall be considered a violation of the Maintenance of Traffic Requirements and is subject to the fines of \$500 per minute or portion thereof.

Request for Complete Stoppage of Traffic

A request for a complete stoppage of traffic must be submitted to the Resident for approval. The Resident is required to receive approval from the Maine Turnpike Authority for all stoppages. The request shall be submitted to the Authority by the Resident at least five (5) working days prior to the day of the requested stoppage of traffic and two (2) days for a stoppage less than five minutes. All requests must be received by 12:00 p.m. noon to be considered as received on that day. Requests received after 12:00 p.m. shall be considered as received the following day. The Contractor shall plan the work accordingly.

Short-Term or Work Hour Speed

A short-term or work hour speed (Fines Doubled) is a regulatory speed limit that indicates the maximum legal speed through a work zone which is lower than the normal posted speed. The speed limit shall be displayed by black on white speed limit signs in conjunction with a "Work Zone" plate. Speed limit signs shall be installed at each mile within the work zone. The reduced speed zone shall be at least 1,500 feet long. Any existing regulatory speed limit signs within the reduced speed zone shall be covered once the reduced speed signs have been erected.

Two orange fluorescent flags shall be attached to all speed limit signs that are uncovered for a period of time exceeding one week. This work shall be incidental. Signs that are uncovered on a regular basis are not required to have the supplemental flags.

The reduced speed limit signs shall only be used during the following circumstances unless approved by the Resident:

- Workers are adjacent to traffic and not protected by temporary barrier.
- Workers are installing temporary barrier.
- Workers are present behind barrier and working adjacent to the barrier.

The signs shall be covered or removed when not applicable. The covering and uncovering of signs shall be included for payment under Maintenance of Traffic. Signs relating to reduced speed shall be installed in accordance with the details. The Contractor shall note that signs installed behind concrete barrier in the outside shoulder are required to be clearly visible to all drivers at all times.

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Portable-Changeable Message Sign)

652.2.4 Other Devices

The eighth paragraph is deleted and replaced with the following:

Portable-Changeable Message Signs (PCMS) will be furnished by the Contractor and shall be Ver-Mac PCMS-1210 or an approved equal. PCMS's shall be located and relocated to locations approved by the Resident within the Project limits for the duration of the Project.

Features to the Ver-Mac PCMS shall include:

- An all LED display.
- Be legible from a distance of 1,000 feet.
- Have three (3) lines available for messages.
- Be NTCIP compliant (NTCIP 1203 & NTCIP 1204).
- Be capable of being programmed by a remote computer via a data (IP over Cell) cellular modem connection.
- Have GPS location capability by adding on a GPS device capable of providing GPS location remotely to the MTA Communications' Center.
- Be programmable by Vanguard Software by Daktronics.

The Contractor shall complete and/or provide the following:

- Submit a catalog cut shop drawing to the Resident of all proposed equipment for review and approval.
- Establish and pay for a data cellular account so that PCMS may be remotely programmed and operated from the MTA Communications' Center.
- Provide to the Authority technical support from the PCMS manufacturer that may be necessary to integrate the PCMS into the MTA software platform (Vanguard Software by Daktronics).
- Provide the manufacturer's software necessary to change the PCMS messages remotely from the MTA Communications' Center and the Resident's computer if necessary or requested.
- Provide training on the operation of the PCMS to the Resident and the MTA Communications' Center representative.
- Make all PCMS on the Project work site available to the MTA for any/all emergency situations as defined by the MTA. This shall include the preemption of any messages running at the time of need as approved by the MTA and the Resident.

The Contractor shall also:

- Furnish, operate, relocate and maintain the PCMS as approved by the Resident.

- Be responsible for the day to day programming and operation of the PCMS for Project purposes.

The PCMS(s) shall be on-site, with data cellular account established, GPS location capable, and all training required complete within one month after award or seven days prior to implementing traffic shifts, detours or stoppages, whichever is sooner. Implementation of traffic shifts, detours, or stoppages of traffic will not be allowed without PCMS boards on-site with the specified MTA Communications' Center Software Platform integration and training.

652.7 Method of Measurement

The following sentence is added:

Portable-Changeable Message Sign(s) will be measured for payment by each unit furnished, installed and maintained.

652.8 Basis of Payment – Saco River

The following paragraphs are added:

The accepted quantity of PCMS will be paid for at the Contract unit price each. This price shall be full compensation for furnishing, relocating, maintaining and removing the PCMS. The price also includes all costs associated with setting-up and paying for a data cellular account, technical support, training and any costs associated with the GPS location device.

Progress payment of each PCMS shall be pro-rated over the duration of the Contract. Contract duration shall be from the specified Contract start date to substantial completion or Contract completion, whichever is sooner.

For a PCMS that fails to operate when required, the Contractor will be given 24-hours to repair or replace the PCMS. For periods longer than 24-hours, payment will be reduced based on the pro-rated time that the PCMS is out of service.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
652.41 Portable-Changeable Message Sign	Each

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Truck Mounted Attenuator)

652.1 Description

The following sentence is added:

The Contractor shall furnish, operate and maintain a truck and truck mounted attenuator.

652.2.1 Truck Mounted Attenuator

The truck mounted attenuator system shall conform to the following requirements:

- Truck and attached attenuator shall conform to the NCHRP Report 350, Test Level 3 criteria.
- A mounted revolving amber light or amber strobe light with 360-degree visibility.
- An arrow light bar fixed to the vehicle.
- The attenuator shall be mounted to a vehicle with a minimum weight of 10,000 lbs.

652.3.7 Operations

The Contractor shall manage the operation of the truck mounted attenuator. The truck mounted attenuator should be utilized in lane closures and other construction operations where workers are exposed to traffic and not protected by positive means. The operation of the vehicle shall be in accordance with the Manual of Uniform Traffic Control Devices and the manufacturer's recommendation.

652.7 Method of Measurement

The following sentence is added:

Truck mounted attenuator shall be measured for payment by the calendar day for each calendar day that the unit is used on the Project.

652.8.2 Basis of Payment

The following paragraphs are added:

The Truck Mounted Attenuator(s) will be paid for at the Contract unit price per calendar day. This price shall include all costs associated with the use of the vehicle. Payment shall include operator, fuel, truck, maintenance, flashing lights, arrow board and all other incidentals necessary to operate the vehicle.

The unit price noted in the proposal sheet is fixed by the Maine Turnpike Authority and may not be altered. Altering of the unit price will be a non-curable bid defect.

Payment will be made under:

Pay Item

Pay Unit

652.45 Truck Mounted Attenuator

Calendar Day

SPECIAL PROVISION

SECTION 656

TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

Section 656 of the Standard Specifications and the General Provisions is deleted in its entirety and replaced with the following:

656.01 Description

This work shall consist of providing temporary erosion and water pollution control during construction in accordance with these Specifications, standard details, Best Management Practices, or as otherwise directed.

All temporary erosion control devices shall be in place and approved by the Resident prior to any operations resulting in disturbed area. The Contractor is responsible for maintaining all erosion control measures in effective operating condition, including repairing and replacing damaged or missing erosion control material until areas are permanently stabilized. The Contractor shall maintain these devices in a clean and properly operating condition as described herein.

Prior to construction, the Contractor shall properly install sediment barriers (e.g., silt fence) at the edge of any downgradient disturbed area and adjacent to any drainage channels within the disturbed area. The Contractor shall maintain the sediment barriers until the disturbed area is permanently stabilized.

The Contractor is responsible for all temporary drainage and erosion control measures. The Contractor shall review his construction operations and staging to determine if additional erosion control measures are required. The Resident may also request additional erosion control measures. The cost for all erosion control devices necessary, due solely to the Contractor's construction operations and not shown on the Plans, shall be borne solely by the Contractor. The frequency of inspection of these devices by the Contractor and the Erosion Control Compliance Officer (ECCO) shall be weekly and before, during and immediately following a rainfall of greater than 1/2 inch in a 24-hour period.

656.02 Temporary Erosion and Sedimentation Control Devices - Materials

The Contractor shall install and maintain all temporary erosion and sedimentation control materials in accordance with the manufacturer's recommendations or the latest BMP's.

1. Baled hay shall be bales at approximately 14 by 18 by 30 inches, or an equivalent, securely tied to form a firm bale.
2. Flexible drainage pipe shall consist of collapsible neoprene pipe, a minimum of 12 inches in diameter or equal.
3. Silt Fence
 - (a) Posts - Either hardwood posts or steel posts shall be used. Hardwood posts shall be straight, at least 18 inches longer than the height of the silt fence

and at least one inch by one inch.

Staples shall be of No. 9 wire.

Steel posts shall be at least 18 inches longer than the height of the silt fence and have the means provided for fastening wire to the fence.

- (b) Wire Support Fence - If required, wire support fence shall be at least two inches higher than the height of the silt fence. Horizontal and vertical wires shall be spaced no more than six inches apart. The top and bottom wires shall be at least 10 gauge; all other wires at least 12 gauge.
- (c) Fabric - The woven geotextile fabric and components shall be made from polypropylene, polyester, polyamide or other chemically stable material and be resistant to ultraviolet radiation degradation for at least 12 months of installation. Silt retention capacity shall be no less than 75 percent. The fabric shall have a Mullen burst test of no less than 260 pounds per square inch with a maximum average sieve opening size of No. 20 to No. 60. Roll width of the fabric shall be no less than six inches wider than the height of the fence, except fabric for boom supported floating silt fence which shall be no less than two feet wider than the design width.
- (d) Flotation Devices - Boom supported floating silt fence shall consist of suitable, flexible plastic or synthetic rubber barrier supported on the top (or floated on the top using six inch "minimum" Styrofoam logs) and sides, and weighted or anchored on the bottom to form a continuous vertical barrier to contain within the designated area(s), silt and clay-size particles suspended or carried by water. The flotation boom and weighing devices for boom supported floating silt fence shall be sufficient to hold the fence in an approximately vertical position.

656.03 Temporary Erosion and Sedimentation Control Devices - General

Temporary Erosion Checks - Temporary erosion checks shall be constructed in ditches and at other locations designated. Checks shall be in accordance with the Standard Detail unless otherwise directed.

Baled hay shall be used in other areas as necessary to inhibit soil erosion.

During winter construction, November 1st through April 15th, all areas being constructed within 75 feet of a protected natural resource shall be protected with a double row of silt fence.

Sediment deposits behind haybales and silt fence shall be removed when the depth of sediment reaches 50 percent of the erosion control device height.

The Contractor is also required to have on-site, at all times, 25 percent additional Contract quantities of silt fence for use as backup devices.

656.04 Temporary Erosion and Sedimentation Control Devices – Construction Requirements

1. Erosion Control Filter Berm

The Contractor may opt to furnish and install an erosion control filter berm in lieu of silt fence. The erosion control filter berm shall be a water permeable windrow of a composted bark mix to remove suspended soil particles from water moving off the site. Erosion control filter berm shall be considered an erosion control device. The material and specific application shall be submitted to the Resident for approval.

The erosion control berm shall be placed uncompacted, in a windrow in locations approved by the Resident. The cross section of the berm shall be four feet wide at the base and 1-1/2 feet high at the center. The erosion control filter berm shall be removed when no longer required, as determined by the Resident, and shall be distributed over an adjacent area.

2. Temporary Berms

When designated, temporary barriers shall be constructed along the edge of the embankment. The barriers shall be of embankment earth material, gravel or sand as available and shaped approximately as shown in the Standard Details. The barriers shall be compacted with the wheels of construction equipment. When placed on pavement, the berms shall be constructed of asphalt grindings or other non-erodible soil material as approved by the Resident, and shaped as shown in the Standard Details.

At designated intervals, temporary slope drains shall be constructed with a crescent shaped barrier placed at each slope drain to direct the water into the inlet pipe.

3. Temporary Slope Drains

Collapsible pipe with corrugated metal pipe inlet shall be placed down the embankment slopes at designated locations and in accordance with the Best Management Practices.

At the outlet end of the drain, dumped stone shall be placed to prevent scoring unless otherwise directed.

4. Silt Fence

The silt fence shall be installed downhill of disturbed slopes as shown on the Plans or as approved. The Contractor shall have the option to provide a reinforced filter fabric or an un-reinforced filter fabric attached to a wire fence.

The fence posts shall be spaced as specified by the Resident, however, not to exceed a maximum of eight feet [2.5 m] apart when either type of silt fence is used and be driven a minimum of 18 inches [450 mm] into the ground.

The geotextile fabric shall be secured to the post or fence by suitable staples, tie wire or hog rings in such a manner as to prevent tearing and sagging of the fabric. The bottom flap of the geotextile fabric shall be entrenched into the ground a minimum depth of six inches [150 mm] to prevent water from flowing under the fence. The geotextile shall be spliced together only at support posts with a minimum six inches [150 mm] overlap and secure post connection which prevents leakage of silt. The top of the geotextile shall be installed with a reinforced top end section.

The Contractor shall maintain the silt fence in a functional condition at all times. All deficiencies shall be immediately corrected by the Contractor. The Contractor shall make a daily inspection of silt fences in areas where construction activity causes drainage runoff, to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, additional silt fences shall be installed as approved or otherwise directed.

Sediment deposits shall be removed when sediments reach 50 percent of the height of the device. All sediment deposits remaining in place after the device is no longer required shall be graded to conform to the existing ground, seeded and mulched immediately.

Geotextile fabric which has decomposed or has become ineffective and is still needed shall be replaced with material equal to the original design.

5. Boom Supported Floating Silt Fence

Prior to starting any work within the river, the Contractor shall furnish and install a boom supported floating silt fence to completely surround the work area as shown on the Plans or as approved by the Resident. The boom supported floating silt fence shall remain in place a minimum of 48-hours after the completion of the work. The Contractor shall then remove the boom supported floating silt fence from the river.

The silt fence fabric shall be securely attached to the flotation boom with a continuous weight placed the entire length of the fence to maintain the fence in a vertical submerged position from the surface of the water to the design depth.

Anchor's shall be placed at the ends of the fence, and intermediate locations if necessary, to hold the fence securely in place.

656.05 Temporary Erosion and Sedimentation Control Devices - Maintenance

The erosion control devices will be cleaned, repaired or replaced as necessary. All deficiencies shall be corrected immediately by the Contractor.

656.06 Temporary Erosion and Sedimentation Control Devices - Removing and Disposing

When disturbed areas have been permanently stabilized, temporary erosion control devices, including stone check dams, shall be removed. However, erosion control mix filter

berms may be spread out, seeded and left to decompose. Areas disturbed during the removal of the erosion control devices shall be repaired and properly stabilized.

When removed, such devices may be reused in other locations provided they are in good condition and suitable to perform the erosion control for which they are intended. Reused devices, if approved, will be measured for payment.

656.07 Erosion Control Compliance Officer

The Contractor shall designate an Erosion Control Compliance Officer (CECCO) on this Project who shall be a “DEP Certified Contractor” or have had equivalent training approved by the Authority. The Contractor shall provide the Resident with the name of the CECCO and any phone numbers or pager numbers that can be used to contact the person in case of emergency.

Before commencing any work that could disturb soils or impact water quality, the CECCO must field review the Project with the Resident’s ECCO (RECCO).

656.08 Inspection and Recordkeeping

The CECCO shall accompany the RECCO in the inspection of all erosion control devices. An inspection log shall be maintained by the Resident for the duration of the Project. The log will include daily on-site precipitation and air temperature as well as the performance, failure and/or any corrective action for all erosion and sedimentation controls in place. The log will be updated at least weekly and after all significant storm runoff or flood events. The log shall be signed by the RECCO and the CECCO after each inspection.

Failure to comply with the erosion and sedimentation control requirements herein or as directed by the RECCO within 24-hours after the violation is noted in the inspection log, will result in the \$1,000 per day per violation penalty until the violation is corrected to the satisfaction of the Resident.

656.09 Method of Measurement

Baled hay will be measured for payment by the number of bales or bags satisfactorily placed.

Temporary berms and temporary slope drains will be measured for payment by the linear foot measured parallel with the flow line including the pipe inlet.

Temporary silt fence will be measured by the linear foot along the gradient of the fence, end post to end post.

Boom supported floating silt fence will be measured by the linear foot.

Erosion control filter berm shall be measured by the linear foot.

The quantity of additional haybales and silt fence material required herein will be measured for payment only when and if they are actually put to use as additional measures on the

Project as approved by the Resident. Haybales and silt fence material used for maintenance or replacement of existing devices will not be measured for payment.

The removal of silt and other material from behind the erosion control devices will not be measured separately for payment, but shall be incidental to the Erosion Control items.

656.10 Basis of Payment

The accepted quantity of baled hay will be paid for at the Contract unit price each for each bale which price shall be full compensation for furnishing and placing the bales, for furnishing and driving the stakes for baled hay, for maintaining the bales, stakes, and for the removing and disposing of the bales, stakes when no longer needed.

The accepted quantity of temporary berms will be paid for at the Contract unit price per linear foot of berm which price shall be full compensation for furnishing, placing and compacting material, for maintaining and for removing the berm when no longer needed.

There will be no separate payment for excavation in the construction of temporary erosion control items under this Section and all necessary excavation shall be incidental to the work.

The accepted quantity of temporary silt fence and boom supported floating silt fence will be paid for at the Contract unit price per linear foot complete in place. Payment shall be full compensation for furnishing, installing, maintaining, anchoring, replacing deteriorated geotextile and clogged geotextile when required and for removing and disposing of the fence when no longer needed.

The accepted quantity of erosion control filter berm will be paid for at the Contract unit price per linear foot under Item 656.632, 30 Inch Temporary Silt Fence, which price shall be full compensation for furnishing, placing, maintaining, and removing the erosion control filter berm.

Cost of seeding and mulching the area after removal of the temporary silt fence will be paid for at the Contract unit prices for Item 618, Seeding, and Item 619, Mulch.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
656.632 30 inch Temporary Silt Fence	Linear Foot

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART III – APPENDICES

APPENDIX A

LEAD DETERMINATION REPORTS

January 3, 2013

Mr. Clayton Hoak
HNTB Corp.
340 County Rd
Suite 6C
Westbrook, ME 04092

RE: Katahdin Lab Number: SF8934
Project ID: MTA Bridges Event 12/12
Project Manager: Ms. Shelly Brown
Sample Receipt Date(s): December 14, 2012

Dear Mr. Hoak:

Please find enclosed the following information:

- * Report of Analysis (Analytical and/or Field)
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to <http://www.katahdinlab.com/cert.html> for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES



Authorized Signature

01/03/2013

Date

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS
(Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory’s Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

MCL Maximum Contaminant Level

NL No limit

NFL No Free Liquid Present

FLP Free Liquid Present

NOD No Odor Detected

TON Threshold Odor Number

H_ Please note that the regulatory holding time for _____ is “analyze immediately”. Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 pH
H2 DO
H3 sulfite
H4 residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.



REPORT OF ANALYTICAL RESULTS

Client: Clayton Hoak
 HNTB Corp.
 340 County Rd
 Suite 6C
 Westbrook, ME 04092

Lab Sample ID: SF8934-001
 Report Date: 1/3/2013
 PO No.:
 Project: MTA Bridges Event 12/12

Sample Description	Matrix	Filtered	Date Sampled	Date Received
MM 33.0 GRAB SOUTH	AQ	No(Total)	12/13/2012	12/14/2012

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
ARSENIC, TCLP	U 0.04	mg/L	0.04	1	0.008	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
BARIUM, TCLP	0.118	mg/L	0.025	1	0.005	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	
CADMIUM, TCLP	U 0.0250	mg/L	0.0250	1	0.005	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
CHROMIUM, TCLP	U 0.0500	mg/L	0.0500	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
LEAD, TCLP	453.	mg/L	0.2	10	0.005	SW846 6010	1/2/13	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	
MERCURY, TCLP	U 0.20	ug/L	0.20	1	0.2	SW846 7470	12/28/12	EAM	SW846 7470	12/27/12	EAM	FL27HW1	
SELENIUM, TCLP	U 0.050	mg/L	0.050	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
SILVER, TCLP	U 0.0500	mg/L	0.0500	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1

1 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.



REPORT OF ANALYTICAL RESULTS

Client: Clayton Hoak
 HNTB Corp.
 340 County Rd
 Suite 6C
 Westbrook, ME 04092

Lab Sample ID: SF8934-002
Report Date: 1/3/2013
PO No.:
Project: MTA Bridges Event 12/12

Sample Description	Matrix	Filtered	Date Sampled	Date Received
MM 33.0 GRAB NORTH	AQ	No(Total)	12/13/2012	12/14/2012

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
ARSENIC, TCLP	U 0.04	mg/L	0.04	1	0.008	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
BARIUM, TCLP	0.163	mg/L	0.025	1	0.005	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	
CADMIUM, TCLP	U 0.0250	mg/L	0.0250	1	0.005	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
CHROMIUM, TCLP	U 0.0500	mg/L	0.0500	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
LEAD, TCLP	580.	mg/L	0.2	10	0.005	SW846 6010	1/2/13	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	
MERCURY, TCLP	U 0.20	ug/L	0.20	1	0.2	SW846 7470	12/28/12	EAM	SW846 7470	12/27/12	EAM	FL27HGW1	
SELENIUM, TCLP	U 0.050	mg/L	0.050	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1
SILVER, TCLP	U 0.0500	mg/L	0.0500	1	0.01	SW846 6010	12/28/12	EAM	SW846 3010	12/27/12	EAM	FL27ICW1	1

1 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

Client: HNTB	KAS PM: SMP	Sampled By: WF
Project: MTA Bridges	KIMS Entry By: GN	Delivered By: WF
KAS Work Order#: SF 8934	KIMS Review By: [Signature]	Received By: GN
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: 1605 12/14/12

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.				✓	Temp (°C):
Samples received at <6 °C w/o freezing?				✓	Note: Not required for metals analysis.
Ice packs or ice present?				✓	The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide – >9 Cyanide – pH >12				✓	
				✓	
				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Dec. 17, 2012

10:34 AM

Login Number: SF8934

Quote/Incoming:

Account:HNTBCO001

NoWeb

HNTB Corp.

Login Information:

 ANALYSIS INSTRUCTIONS :
 CHECK NO. :
 CLIENT PO# :
 CLIENT PROJECT MANAGE :
 CONTRACT :
 COOLER TEMPERATURE : n/a
 DELIVERY SERVICES : Client
 EDD FORMAT :
 LOGIN INITIALS : GN
 PM : SMB
 PROJECT NAME : MTA Bridges Event 12/12
 QC LEVEL : I
 REGULATORY LIST :
 REPORT INSTRUCTIONS : email pdf and invoice Clayton, no HC
 SDG ID :
 SDG STATUS :

Project:

Primary Report Address:

 Clayton Hoak
 HNTB Corp.
 340 County Rd
 Suite 6C
 Westbrook,ME 04092

Primary Invoice Address:

 Accounts Payable
 HNTB Corp.
 340 County Rd
 Suite 6-C
 Westbrook,ME 04092

Report CC Addresses:
Invoice CC Addresses:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal Date	Due Date	Mailed
SF8934-1	MM 33.0 GRAB SOUTH	13-DEC-12 13:40	14-DEC-12		27-DEC-12	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>	<i>Comments</i>	
Aqueous	S SAMPLING					
Solid	P TCLP-METALS		Boz Glass			
SW1311-EXT	SW3010-PREP		TCLP-ARSENIC			
TCLP-BARIUM	TCLP-CADMIUM		TCLP-CHROMIUM			
TCLP-LEAD	TCLP-MERCURY		TCLP-SELENIUM			
TCLP-SILVER						
SF8934-2	MM 33.0 GRAB NORTH	13-DEC-12 13:30	14-DEC-12		27-DEC-12	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>	<i>Comments</i>	
Aqueous	S SAMPLING					
Solid	P TCLP-METALS		Boz Glass			
SW1311-EXT	SW3010-PREP		TCLP-ARSENIC			
TCLP-BARIUM	TCLP-CADMIUM		TCLP-CHROMIUM			
TCLP-LEAD	TCLP-MERCURY		TCLP-SELENIUM			
TCLP-SILVER						
SF8934-3	MM 56.6 GRAB	13-DEC-12 14:45	14-DEC-12		27-DEC-12	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>	<i>Comments</i>	
Aqueous	S SAMPLING					
Solid	P TCLP-METALS		Boz Glass			
SW1311-EXT	SW3010-PREP		TCLP-ARSENIC			
TCLP-BARIUM	TCLP-CADMIUM		TCLP-CHROMIUM			
TCLP-LEAD	TCLP-MERCURY		TCLP-SELENIUM			
TCLP-SILVER						
SF8934-4	MM 79.8 GRAB MAIN 1	14-DEC-12 13:25	14-DEC-12		27-DEC-12	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>	<i>Comments</i>	
Aqueous	S SAMPLING					
Solid	P TCLP-METALS		Boz Glass			
SW1311-EXT	SW3010-PREP		TCLP-ARSENIC			
TCLP-BARIUM	TCLP-CADMIUM		TCLP-CHROMIUM			
TCLP-LEAD	TCLP-MERCURY		TCLP-SELENIUM			
TCLP-SILVER						

APPENDIX B

TABLE A (NB) & TABLE B (SB)

LANE CLOSURE RESTRICTIONS

MAINE TURNPIKE AUTHORITY

**TABLE A
NORTHBOUND**

Allowable Lane Closure Times at Saco River Bridge

SINGLE LANE CLOSURE									
March through May, September and October									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	23:59	Any Time		Any Time		Any Time		0:00	17:00
June and July									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	23:59	Any Time		Any Time		Any Time		0:00	06:00
August									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	23:59	Any Time		Any Time		0:00	14:00	20:00	06:00

DOUBLE LANE CLOSURE									
March through October									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
21:00	06:00	21:00	06:00	21:00	06:00	21:00	06:00	21:00	06:00

Notes:

1. See Holiday restrictions for additional lane closure restrictions.
2. Equipment moves requiring stoppages, if required, shall only be allowed during the same hours as permitted for a double lane closure.

MAINE TURNPIKE AUTHORITY

**TABLE B
SOUTHBOUND**

Allowable Lane Closure Times at Saco River Bridge

SINGLE LANE CLOSURE									
March through June, September and October									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	23:59	Any Time		Any Time		Any Time		0:00	1400
July									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	15:30	20:00	15:30	20:00	15:30	20:00	15:30	20:00	12:00
August									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	15:30	20:00	15:30	20:00	15:30	20:00	15:30	20:00	06:00

DOUBLE LANE CLOSURE									
March through June, September and October									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
20:00	06:00	20:00	06:00	20:00	06:00	20:00	06:00	20:00	06:00
July through August									
Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri	
21:00	06:00	21:00	06:00	21:00	06:00	21:00	06:00	21:00	06:00

Notes:

1. See Holiday restrictions for additional lane closure restrictions.
2. Equipment moves requiring stoppages, if required, shall only be allowed during the same hours as permitted for a double lane closure.