MAINE TURNPIKE AUTHORITY

MAINE TURNPIKE

CONTRACT DOCUMENTS

CONTRACT 2016.05

BRIDGE REPAIRS
RAMP J OVER ROUTE 1 SB AND RAMP M UNDERPASS MILE 1.59
TWO ROD ROAD UNDERPASS MILE 42.00
CUMMINGS ROAD UNDERPASS MILE 44.60
EXIT 45 UNDERPASS MILE 44.90
FOREST AVENUE NORTHBOUND AND SOUTHBOUND OVERPASS MILE 50.00
SNOW FENCE INSTALLATIONS MULTIPLE LOCATIONS

NOTICE TO CONTACTORS

PROPOSAL

CONTRACT AGREEMENT

CONTRACT BOND

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

SPECIFICATIONS

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

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

The Maine Turnpike Supplemental Specifications are additions and alterations to the 2014 Maine Department of Transportation Standard Specifications. See Subsection 100.1.

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MAINE TURNPIKE AUTHORITY

NOTICE TO CONTRACTORS

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

CONTRACT 2016.05

BRIDGE REPAIRS
RAMP J OVER ROUTE 1 SB AND RAMP M UNDERPASS MILE 1.59
TWO ROD ROAD UNDERPASS MILE 42.00
CUMMINGS ROAD UNDERPASS MILE 44.60
EXIT 45 UNDERPASS MILE 44.90
FOREST AVENUE NORTHBOUND AND SOUTHBOUND OVERPASS MILE 50.00
SNOW FENCE INSTALLATIONS MULTIPLE LOCATIONS

at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, ME, until 11:00 a.m., prevailing time as determined by the Authority on April 21, 2016 at which time and place the Proposals will be publicly opened and read. Bids will be accepted from Contractors **prequalified** by the Maine Department of Transportation for Bridge Construction Projects. 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 repairs to four bridge structures for the Maine Turnpike Authority. The work includes: bridge expansion joint seal replacement, drainage trough installation and snow fence installation at Ramp J Underpass, parapet repairs and granite curb repointing at Two Rod Road Underpass, deck repairs and snow fence installation at Cummings Road Underpass, joint seal installation at Exit 45 Underpass, rocker bearing replacements and substructure repairs at Forest Avenue, snow fence installations at various locations, bridge mounted sign clip installation at various locations, 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 One Hundred and Twenty Five ($125.00) 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 Seventy Five ($75.00) 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 Nate Carll, Purchasing Manager, at (207) 482-8115. 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

Nate Carll, Purchasing Manager, 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 November 2014", "Standard Details, Revision of November 2014" 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 conference will be held on April 11, 2016 at 11:00 a.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

Nate Carll
Purchasing Manager
Maine Turnpike Authority

Portland, Maine

Maine Turnpike Authority

MAINE TURNPIKE

PROPOSAL

CONTRACT 2016.05

BRIDGE REPAIRS
RAMP J OVER ROUTE 1 SB AND RAMP M UNDERPASS MILE 1.59
TWO ROD ROAD UNDERPASS MILE 42.00
CUMMINGS ROAD UNDERPASS MILE 44.60
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FOREST AVENUE NORTHBOUND AND SOUTHBOUND OVERPASS MILE 50.00
SNOW FENCE INSTALLATIONS MULTIPLE LOCATIONS

MAINE TURNPIKE AUTHORITY

PROPOSAL

CONTRACT 2016.05

BRIDGE REPAIRS
RAMP "J" OVER ROUTE 1 SB AND RAMP "M" UNDERPASS MILE 1.59
TWO ROD ROAD UNDERPASS MILE 42.00
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EXIT 45 UNDERPASS MILE 44.90
FOREST AVENUE NORTHBOUND AND SOUTHBOUND OVERPASS MILE 50.00
SNOW FENCE INSTALLATIONS MULTIPLE LOCATIONS

TO MAINE TURNPIKE AUTHORITY:

The work consists of repairs to four bridge structures for the Maine Turnpike Authority. The work includes: bridge expansion joint seal replacement, drainage trough installation and snow fence installation at Ramp J Underpass, parapet repairs and granite curb repointing at Two Rod Road Underpass, deck repairs and snow fence installation at Cummings Road Underpass, joint seal installation at Exit 45 Underpass, rocker bearing replacements and substructure repairs at Forest Avenue, snow fence installations at various locations, bridge mounted sign clip installation at various locations, 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 2016.05 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. 2016.05
Bridge Repairs

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
202.191	Removing Existing Drain Troughs	Lump Sum	1				
202.2021	Removing Pavement Surface - Bridge Deck	Square Yard	34				
403.210	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size	Ton	2				
409.15	Bituminous Tack Coat, Applied	Gallon	2				
419.30	Sawing Bituminous Pavement	Linear Foot	230				
502.219	Structural Concrete, Abutments and Retaining Walls (1 CY)	Lump Sum	1				
507.095	Aluminum Bridge Railing - Splice Modification	Each	92				
514.06	Curing Box for Concrete Cylinders	Each	2				
515.201	Pigmented Protective Coating for Concrete Surfaces	Square Yard	920				
515.202	Clear Protective Coating for Concrete Surfaces	Square Yard	330				
518.39	Granite Curb Joint Mortar and Bedding Mortar Repair	Linear Foot	53				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
			BROUGHT FORWARD:				
518.40	Epoxy Injection Crack Repair	Linear Foot	123				
518.43	Parapet Joint Repair	Linear Foot	290				
518.51	Repair of Upward Facing Surfaces - below Reinforcing Steel < 8 inches	Square Foot	147				
518.511	Partial Depth Concrete Deck Repairs	Square Foot	100				
518.512	Full Depth Concrete Deck Repairs	Square Foot	90				
518.52	Repair of Upward Facing Surfaces > 8 inches	Cubic Yard	1				
518.60	Repair of Vertical Surfaces < 8 Inches	Square Foot	359				
518.611	Parapet Replacement	Lump Sum	1				
518.70	Repair of Overhead Surfaces < 8 inches	Square Foot	34				
520.211	Expansion Device Pourable Seal	Lump Sum	1				
520.221	Expansion Device Modification	Each	1				
521.32	Fabric Trough for Finger Joint	Each	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
			BROUGHT FORWARD:				
523.52	Bearing Installation	Each	24				
523.5402	Laminated Elastomeric Bearings, Expansion	Each	24				
603.91	Pressure Treated Wood Drain Trough	Linear Foot	200				
607.431	Snow Fence - Ramp J over Route 1 and Ramp M Bridge (2-Bar)	Linear Foot	208				
607.431	Snow Fence - Saco Interchange Bridge (2-Bar)	Linear Foot	544				
607.431	Snow Fence - Scarborough Interchange Bridges (2-Bar)	Linear Foot	324				
607.431	Snow Fence - Gorham Road Bridge (2-Bar)	Linear Foot	348				
607.431	Snow Fence - Exit 44 Bridge over I-95 (2-Bar)	Linear Foot	308				
607.431	Snow Fence - Cummings Road Bridge (2-Bar)	Linear Foot	331				
615.07	Loam	Cubic Yard	5				
618.14	Seeding Method Number 2	Unit	0.5				
619.1201	Mulch	Unit	0.5				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
			BROUGHT FORWARD:				
619.1202	Temporary Mulch	Lump Sum	1				
619.1401	Erosion Control Mix	Cubic Yard	40				
629.05	Hand Labor, Straight Time	Hour	100				
631.10	Air Compressor (including operator)	Hour	50				
631.11	Air Tool (including operator)	Hour	100				
631.36	Foreman	Hour	50				
631.40	Welder (including operator)	Hour	10				
645.14	Special Work No.: Route 236 Underpass	Lump Sum	1				
645.14	Special Work No.: Ramp H Underpass	Lump Sum	1				
645.14	Special Work No.: Gorham Road Underpass	Lump Sum	1				
645.14	Special Work No.: Cummings Road Underpass	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Ramp J and Ramp M	Lump Sum	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
				BROUGHT FORWARD:			
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Two Rod Road	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Cummings Road	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 45	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Forest Avenue	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 36	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 42	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Gorham Road	Lump Sum	1				
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 44	Lump Sum	1				
652.38	Flaggers	Hour	500				
652.41	Portable-Changeable Message Sign	Each	4				
652.45	Truck Mounted Attenuator	Calendar Day	63	150	00	9450	00
656.50	Baled Hay, in place	Each	20				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
			BROUGHT FORWARD:				
656.62	Temporary Slope Drains	Linear Foot	330				
656.632	30 inch Temporary Silt Fence	Linear Foot	260				
659.10	Mobilization	Lump Sum	1				
					TOTAL:		

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: _____

Title: CHAIRMAN

Date of Signature: _____

ATTEST:

_____
Secretary

CONTRACTOR -

_____
CONTRACTOR

By: _____

Title: _____

Date of Signature: _____

WITNESS:

_____

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 – SUPPLEMENTAL SPECIFICATIONS

(Rev. December 18, 2015)

Maine Turnpike Authority
2015 Supplemental Specifications

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INTRODUCTION

This document shall be known as the Maine Turnpike Authority's Supplemental Specifications 2015 Edition. This document consists of additions and alterations to the MaineDOT 's Standard Specifications November 2014 Edition, as detailed below. Sections from the MaineDOT November, 2014 standard specifications which are not altered herein are incorporated without change. References to "the Department" contained therein shall refer to "the Authority" and references to Department personnel shall apply to equivalent personnel at the Maine Turnpike Authority.

Maine Turnpike Authority Special Provisions shall be issued for all Contracts and shall amend or add to both these Maine Turnpike Authority Supplemental Specifications and the MaineDOT 2014 Standard Specifications. MaineDOT Special Provisions or revisions to the November 2014 specifications are not incorporated herein unless specifically stated.

DIVISION 100 - GENERAL CONDITIONS

100.1 Replacement of Former Standard Specifications and Details:
Division 100 of the MaineDOT's Standard Specifications November, 2014 is completely replaced by the General Conditions contained herein.

SECTION 101 - CONTRACT INTERPRETATION

Scope of Section This Section consists of abbreviations, definitions, and general rules of interpretation.

101.1 Abbreviations - Abbreviations are defined in the following list. Abbreviations not defined in this Section or otherwise in the Contract shall have the meaning that is commonly accepted in the Engineering and construction industry.

AAN	American Association of Nurserymen, Incorporated
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
ANLA	American Nursery & Landscape Association

ANSI	American National Standards Institute
ARA	American Railway Association
AREMA	American Railway Engineering and Maintenance-of-way Association
ARTBA	American Road & Transportation Builders Association
ASCE	American Society of Civil Engineers
ASD	Allowable Stress Design
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATSSA	American Traffic Safety Services Association
AWWA	American Water Works Association
AWPA	American Wood Preservers Association
AWS	American Welding Society
BMP	MDOT's “Best Management Practices for Erosion and Sediment Control"
CFR	Code of Federal Regulations
DBE	Disadvantaged Business Enterprise
DREW	Daily Reports of Extra Work
DRB	Dispute Review Board
EIA	Electronic Industries Association
EEO	Equal Employment Opportunity
EMS	Emergency Medical Service
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FSS	Federal Specifications and Standards, General Services Administration
IES	Illuminating Engineering Society
IMSA	International Municipal Signal Association
IPCEA	Insulated Power Cable Engineers Association
ISEE	International Society of Explosives Engineers
ISO	Insurance Services Office
ITE	Institute of Transportation Engineers
LFD	Load Factor Design
LRFD	Load and Resistance Factor Design
LURC	Land Use Regulation Commission - Maine
MCTCB	Maine Concrete Technician Certification Board
MDEP	Maine Department of Environmental Protection
MDOT	Maine Department of Transportation
MIL	Military Specifications
MRSA	Maine Revised Statutes Annotated
MUTCD	Manual on Uniform Traffic Control Devices
NBS	National Bureau of Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NEPCOAT	Northeast Protective Coating Committee
NESC	National Electric Safety Code
NETTCP	New England Transportation Technician Certification Program

NHS	National Highway System
NICET	National Institute for Certification in Engineering Technologies
OJT	On-The-Job Training
OSHA	Occupational Safety and Health Administration
PCI	Precast/Prestressed Concrete Institute
PIN	Project Identification Numbers
QA	Quality Assurance
QC	Quality Control
QCP	Quality Control Plan
QPL	Qualified Products List
RFI	Request for Information
SAE	Society of Automotive Engineers
SEWPCP	Soil Erosion and Water Pollution Control Plan
SHA	State Highway Agency (as used by FHWA, meaning MDOT)
SPCCP	Spill Prevention Control and Countermeasure Plan
SSPC	Society for Protective Coatings
TAPPI	Technical Association of Pulp and Paper Industry
TCP	Traffic Control Plan
USC	United States Code
USDA	United States Department of Agriculture
UL	Underwriter's Laboratory
VECP	Value Engineering Change Proposal

101.2 Definitions - Words, terms, and phrases are defined below. Capitalized words in this Standard Specifications book are defined under this Section. Words, terms, or phrases that are not defined in this Section 101.2 or otherwise in the Contract shall have the meaning commonly accepted in the engineering and construction industry.

Acceptable Work: Work that Conforms or Substantially Conforms to the Contract and is satisfactory to the Authority.

Acceptance: Consideration of operations, inspections, samples, tests, certifications, proper QCP implementation, and end product properties to determine whether the product will be accepted for payment, including any adjustments to compensation as provided in the Contract.

Acceptance Test: Test utilized by the Authority to evaluate the quality of a Material or product.

Actual Costs: Direct, Project-specific, costs actually incurred by the Contractor in the performance of Work. Actual Costs consist of labor, Material, Equipment, and administrative overhead. For related provisions, see Section 109.7, Equitable Adjustments to Compensation, and Time and Section 109.7.2 – Basis of Payment

Addendum: See Bid Amendment.

Aggregate: Inert Material such as sand, gravel, broken stone, crushed stone, or a combination of any of these Materials.

Agreement: Agreement means Contract Agreement.

Apparent Low Bidder: A Bidder that submits the lowest apparently responsive Bid. The Apparent Low Bidder may not be Awarded the Contract if a) the Bid is later found to be non-responsive in accordance with Section 102.11, b) the Bidder is found to be not responsible, c) the Bidder fails to comply with all applicable pre-Award Conditions, other pre-execution requirements of the Contract, or d) the Authority chooses not to Award a Contract.

Apparent Successful Bidder: The Bidder with the lowest responsive Bid as determined by the Authority. A responsive responsible Bidder, usually the Apparent Low Bidder, that is Awarded the Contract. The Authority may not execute the Contract with the Apparent Successful Bidder if a) the Apparent Successful Bidder fails to comply with all applicable pre-Award conditions or other pre-execution requirements of the Contract or b) if the Authority chooses not to Award a Contract.

Authority: The Maine Turnpike Authority, a body corporate and politic duly created 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 execution of the Contract by the Authority, conditioned upon the Successful Bidder's performance of all pre-execution requirements of the Bid Documents.

Award Conditions: Pre-Award or pre-execution requirements that the Contractor must meet before Contract Execution including bonding and insurance. For a related provision, see Section 103.5 - Award Conditions.

Bid: The offer by a Bidder on forms prescribed by the Authority to perform the Work in Conformity with all provisions of the Bid Documents for the price(s) set forth.

Bid Amendment: A written change to the Bid Documents issued by the Authority after advertisement and before the Bid Opening.

Bid Bond: A bond furnished with a Bid by a Bidder and it's Surety in the amount set forth in the Notice to Contractors or elsewhere in the Bid Documents. The Bid Bond is forfeited if the Apparent Low Bidder fails to enter into a Contract with the Authority.

Bid Contact Person: The person identified in the advertised Notice to Contractors, as the person to whom the Bidder must refer technical or Engineering questions from the time of advertisement through Contract Execution..

Bidder: An individual, firm, corporation, limited liability company, partnership, joint venture, sole proprietorship, or other entity that submits a Bid. Upon Contract Execution, the successful Bidder becomes the Contractor.

Bid Documents: Documents issued by the Authority to solicit Bids from Contractors. Bid Documents generally include the Bid Book, Notice to Contractors, Plans and Specifications (including the Authority's Supplemental Specifications and MaineDOT's Standard Specifications), Standard Details, Special Provisions, Bidding instructions, and any Bid Amendments issued by the Authority. Documents attached to or referenced in the Bid Documents are part of the Bid Documents. Contrast "Bid Documents" with "Bid Escrow Documentation" as may be defined by Special Provision.

Bid Escrow Documentation: All writings, working papers, computer printouts, charts, schedules of prices, and data compilation that contain or reflect information, quantities, unit costs, data, or calculations used by the Bidder to determine the Bid price, or technical and price proposal in the case of a Design-Build or Best Value Procurement type of Contract, shall be submitted, including but not limited to material relating to the determination and application of:

Design Costs
Equipment rates
Overhead rates and related time schedules
Labor rates
Arithmetic extensions
Subcontractor and Material Supplier Quotations

Any manuals standard to the industry used by the Bidder in determining the Bid are also considered Bid Escrow Documentation. These manuals may be included in the Bid Escrow Documentation by reference and shall show the name and date of the publication and the publisher. Bid Escrow Documentation need not include Bid Documents provided by the Authority to all Bidders.

Bid Guaranty: A bond or other acceptable security specified in the Notice to Contractors or elsewhere in the Bid Documents that is forfeited if the Apparent Low Bidder fails to to enter into a Contract with the Authority. For a related provision, see Section 102.6 - Bid Guaranty.

Bid Opening: The date and precise time by which the Bidder must Deliver its Bid as specified in the Notice to Contractors or any applicable Bid Amendment. For related provisions, see Sections 102.7 - Delivery of Bids and 102.9 - Bid Opening.

Blue Book: The edition of publications entitled "Rental Rate Blue Book for Construction Equipment" or "Rental Rate Blue Book for Older Construction Equipment," as applicable, published by Primedia Information Inc., that was current when the Work being priced was performed.

Bridge: "Bridge" means a structure, including supports, designed principally to carry motor vehicles that is erected over a depression or an obstruction, such as water, a highway or a railway, and has an opening measured along the center of the roadway of more than 20 feet between the undercropping of abutments or spring lines of arches or the extreme ends of openings for multiple boxes. It also includes multiple pipes when the clear distance between openings is

less than 1/2 of the smaller contiguous opening.

A. Length The length of a Bridge structure is the overall length measured along the construction centerline back to back of backwalls of abutments, if present; otherwise end to end of the Bridge floor; but in no case less than the total opening of the structure.

B. Roadway Width The width measured at right angles to the longitudinal centerline of the Bridge between the bottom of curbs or guard timbers or in case of multiple heights of curbs, between the bottoms of the lower risers.

Business Day: Every Calendar Day less Saturdays, Sundays, and Holidays.

Calendar Day: Every day shown on the calendar, beginning at 12:01 a.m. and ending at midnight.

Change Order: See Contract Modification

Chief Engineer: The Maine Turnpike Authority's Director of Engineering.

Closeout Documentation: All documentation required by the Authority to close out the Project in accordance with all applicable contractual, statutory or regulatory requirements. These documents include, but are not necessarily limited to: an acceptable final payment requisition, a lien waiver and indemnity of the Authority against any Subcontractor liens, and certification that all persons or firms supplying work and materials to the project have been paid in full or will be paid in full immediately upon final payment.

Compensable Delay: See Section 109.5.1 - Definitions - Types of Delays.

Completion: Completion occurs when the Contractor has finished all Work pursuant to the Contract, including Delivery of all Closeout Documentation. Completion does not mean Substantial Completion. Unless the context indicates otherwise, Completion also does not mean Completion of Physical Work.

Completion of Physical Work: Completion of Physical Work including punch list items occurs when the Work is complete and has undergone a successful final inspection.

Conduit: A pipe used for receiving and protecting wires or cable.

Conform or Conformity: The performance of an item of Work in strict compliance with all applicable provisions of the Contract. For a related definition, see Substantially Conform.

Construction Easement: A right acquired by the Authority to use or control property, outside of the established Right-of-Way.

Construction Limit Line: A line, usually outside of the Right-of-Way, within which the Contractor may Work and outside of which Work may not be performed without authorization

by the Authority.

Contract: All documents affecting the respective rights and responsibilities of the Authority and the Contractor. These documents include, but are not limited to: the Contract Agreement, Project specific proposal Bid Book, the Notice to Contractors, Plans, the Authority's Supplemental Specifications, MaineDOT's Standard Specifications and Standard Details, Special Provisions, Bid Amendments, Contract Modifications, Geotechnical Information, Permits, Bid Escrow Documentation (if any), the Contractor's Bid prices (as corrected mathematically pursuant to Section 103.1.1 - Unit Prices Govern, if necessary), and all documents incorporated by reference.

Contract Bonds: The forms of security approved by the Authority, executed by the Contractor and its Surety or Sureties, guaranteeing performance of the Work, and the payment of all obligations pertaining to the Work. For related provisions, see the definitions of Bid Guaranty, Performance Bond, and Payment Bond.

Contract Completion Time: Length of time allowed under the Contract to complete the Work pursuant to the terms of the Contract.

Contract Completion Date: The required completion date of all Work including punch list items pursuant to the Contract, except the landscape establishment period and warranty work. The Contract Completion Date is usually included in Special Provision 107 and on the Contract Agreement, Offer, & Award form.

Contract Documents: Contract Documents are all documents, whether physically attached or incorporated by reference, which make up the Contract.

Contract Execution: Execution of the Contract by the Executive Director or the Executive Director's authorized agent by signing the Contract Agreement, Offer, & Award form which action, upon written notification to the Contractor, forms a Contract as provided in Section 103.8 - Execution of Contract by Authority.

Contract Modification: A general term describing a formal change to a Contract. Types of Contract Modifications include: change orders, extra work orders, field memos, and supplemental agreements. For a related provision, see Section 109.8 - Contract Modification

Contract Time: See Contract Completion Time and Section 107.1 - Contract Time and Completion Date.

Contractor: After the Authority has executed the Contract by cosigning the Contract Agreement, Offer, & Award form provided in the Bid Documents, previously signed by the successful bidder, the Successful Bidder in a low Bid process or the successful Proposer in a best value type of Contract becomes the Contractor. The Contractor will be the single point of responsibility for all Contract obligations to the Authority. The Contractor shall be an independent Contractor with respect to the Authority and shall not be an employee, agent, or

representative of the Authority. Alternatively, "Contractor," with a lower case "c," may mean a firm engaged in construction Work.

Critical Path: The sequence of activities from the Project start to its Completion having the greatest cumulative elapsed time, thereby determining the minimum time duration of the entire Project. The Critical Path is identified by the sequence of those activities with the least float.

Critical Rock Slopes: Critical rock slopes shall be rock slopes higher than 6 feet with an overburden slope steeper than 3H:1V and all rock slopes greater than 10 feet high.

Culvert: Any structure not defined as a Large Culvert, Bridge, or Minor Span that provides a Drainage opening less than 5 feet, under the Roadway or approaches to the Roadway.

Days: Calendar Days.

Default: See Section 112.1 - Default.

Defects or Defective Work: Work that is unsatisfactory, faulty, or deficient in that it is not in Conformity with the Contract or with prevailing industry standards applicable to the Work at the time of submission of the Bid as determined by the Authority or its agents. For related provisions, see the definition of Acceptable Work and Section - 101.3.1 Meaning of "Approved," Etc.

Delay: To cause to be late. See Section 109.5 - Adjustments for Delay.

Deliver: To cause Receipt by a means set forth in the definition of Received or Receipt.

Department: The Department of Transportation of the State of Maine, as established by 23 MRSA §4205 et seq. for the administration of Highway, Bridge, and other public Works; acting through the Commissioner and his/her duly authorized representatives. For related provisions, see definitions of Project Manager, and Resident.

Design-Build Contract: A contract in which the Contractor is responsible for both design and construction requirements under the contract. In a Design-Build Contract, the Contractor maybe procured through a Best-Value Procurement process using a Request for Proposals and evaluation of submitted Proposals using price as one of several evaluation factors.

Differing Site Conditions: See Section 109.4 - Differing Site Conditions.

Disputes: Disagreements, claims, counterclaims, matters in question, and differences of opinion between the Authority and the Contractor and those Working for or through the Contractor regarding matters related to the Work that arise after Contract Execution. These include, but are not limited to, interpretation of the Contract, compensation and costs, time for performance, and quality.

Drainage: The system of pipes, Drainage ways, ditches, and Structures by which surface or subsurface waters are collected and conducted from the Highway area.

Drawings: See Plans.

Dredge Material (Dredge Spoils): "Dredge materials" means sand, silt, mud, gravel, rock or other sediment or material removed from beneath any surface water. The term, "beneath any surface water" has been interpreted by the MDEP to mean that area that falls beneath the plane bounded by the normal high water line of any stream, river, brook, pond, lake, vernal pool, etc. Note that the entire area of Dredge Material removal could be dry at the time of excavation.

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

Equipment: All machinery, supplies for repair and maintenance of such machinery, tools, and other apparatus necessary or appropriate for Completion of the Work in Conformity with the Contract.

Equitable Adjustment: An adjustment to compensation and time due to a change in the nature or scope of the Work made a part of a Contract by a formal Contract Modification. For a related provision, see Section 109.7 - Equitable Adjustments to Compensation and Time.

Excusable Delay: See Section 109.5.1 - Definitions - Types of Delays.

Executive Director: The chief executive officer of the Maine Turnpike Authority, duly appointed in accordance with 23 MRSA 1964-A.

Extra Work: Work that is outside the scope of the Contract and that the Authority determines is necessary.

Extra Work Order: See Contract Modification

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

Final Acceptance: Acceptance by the Authority for all Work and responsibility for the Project from the Contractor, except for any Contractor warranty obligations.

Force Account Work: Prescribed Work paid on the basis of Actual Costs and additives as set forth in Section 109.7.5 - Force Account Work.

Geometrics: The physical location (horizontally and vertically) and shape of the object under consideration.

Geotechnical Information: 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 Section 104.3.14 - Interpretation and Interpolation.

Haul Road: A private way leading to a public way that is used by the Contractor to move Equipment and Materials related to the Work.

Highway: A general term denoting a public way for purposes of vehicular travel, including the entire area within the Right-of-Way.

Holidays: New Year's Day, Martin Luther King Day, President's Day, Patriot's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. For a related provision, see Section 107.3.3 - Sundays and Holidays.

The following holidays are extended to include the Holiday Period:

HOLIDAY	HOLIDAY PERIOD
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.
Thanksgiving Day	12:01 a.m. (Midnight) preceding Wednesday to 12:01 p.m. following Monday.

Incentive/Disincentive Payment: An adjustment to the contract price of a predetermined amount for each day the Work is completed ahead of or behind the Contract Time, Contract Completion Date, or some specified intermediary milestone. A disincentive is not a penalty, but an estimate of Authority user and other costs incurred by the people of the State of Maine.

Incidentals: The terms "Incidentals" and "Incidental to the Contract" mean items that are accessory to or incorporated into the Work and that have no separate Pay Item. Unless otherwise provided in the Contract, the cost of Incidentals shall be included in the Contractor's prices for the Pay Items. There will be no separate payment.

Independent Assurance (IA): Independent assessment of the reliability of test results obtained from Acceptance Testing.

Inexcusable Delay: See Section 109.5.1 - Definitions - Types of Delays.

Inspector: An authorized representative of the Resident assigned to make detailed inspections of the Work to determine compliance with the Contract.

In Stream Work: Any activities conducted in the water (see permits in individual contract documents.)

Laboratory: Unless the context indicates otherwise, the testing laboratory of the Authority or its designee.

Landscape Establishment Period: The period of time commencing at initial Acceptance of each planting and extending for two years, unless otherwise provided in the Contract. For a related provision, see Section 621 - Landscaping.

Landscape Establishment Period Obligations: The obligations of the Contractor and Landscape Subcontractor during the Landscape Establishment Period. Unless otherwise provided in the Contract, these obligations consist of monthly inspection and reporting from March through November of the condition of all plants installed and replacing plants that are not in a healthy, vigorous growing condition. For a related provision, see Section 621 - Landscaping.

Landscape Items: Items starting with the number "621" in the Schedule of Items.

Landscape Subcontractor: The individual or firm performing Landscape Items, generally a Subcontractor.

Lane: A strip of Roadway intended to accommodate a single line of vehicles.

Large Culvert: Any structure not defined as a Culvert or Bridge that provides a Drainage or non-drainage opening under the Roadway or approaches to the Roadway, that is over 5 feet but less than 20 feet in nominal diameter.

Liquidated Damages: An amount due and payable to the Authority by the Contractor, normally realized through a reduction of amounts to be paid to the Contractor. Said amount is calculated by multiplying a daily amount set forth in the Contract by the number of Days the Work remains Incomplete after the Contract Completion Time has expired.

Major Item: An individual Pay Item that constitutes 10% or more of the amount of the Awarded Contract, calculated using the Contractor's Bid prices and the estimated quantities contained in the Bid Documents.

Material: Any substance specified for use in the construction of the Project and related

approaches.

Minor Item: All Pay Items that are not Major Items.

Minor Span: Same definition as Bridge, except having an opening of at least 10 feet, but less than 20 feet.

Modification: See Contract Modification.

National Highway System (NHS): A system of Interstate Highways and major collectors specifically designated by the Federal Highway Administration. It includes the Interstate System, other urban and rural principal arterials, highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, the defense strategic highway network, and strategic highway network connectors.

Non-conforming Work: All Defective, Unauthorized, or Uninspected Work.

Notice of Award: A written notice to the Contractor stating that the Contract has been executed.

Notice of Intent to Award: Written transmittal by the Authority to an Apparent Successful Bidder, following approval of an Award by the Authority's Board or Executive Director, of either of the following: (1) the Contract Documents or (2) Notice, which may be by electronic mail, that the Contract Documents are available for the bidder to pick up at the Authority. See Section 103.4 – Notice of Intent to Award

Notice to Contractors: The advertisement or invitation for Bids issued by the Authority.

Offer: A response to a solicitation that, if accepted, would bind the offeror to perform the resultant Contract. Submission of a Bid constitutes an Offer by the Bidder.

Order: A directive from the Authority requiring compliance by the Contractor.

Owner: The legal or record Owner of the property on which the Project is to be constructed.

Partnering: See Section 104.4.1 - Partnering.

Pavement Structure: The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.

A. Base Course- One or more layers of specified Material thickness placed on a subbase or a subgrade to support a surface course.

B. Subbase- Layers of specified Material thickness placed on a subgrade to support a base course.

C. Surface Course- The top layer(s) of a Pavement Structure designed to accommodate the traffic load, resist skidding, traffic abrasion, and the disintegrating effects of climate. This layer is sometimes called the "Wearing Course."

Pay Item: An item of Work set forth in the Schedule of Items for which the Contractor must provide a price.

Payment Bond: The security furnished by the Contractor and its Surety to guarantee payment of all obligations incurred by the Contractor related to the Contract. For a related provision, see Section 110.2.1 - Bonds.

Performance Bond: The security furnished by the Contractor and its Surety to guarantee performance of the Work in Conformity with the Contract. For a related provision, see Section 110.2.1 - Bonds.

Physical Work: All Work specified in the Contract that affects the physical environment including all Work within the Project Limits, final cleaning up and finishing, and Completion of Punch List Items as provided in Section 107.9 - Project Closeout, and removal of traffic control devices.

Plans: When the context so indicates, "Plans" means applicable construction drawings including plan, profile, typical cross sections, Working Drawings, Standard Details, Supplemental Standard Details, and supplemental Drawings or exact reproductions thereof or electronically displayed equivalents, that show the location, character, dimensions, and details of the Work. Where the context so indicates, "Plan" may also mean a detailed process, program, or method worked out beforehand for the accomplishment of an objective. Examples include QCP, the SEWPCP, the TCP, Safety Plan, and Project specific emergency planning.

Prequalification Procedure: The current procedure and requirements observed by the MaineDOT in its prequalification of Contractors, including but not limited to the requirements contained in the current version of the MaineDOT's Contractor's Prequalification Procedure first adopted by the MaineDOT in April 1998 and administered through the MaineDOT's Contracts Section.

Process Control Test: Test performed at the source of supply of Material to determine whether the Material meets the Specification prior to Delivery.

Profile Grade: The trace of a vertical plane intersecting the top of the wearing surface, usually along the longitudinal centerline of the roadbed. Profile Grade means either elevation or gradient of such trace according to the context.

Progress Meeting: See Section 104.4.3 - Progress Meetings.

Project: The infrastructure improvement being constructed, rehabilitated, or repaired, together

with all appurtenances and Incidentals. All the Work to be performed under the Contract.

Project Limits: Areas within the Right-of-Way or Construction Limit Lines shown on the Plans or otherwise indicated in the Contract. If no Project Limits are indicated in the Contract, the Project Limits shall be the area actually occupied by the Bridge, Highway, or other infrastructure before construction extending to and including (A) the area outside the Shoulders and ditch lines and within any landmarks or historic features such as fences, fence posts, tree rows, stone walls, corner stones, or other monuments indicating the boundary line, or (B) in the absence of any landmarks or historic features, Sidewalks, Shoulders, and ditch lines to the top of cuts or toe of fills. For a related Maine statute, see 23 MRSA § 653.

Project Manager: The Authority's duly authorized representative for overall coordination of the Project.

Project Records: Records or data of any type on any media including those produced by the Contractor or its consultants, Subcontractors, suppliers, or manufacturers that are related to the Project. Project Records include, but are not limited to, Plans, Working Drawings, Specifications, manufacturer's recommendations, catalog cuts, daily time reports, records of Force Account Work, schedules and scheduled updates or revisions, quality control Plans and related documentation, inspectors' reports, traffic control Plans and log, safety program and incident reports, soil erosion and water pollution control Plans and log, employment records, payrolls, internal accounting records, equal opportunity and affirmative action records, preconstruction conference records, Progress Meeting records, Partnering records, correspondence, e-mails, and any other documents related to the Work.

Proposal: A Bid or other response to a Request for Proposals.

Proposer: The entity submitting a Proposal.

Punch List: See Sections 107.9.2 - Notice/Inspection/Punch List and 107.9.3 - Notices/ Final Inspections/Physical Work Completion.

Quality Assurance (QA): All planned and systematic operations to ensure that the operation, material, and/or end product meets Specifications. Quality Assurance may include, but is not necessarily limited to the following:

A. Approval and oversight of the Contractor's Quality Control Plan
B. Review of inspector, sampler, tester, and Laboratory qualifications
C. Inspection for Conformity with Contract requirements
D. Contractor Quality Control
E. Acceptance Testing, and
F. Independent Assurance.

Quality Control (QC): Planned and specified actions or operations necessary to produce an end product that Conforms to the quality requirements of the Contract. Unless otherwise specified, QC includes inspection and testing for process control to the extent determined necessary by the Contractor. Quality Control is also referred to as Process Control.

Quality Control Plan (QCP): The program and documentation of that program, approved by the Authority, which specifies the actions, inspection, sampling, and testing necessary to keep production and placement operations within Specifications, including provisions to quickly determine when an operations becomes out of control and those actions that the Contractor will take to restore compliance.

Receipted Bill: Written Evidence provided by the Contractor that the cost of materials has actually been paid by the Contractor. This could take the form of a copy of a cancelled check, a copy of an invoice with written verification from the Subcontractor that the bill has been paid or a written declaration from the Subcontractor, on its letterhead, that the bill has been paid.

Received or Receipt: When considering documents, unless the context indicates otherwise, Receipt by regular US mail, overnight courier, service in hand, or by fax or electronic transmission with confirmation of Receipt originating from the recipient. If Delivered by regular US mail, notices that are properly addressed will be deemed Received three Days after mailing, unless the recipient admits earlier Receipt, in which case Receipt will be the date admitted.

Reference Stake: A stake set beyond the proposed grading areas for use as a control for the new construction.

Related Entities: All general partners, joint venturers, parent firms, subsidiaries, or sister firms that are, in the Authority's judgment, owned or controlled by the Bidder or other entity under consideration.

Request for Proposal: The Authority's solicitation for Proposals, including the Notice to Contractors and other documentation furnished or made available to potential Proposers.

Resident: The Authority's on-site representative.

Right-of-Way: A general term denoting land, property, or interest therein, usually in the form of a strip, acquired for or devoted to the Project or other purposes.

Road: A general term denoting a public way for purposes of vehicular travel, including the entire area within the Right-of-Way.

Roadbed: The graded portion of a Highway within top and side slopes, prepared as a foundation for the Pavement Structure and Shoulders.

Roadside: A general term denoting the area adjoining the outer edge of the Roadway. Extensive areas between the Roadways of a divided Highway may also be considered Roadside.

Roadside Development: Those items necessary to complete the Highway that provide for the preservation of landscape Materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching, and the placing of other ground covers; and such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the Highway.

Roadway: The portion of a Highway, including Shoulders, for vehicular use. A divided Highway has two or more Roadways.

Schedule of Items: A document containing the list of items of Work provided in the Bid Documents on which the Contractor provides prices. The Schedule of Items is a Special Provision.

Schedule of Work: A written Work schedule submitted and maintained by the Contractor by which the Contractor Plans and prosecutes the Work. The Schedule of Work contains dates of commencement and Completion of various items of Work within the Contract Time and all authorized extensions. For a related provision, see Section 107.4.2 - Schedule of Work Required.

Shop Drawings: See Working Drawings.

Shoulder: The portion of the Road or Roadway that is contiguous with the traveled Way and that is provided for accommodation of stopped vehicles, emergency use, and lateral support of base and surface courses.

Sidewalk: A way constructed primarily for the use of pedestrians.

Skew or Skew Angle: The acute angle formed by the intersection of the line normal to the centerline of the Roadway or the Working line of the Superstructure with a line parallel to the face of the Substructure or in the case of structural plate units and Culverts, with the centerline of the structural plate units and Culverts.

Special Provision: Revisions to the Standard and/or Supplemental Specifications applicable to an individual Project or Contract.

Specifications: A written or electronic textual compilation of provisions and requirements for the performance of the Work, including incorporations by reference.

Standard Details: Detailed Drawings published and approved by the Authority for general application and repetitive use.

Standard Specifications: Maine Department of Transportation Standard Specifications and Standard Details for Construction Revision of 2014.

State: The State of Maine acting through its authorized agencies and representatives.

Street: A general term denoting a public way for purposes of vehicular travel, including the entire area within the Right-of-Way.

Structures: Bridges, Culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, end walls, buildings, sewers, services pipes, underdrains, foundation drains, and other manufactured features.

Strut: See Large Culvert

Subcontractor: An individual, firm, corporation, limited liability company, partnership, joint venture, sole proprietorship, or any other entity to whom the Contractor or a Subcontractor contracts a portion of the Work. A subcontracting arrangement shall be considered to exist when a person or firm assumes an obligation through a written contract for performing part of the Work using its own Equipment and Workers, procuring its own Materials and supplies, and furnishing its own supervision with only general overall supervision being exercised by the prime Contractor or higher tier Subcontractors. Unless the context indicates otherwise, Subcontractors include suppliers, vendors, fabricators, and any other entities which contract to perform any portion of the Work.

Subgrade: The top surface of a Roadbed upon which the Pavement Structure, Shoulders, and curbs are constructed.

Subgrade Treatment: Modification of Roadbed Material by stabilization.

Substantially Conform or Substantial Conformity: Substantially Conform or Substantial Conformity means that the Work at issue, though not in strict accordance with the Plans, Specifications, or other Contract requirements, Conforms sufficiently to the applicable standard such that it may be acceptable to the Authority (possibly with a credit to the Authority) and not require removal, as determined by the Authority. For a related definition, see Conformity. For a related provision, see Section 106.8.1 - Substantially Conforming Work.

Substructure: All of that part of the Structure below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the backwalls, parapets, and wingwalls of abutments.

Superintendent: The Contractor's authorized on-site representative who is in charge of and responsible for the Work.

Superstructure: Excluding backwalls, wingwalls and wing protection railing, the portion of the Structure above: the bearings of simple and continuous spans; the skewbacks of arches; the top of footings of rigid frames.

Supplemental Liquidated Damages: Liquidated Damages for additional costs resulting from Contractor's failure to complete a specific Work item, phase, or milestone within the time specified in the Contract for that item. Supplemental Liquidated Damages are in addition to

and separate and distinct from Liquidated Damages.

Supplemental Specification: Approved additions or modifications to the Standard Specifications.

Supplemental Standard Details: Approved additions or modifications to the Standard Details.

Surety: The corporation, limited liability company, partnership or individual, or other entity, other than the Contractor, that executes or is obligated under a Contract Bond or Bid Bond.

Traveled Way: The portion of the Roadway that is intended for the movement of vehicles, exclusive of Shoulders and auxiliary Lanes.

Turnpike: The entire toll highway, including all approaches, bridges, interchanges, toll facilities and structures owned by the Maine Turnpike Authority.

Unacceptable Work: All Work that does not Substantially Conform to the Contract as determined by the Authority.

Unauthorized Work: Work performed without providing the Resident with reasonable notice of the date and time that the Work is to be performed, Work performed contrary to the instructions of the Authority, or any Extra Work performed without written Contract Modification or Agreement. For a related provision, see Section 106.8.3 - Unauthorized Work.

Uncontrollable Events: Events or acts that were unforeseeable at the time of Bid submission and that were beyond the Contractor's control in that the risk of the event or act could not have been prevented or managed by the Contractor with proper planning, coordination, Subcontractor management, insurance, bonding, maintenance, erosion control, traffic control, security precautions, Workers or Equipment. Uncontrollable Events are of two types: (A) severe weather events that meet the requirements of the first sentence of this definition and/or (B) non-weather events that meet the requirements of the first sentence of this definition which might include acts by foreign enemy, quarantine restrictions, strikes not involving the Contractor, action or inaction by governmental authorities, action or inaction by Utility Companies or other third parties (not Subcontractors) working on Project related Work within the Project Limits, and freight embargoes. Uncontrollable Events specifically do not include: fires (unless caused by a weather event described in this definition above), acts by other third parties including vandals and members of the traveling public, non- performance of Subcontractors (except in cases of unforeseeable, permanent, and complete cessation of all operations by the Subcontractor for reasons unrelated to the Contractor), and difficult, but foreseeable weather for the location and time of the Work including but not limited to cold, snow, and ice in the winter, flooding caused by snow melt and rain in the spring, rain in the fall, and thunderstorms in the summer.

Uninspected Work: Work that was performed without inspection by the Authority.

Unit Price: The price for one unit of Work submitted by the Bidder in its Bid.

Utility Companies: All persons or entities set forth in 35-A MRSA §2501(2).

Utility Facilities: All Structures, facilities, Equipment, and all appurtenances thereto used by Utility Companies including, but not limited to, poles, wires, support poles, guys, anchors, water pipelines, sewer pipelines, gas pipelines, all other pipelines, fire alarms, service connections, meter boxes, valve boxes, light standards, cableways, Conduits, signals, and manholes.

Value Engineering Change Proposal: See Section 109.6 - Value Engineering.

Wetlands: Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions.

Winter Suspensions: See Section 107.5.1 - Winter Suspensions.

Work: All labor, services, personnel, Materials, Equipment, tools, supplies, and Incidentals required or indicated by the Contract in Conformity with the same. For a related provision, see Section 105.1 - Intent of the Contract.

Working Day: A calendar day, exclusive of Saturdays, Sundays, holidays and the period from November 15th to May 15th inclusive, on which weather and other conditions not under the control of the Contractor will permit construction operation to proceed for 70% of the hours of the usual working day with normal working force.

Saturday shall be considered one half of a working day if the Contractor works 2 or more hours during the forenoon. If the Contractor extends work after 12 o'clock noon after working 2 or more hours during the forenoon, it shall be considered as one working day. If after approval, work is performed on a Sunday or Holiday, the day shall be considered a working day. Work necessary either for the safety of the traveling public or maintenance, performed on Sundays or Holidays, which is neither caused by nor resulting from any fault of the Contractor, shall not be considered a working day.

The Contractor shall not work during the period from ½ hour after sunset to ½ hour before sunrise, unless otherwise approved by the Resident.

Working Drawings: Plans, sketches, or Drawings provided by the Contractor, or its Subcontractors, vendors, or fabricators for the purpose of supplementing the Plans provided in the Bid Documents and being necessary to demonstrate that the Work will comply with the Contract and meet the intent of the Contract. Working Drawings shall be of sufficient detail to meet the purpose set forth in the preceding sentence. Examples include Shop drawings, erection Plans, falsework Plans, cofferdam Plans, and bending diagrams for reinforcing steel.

101.3 General Rules of Interpretation

101.3.1 Meaning of "Approved," Etc. - Unless the Contract clearly indicates otherwise,

whenever anything is to be done or is not to be done unless “approved”, “accepted”, “acceptable”, “authorized”, “ordered”, “required”, “determined”, “directed”, “specified”, “designated”, “established”, “suitable”, “satisfactory”, “sufficient”, “unacceptable”, or a similar word or phrase, the word or phrase shall be interpreted as if it were followed by the words “by the Authority” or “to the Authority” as applicable.

101.3.2 Referenced Publications - The Contractor is responsible for obtaining all manuals, Specifications, reference guides, or other publications referenced or indicated by the Contract and performing the Work in Conformity with the same. Unless a specific date or version is specified, the Contractor shall use the most recent version of such publication that existed at the time the Bid was submitted.

101.3.3 Cross References - Cross-references are sometimes provided in the Contract. (Example: "For a related provision, see Section "). These cross-references are provided for convenience only and are not a comprehensive listing of related Sections. The lack of a cross reference or an incorrect reference shall not be interpreted as indicating that there are no related provisions and does not relieve the parties of the obligation to read the Contract as a whole.

101.3.4 Headings and Tables of Contents - All headings, indices, titles, and tables of contents are for convenience only. They do not control interpretation and do not relieve the parties of the obligation to read the Bid Documents or Contract as a whole.

101.3.5 Calculated Dimensions Control - In the case of discrepancy between calculated dimensions and scaled dimensions, calculated dimensions shall control.

101.3.6 Priority of Conflicting Contract Documents - If the Contractor discovers any ambiguity, error, omission, conflict, or discrepancy ("ambiguity, etc.") related to the Contract Documents that may significantly affect the cost, quality, Conformity, or timeliness of the Work, the Contractor must comply with Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered. In the case of ambiguity, etc., the following components of the Contract Documents shall control in the following descending order of priority:

Bid Amendments (most recent to least recent)
Project Specific Permit Requirements
Special Provisions
Notes on Plans Issued for Bidding
Plans Issued for Bidding
Supplemental Specifications
Supplemental Standard Details
Standard Specifications
Standard Details

101.3.7 Multiple Pay Items - When there is more than one Pay Item for similar Work governed by one Specification, the item number in the Specification may be appended with additional digits to differentiate such multiple Pay Items. For example, Specification item

900.06 also covers Pay Items 900.061, 900.062, 900.0601, and 900.0602, etc. unless the context clearly indicates otherwise.

SECTION 102 - BIDDING

Scope of Section This Section includes requirements related to eligibility to Bid and the Bidding process from advertisement for Bids, through Bid Opening, to the analysis of Bids.

102.1 Eligibility to Bid

102.1.1 Basic Requirements - To be eligible to Bid, prospective Bidders must (A) not have been debarred or suspended from Bidding by the Authority or MaineDOT, and (B) not be in Default with respect to any outstanding Contract with the Authority or MaineDOT, unless the Authority grants written permission to Bid despite such Default. For related provisions, see Sections 102.9 - Bid Opening and 103.3 - Post-Bid Qualification.

102.2 Notice to Contractors - A Notice to Contractors will provide a solicitation or an invitation to bid.. Such Notice will contain a brief and general description of the nature and location of the Work and information about how to Bid and how to provide any prequalification requirements.

102.3 Examinations of Documents, Site and Other Information - Before submitting a Bid, the Bidder is responsible for: (A) obtaining and examining the Plans, Specifications, all Bid Amendments, and all other Bid Documents; (B) examining the Geotechnical Information and all other information provided or referenced in the Bid Documents; (C) examining the site(s) of Work and making other examinations and investigations that are needed to Make the Bidder fully aware of the conditions that would be encountered in performing the Work, and (D) communicating with the Authority as provided in Section 102.5 - Communication Before Bid Opening. For a related provision, see Section 102.7.2 - Effects of Signing and Delivery of Bid.

102.3.1 Geotechnical Information - Bidders and Contractors are obligated to examine and, if necessary, obtain geotechnical information. If one exists the Authority's project geotechnical report will be made available, either on the Authority's website or otherwise.

The Authority shall not be responsible for the Bidders' and Contractors' interpretations of or estimates or conclusions drawn from the Geotechnical Information. Data provided may not be representative of the subsurface conditions between the boring locations.

This section does not diminish the duties imposed upon parties in Section 102 or in any other sections.

102.4 Estimated Quantities - Quantities shown in the Bid Documents are estimates; only to be used for the preparation and comparison of Bids. For related provisions, see Sections 109.1- Changes in Quantities and 109.2 - Elimination of Items.

102.5 Communication Before Bid Opening

102.5.1 Questions From Bidders - All questions from Bidders must be transmitted as described in the Notice to Contractors.

102.5.2 Bidder's Duty To Notify Authority If Ambiguities Discovered - Bidders shall not take advantage of any ambiguity, error, omission, conflict, or discrepancy ("ambiguity, etc.") relating to the Bid Documents, Geotechnical Information, site conditions, or any other information that may significantly affect the cost, quality, Conformity, or timeliness of the Work. If a Bidder discovers any such ambiguity, etc., it must notify the Bid Contact Person immediately in writing. Failure to provide such notice constitutes a waiver of any claim for entitlement for additional compensation or time related to such ambiguity, etc.

102.5.3 Bid Amendment - The Authority will interpret or modify the Bid Documents only by written Bid Amendment or other writing issued by the Authority. The Authority is not bound by any other oral or written representations, including information exchanged verbally at pre-Bid meetings. The Authority will issue written Bid Amendment in response to questions from Bidders when the answers: (A) relate to ambiguous, incorrect, or missing information in the Bid Documents; (B) are not apparent to Contractors experienced in the type of Work covered by the potential Contract; and (C) could have a significant impact on the cost, quality, Conformity or timeliness of the Work. For a related provision, see Section 102.5.1 - Questions From Bidders.

102.6 Bid Guaranty - Bids must be accompanied by a Bid Guaranty that complies with all the requirements of this Section, unless noted otherwise in the Notice to Contractors and the Bid Documents.

No Proposal will be considered unless accompanied by a Bid 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 Bid Guaranty shall not be less than $500.00. Solicitations do not require a Bid Guaranty.

Bid Bonds must be: (A) issued by an insurance company licensed or approved by the State of Maine, Department of Business Regulation, Bureau of Insurance, to do business in the State of Maine; (B) properly signed by the Bidder (as Principal) and a duly authorized representative of the insurance company referenced above, and (C) on the Authority's Bid Bond form (or an exact copy thereof) OR must not contain any significant variations from said form as determined in the sole discretion of the Authority.

102.7 Delivery of Bids

102.7.1 Location and Time - The Proposal and the Bid Guaranty shall be enclosed in a sealed envelope 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

A. Offer and Agreement to Pre-execution Terms: The signing and Delivery of a Bid represents: (1) an offer by the Bidder to perform the Work for the price(s) submitted within the time(s) specified and in Conformity with all provisions of the Bid Documents; and (2) the Bidder's Agreement to all the provisions of the Bid Documents governing requirement and procedures applicable before Contract Execution. The Bidder's offer shall be irrevocable until the expiration of the time for Contract Execution by the Authority set forth in Section 103.8, except as provided in Sections 102.8 and 102.10 regarding withdrawal of Bids.

B. Bidder Representations: By signing and Delivering a Bid, the Bidder represents that: (1) the Bidder has performed the examinations required by Section 102.3 - Examinations of Documents, Site and Other Information; (2) the Bidder has given the Authority written notice of all ambiguities, etc. discovered by the Bidder as required by Section 102.5.2 – Bidder's Duty to Notify Department if Ambiguities Discovered; and (3)the Bidder has sufficient knowledge of the Bid Documents, Geotechnical Information, the site, and other conditions to properly price, schedule, plan, and perform the Work.

102.8 Withdrawal of Bids Before the Time Specified for Bid Opening A Bidder may withdraw a Bid after Delivery, provided the request for such withdrawal is made in writing or in person before the time set for Bid Opening in the Notice to Contractors. The Bidder may revise and resubmit a Bid so withdrawn before the time specified for Bid Opening.

102.9 Bid Opening Bids will be opened at the time and place specified in the Notice to Contractors or any applicable Bid Amendments. Unit and lump sum prices are available for inspection by the Bidders after the Bid Opening process.

Accordingly, the Authority may reject a Bid as non-responsive and/or determine a Bidder is not responsible or ineligible to Bid even if that Bidder's Bid is read at Bid Opening.

102.10 Withdrawal of Bids in Multiple Bid Context Bids may not be withdrawn after the time of Bid Opening, except under the limited circumstance set forth in this Section 102.10.

If a Bidder has submitted Bids on multiple Projects that have the same Bid Opening time, and if after the reading of Bids the Bidder has submitted the apparent low Bid on one Project, then the Bidder may withdraw any Bids on other Projects for which no Bids have yet been read. Such a request for withdrawal must be made in person or in writing. Bids withdrawn will not be considered. The Bidder assumes sole responsibility for the risk that the Bidder's apparent low

Bid is ultimately rejected as non-responsive or that the Bidder is later determined to be not responsible.

102.11 Bid Responsiveness

102.11.1 Non-curable Bid Defects The Authority **WILL REJECT** Bids as non-responsive if ANY ONE of the following occurs.

A. The Bid and Bid Guaranty are not Delivered to the precise location and by the precise time set forth in the Notice to Contractors or any applicable Bid Amendment.

B. The Bidder is not eligible to Bid as set forth in Section 102.1 - Eligibility to Bid.

C. The Bid is not signed by a duly authorized representative of the Bidder.

D. A Bid Guaranty Conforming to Section 102.6 - Bid Guaranty is not submitted.

E. The unit price and bid amount is not provided or a lump sum price is not provided or is illegible as determined by the Authority.

F. The Bidder fails to indicate the Bidder's choice where the Bid Documents clearly require a choice affecting the bid amount.

G. The Bid contains any conditional or alternate Bidding language including the right to accept or reject an Award of the Contract.

H. The Bidder submits more than one Bid for the same Contract, or the Bidder and any Related Entity each submit a Bid for the same Contract.

I. The Authority has substantial evidence of collusion by the Bidder.

J. The Bidder fails to comply with any provision in the Bid Documents that expressly indicates that such non-compliance will cause Bid rejection.

K. When A plus B bidding is specified, the bid does not contain the number of Calendar Days bid to complete the work

L. The Bid is not submitted on the most current forms provided by the Authority or identical copies thereof

The Bidder will have no opportunity to cure the above Non-curable Bid Defects.

102.11.2 Curable Bid Defects - Unless the Authority waives a curable Bid defect, the Bidder must cure, within the time stated in the written notice by the Authority, but not less than 24 hours, all other Bid Defects not listed in Section 102.11.1 - Non-curable Bid Defects that are identified by the Authority. Failure to cure such Defects within said time may result in forfeiture of the Bidder's Bid Guaranty. Upon such failure, the Authority may take any action in the best interests of the Authority including those set forth in Section 103.6 - Failure to Fulfill Award Conditions.

Such curable Bid Defects include, but are not limited to, the following.

A. Missing total sum of the items provided in the Schedule of Items.

B. The prices or signatures on the Bid or Bid Guaranty are not in ink or other non-erasable substance.

C. Failure to acknowledge Receipt and consideration of all Bid Amendments.

D. All other Defects that do not create a significant question as to the Bidder's total Bid amount or the Bidder's ability to complete the Work within the Contract Time or otherwise in accordance with the Contract terms, as determined by the Authority.

Bids that the Authority determines, in its sole discretion, create a significant question as to the Bidder's ability or will to complete the Work within the Contract Time or otherwise in accordance with the Contract terms will be treated as non-curable defects. Materially unbalanced bids may fall into this category, depending on the circumstances.

Contractors prequalified for the general category stated in the Notice to Contractors may be determined non-responsive by the Authority based on recent or new data provided since the last determination of prequalification for that Contractor.

If the Authority rejects a bid as non-responsive it may take any action that is in the best interests of the Authority including but not limited to those set forth in Section 103.6 - Failure to Fulfill Award Conditions.

SECTION 103 - AWARD AND CONTRACTING

Scope of Section This Section includes requirements related to the final determination of Bid responsiveness and Award and execution of the Contract.

103.1 Analysis of Bids

103.1.1 Unit Prices Govern - After Bid Opening, the Authority will review the mathematics of all apparently responsive Bids. In the event of a discrepancy between (A) unit and lump prices and (B) extensions and/or the total Bid Price, the unit and lumps sum prices shall govern and the total Bid Price will be adjusted accordingly.

103.1.2 Unbalanced Bids

A. Definitions: An Unbalanced Bid is a Bid that is Mathematically Unbalanced and that may also be Materially Unbalanced. Mathematically Unbalanced means a Bid containing lump sum or Unit Prices, which do not reflect reasonable direct costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs. Materially Unbalanced means a Mathematically Unbalanced Bid, which, in the Authority's judgment, generates a doubt that said Bid will represent the lowest ultimate cost to the Authority.

B. Comparison and Possible Bid Rejection: The Authority will compare the price of items contained in the Bid of the Apparent Successful Bidder with the estimate prepared by the Authority. If the Bid is Mathematically Unbalanced, the Authority may, in its discretion, notify the Apparent Successful Bidder and request an explanation. There shall be no negotiation or changes in prices. If the Bidder fails to provide a reasonable explanation, and if the Authority finds the Bid is Materially Unbalanced, the Authority may reject the Bid as non-responsive and may take any action that is in the best interests of the Authority including those set forth in Section 103.6 - Failure to Fulfill Award Conditions.

103.1.3 Waiver of Defects and Technicalities; Right to Reject Bids - The Authority reserves the right to reject any or all Bids and to advertise for new Bids if doing so is in the best interest of the Authority. The Authority reserves the right to waive curable defects and other technicalities without notice to any party. Refer to section 102.11.2 for Curable Bid Defects.

103.2 Return of Bid Guaranty - Bid Bonds will not be returned unless so requested. Bid Guaranties other than bonds will be returned within 7 Days following Bid Opening, except that the Bid Guaranties from the two lowest responsive Bids from responsible Bidders will be retained until Contract Execution or rejection of all Bids.

103.3 Post-Bid Qualification

103.3.1 PreQualification Requirement for Award - If the Notice to Contractors lists a PreQualification requirement, the Apparent Successful Bidder must successfully complete the prequalification process as a condition of Award. The Authority may, in its sole discretion, substitute the process described in subsection 103.3.1.1 for the Prequalification Procedure, or require compliance with that process in addition to the Prequalification Procedure.

103.3.1.1 Notice and Information Gathering - After Bid Opening and 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. The Authority may require this demonstration regardless of whether the Notice to Contractors listed a Prequalification requirement. 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 - 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:

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

B. Failure to pay or settle all bills for labor, Materials or services on past or current Contracts.

C. Failure to provide Closeout Documentation on past or current Contracts.

D. Failure to fulfill warranty obligations on past or current Contracts.

E. Failure to comply with directives of the Authority or the MaineDOT on past or current Contracts.

F. "Below Standard" performance as determined from the MaineDOT's Contractor's Performance Rating process.

G. Inability of the Contractor to obtain or retain performance or Payment Bonds meeting MDOT requirements.

H. Failure to accept an Award of a Contract made by the Authority or the MaineDOT to the Contractor.

I. Making materially false, deceptive, or misleading Statements or omissions, whether or not under oath, regarding a claim on prior Contracts or in connection with a prequalification process.

J. Failure to provide information requested by the Authority pursuant to this Section

103.3.

K. Any of the reasons contained in Section 102.02 of the "Rules Regarding Debarment of Contractors", Maine Department of Transportation Register 17-229, Chapter 102 (October 2, 1985).

L. Debarment or suspension by any federal, State, or local governmental procurement agency or the Contractor's Agreement to refrain from Bidding as part of the settlement with any such agencies.

M. Other serious misconduct that the Authority determines will substantially and adversely affect the cost, quality or timeliness of Work, or the safety of Workers or the public.

N. Bidder has previously performed Work for the State or 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.

S. Lack of qualifications as determined by the Authority.

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

103.3. 3. Appeal - To appeal a "Not Qualified" determination, the Bidder must Deliver a written "Request for Appeal of Qualification Determination" to the Authority's Chief Operations Officer within 48 hours of Receipt of such determination. The Chief Operations Officer or the Chief Operations Officer's designee will grant such Requests for Appeal unless the Authority reasonably determines that Delay of Award pending appeal is likely to cause substantial harm to the interests of the Authority. If the Request for Appeal is denied the determination of "Not Qualified" is upheld and the Award process will proceed without the unqualified Bidder.

If the Request for Appeal is granted, the Bidder and the Chief Operations Officer must Deliver to the Executive Director or the Executive Director designee any information or

arguments that the parties want considered within 14 Days of Receipt of a "Not Qualified" determination.

Within 14 Days of Receipt of such information and arguments, the Executive Director will notify the Bidder in writing as to whether the decision of "Not Qualified" is upheld, modified, or reversed. The Executive Director'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 Intent to Award - Within five (5) days of the Maine Turnpike Authority Board or Executive Director approval of a Contract Award, the Authority will transmit to the Apparent Successful Bidder a Notice of Intent to Award. .

103.5 Award Conditions - The Apparent Successful Bidder must provide and/or perform all of the items listed in this Section 103.5 within 14 Days of Receipt of the Notice of Intent to Award. Unless indicated otherwise, all items must be Delivered to the Authority's Purchasing Manager.

103.5.1Performance and Payment Bonds Performance and Payment Bonds complying with Section 110.2.1 - Bonds.

103.5.2Insurance Certificates - Certificates of Insurance complying with Section 110.3 - Insurance.

103.5.3 Non-Resident Contractor Requirements -

A. Definition A Non-Resident Contractor is defined as a Contractor that is: (A) any person who is not a Resident of the State of Maine, or (B) any firm, corporation, limited liability company, partnership, joint venture, sole proprietorship, or other entity which (A) is not licensed to do business within the State of Maine, or (B) does not have a principal place of business within the State of Maine.

B. Requirements If a Non-Resident Contractor, the Apparent Successful Bidder must file with the Authority a copy of a written appointment of an attorney admitted to practice in the State of Maine having a place of business within the State. The appointment must: (A) set forth the attorney's business and personal addresses, and business telephone and fax numbers, (B) name said attorney to be the true and lawful attorney of the Non-Resident Contractor, (C) set forth that the Contractor agrees that any lawful process which is served on said attorney shall have the same legal force and validity as if served on the Contractor, (D) set forth that the appointment shall continue in force as long as any potential liability in any way related to the Work or the Contract remains or until the Authority receives written notice of a change of appointment Conforming to this paragraph, (E) provide that service of such process may be made by leaving a copy of the process in the hands or in the office of the Resident attorney and that such

service will be effective upon the Non-Resident Contractor, as if service were made in accordance with Rule 4 of the Maine Rule of Civil Procedure, and (F) provide that the Contractor expressly waives any and all defenses regarding service of process under Rule 12 of said Civil Rules or otherwise. The appointment shall be filed in the office of the Maine Secretary of State.

103.5.4 Execution of Contract By Bidder - The properly completed signed and witnessed Contract Agreement

103.5.5 Bid Escrow - If required by Special Provision, the Apparent Successful Bidder must provide a legible copy of Bid Escrow Documentation and a related Affidavit Conforming to said Special Provision. .

103.5.6 Other Conditions - The Apparent Successful Bidder must comply with all other conditions set forth or referenced in the Notice of Intent to Award. and other conditions that are described in the Contract Documents as requirements of Contract Award, including but not limited to requirements relating to Prequalification.

103.6 Failure to Fulfill Award Conditions - Failure of the Apparent Successful Bidder to fulfill all conditions of Award within the time provided or to otherwise accept an Award will result in forfeiture of the Award to the Apparent Successful Bidder and the forfeiture of the Bid Guaranty. Such Bidder will be prohibited from submitting a Bid for the Work in the event that the Work is re-advertised. Further, the Authority may refuse to accept any Bid from the Bidder on any Project for a period of two years from the date of such refusal.

The Authority may then take any action that the Authority determines is in it's best interest including Awarding the Contract to the responsible Bidder with the next lowest responsive Bid, rejecting all Bids, and/or re-advertising the Work.

103.7 Forfeiture of Award - The Authority reserves the right to stop the Award of any Contract at any time before the Contract Execution without liability if doing so is in the best interest of the Department. Any costs incurred by the Bidder before Contract Execution shall be the sole responsibility of the Bidder.

103.8 Award of Contract by Authority - Once the Contractor has met the requirements of the Notice of Intent to Award, the Authority has 14 days to execute the Contract. Execution of the Contract of the Authority constitutes the Authority's acceptance of the Contractor's Offer and Award of the Contract. If the Authority does not execute the Contract within the required time, the Apparent Successful Bidder may withdraw its Bid without forfeiture of its Bid Guaranty or Bidding eligibility. For a related provision, see Section 107.2 - Commencement of Contract Time.

103.9 Computation and Extension of Time - In the event that a time period provided in this Section 103 concludes on a Holiday, Saturday, or Sunday, said time period shall be extended to the next Business Day.

The Authority and Apparent Successful Bidder may extend the time for the Award process, fulfillment of Award Conditions, or execution of the Contract by mutual Agreement. Unless specifically and mutually agreed to in writing, such extensions shall not extend the Contract Time or the Contract Completion Date.

SECTION 104 - GENERAL RIGHTS AND RESPONSIBILITIES

Scope of Section This Section sets forth certain rights and responsibilities of the Authority and the Contractor that are generally applicable to all Contracts. This Section is not all inclusive and additional rights and responsibilities are set forth elsewhere in the Contract.

104.1 General

104.1.1 Basic Roles of the Parties - The Contractor has the responsibility to perform all Work in Conformity with the Contract. The Authority has the authority and responsibility to assure that the Contractor does so.

104.1.2 Joint Covenants of Good Faith and Fair Dealing - This Contract imposes an obligation of good faith and fair dealing on both parties in the execution, performance, interpretation, and enforcement of the Contract. With a positive commitment to honesty and integrity, the Contractor and the Authority agree to function within all applicable laws, statutes, regulations, and Contract provisions; avoid hindering each other's performance; fulfill all Contract obligations diligently; and cooperate in achievement of the terms of the Contract. Nothing in this subsection nullifies or supersedes the express provisions of the Contract and the Standard Specifications.

104.2 Authority's General Authority andResponsibilities

104.2.1 Furnishing of Right-of-Way - The Authority will secure all necessary rights to real property within the Project Limits shown on the Plans.

104.2.2 Furnishing of Permits - Except as provided otherwise in the Contract, the Authority will furnish Permits required to perform the Work within the Project Limits. For a related provision, see Sections 101.2 - Definition of Permits, 104.3.2 - Furnishing of Other Property Rights, Licenses and Permits and 105.8.2 - Permit Requirements.

The Contractor shall obtain the following permits, if applicable:

State Electrical and State Plumbing.

104.2.3 Authority of Resident - After Contract Execution, the Resident has the authority

to take all actions needed to assure that the Contractor is performing the Work in Conformity with the Contract. Except as provided elsewhere in the Contract, the Resident will decide all questions regarding the quality and acceptability of Materials furnished, Work performed, suspension of Work, and the interpretation of the Contract. The Resident has the authority to reject Unacceptable or Unauthorized Work and refuse to approve Progress and Final Payments until the Unacceptable or Unauthorized Work is corrected. For related provisions, see Sections 106.8 - Non-conforming Work and 109.8 - Contract Modification.

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.

104.2.4 Authority of Residents and Inspectors - Residents, inspectors, and other Authority employees or representatives working for the Authority have the authority to make initial determinations regarding the Conformity of the Work. Unless authorized by the Program Manager, Residents or inspectors are not authorized to alter or waive the provisions of the Contract or to issue instructions contrary to the Contract. They may not act as a supervisor for the Contractor.

104.2.5 Right to Inspect Work - The Authority has the authority to inspect all Materials and every detail of the Work. For a related provision, see Section 104.3.5 - Inspection of Work.

104.2.6 Right to Suspend Work - The Authority has the right to suspend any or all Work at any time for any reason. For related provisions, see Sections 105.4.4 - Maintenance During Suspension of Work and 107.5 - Suspension of Work.

104.2.7 Damage to Project Caused By Uncontrollable Events - All repairs that are required to the Project or temporary Structures because of property damage that is directly caused by an Uncontrollable Event may entitle the Contractor to an Equitable Adjustment if the Contractor complies with the notification, documentation and procedural requirements set forth in the Contract. Delays resulting from an Uncontrollable Event will be analyzed in accordance with Section 109.5 - Adjustments for Delay. For related provisions, see Sections 101.2 - Definition of Uncontrollable Event, 104.3.10 - Responsibility for Damage to Work, 109.3 - Extra Work, 109.5 - Adjustments for Delay, 109.7 - Equitable Adjustments to Compensation and Time, and 109.8 - Contract Modification.

104.2.8 No Personal Liability - The Authority's employees and other representatives act solely as representatives of the Authority when conducting and exercising authority granted to them under the Contract. Such persons have no liability either personally or as Authority employees.

104.3 Contractor's General Authority and Responsibilities

104.3.1 General Duty to Cooperate - The Contractor shall cooperate with Authority personnel, Utility Companies, railroad personnel, marine traffic personnel, regulating agencies with jurisdiction, other Contractors, municipalities, and the public in every reasonable way possible. For a related provision, see Section 104.4 - Communication and Coordination.

104.3.2 Furnishing of Other Property Rights, Licenses and Permits - The Contractor shall acquire, at its sole expense, all property rights outside the Project Limits needed for construction staging, yarding, construction, waste disposal, or other Project-related purpose. The Contractor shall also acquire, at its sole expense, all licenses and Permits necessary to perform the Work that are not furnished by the Authority. For related provisions, see Sections 104.2.1 - Furnishing of Right-of-Way, 104.2.2 - Furnishing of Permits, 104.3.11 - Responsibility for Property of Others, and 105.8.2(B) - Permit Requirements, All Other Permits.

104.3.3 Duty to Notify Authority If Ambiguities Discovered - The Contractor shall not take advantage of any Ambiguity, error, omission, conflict, or discrepancy contained in the Contract. If the Contractor discovers any such ambiguity, etc. for which the Contractor may seek adjustments to compensation, time, or other Contract requirements, the Contractor shall provide a written notice to the Authority within 48 hours and before performing any Work related to the ambiguity, etc., as provided in Section 104.4.5 - Early Negotiation. Failure to provide such notice in compliance with the Contract shall constitute a waiver of all claims related to the ambiguity, etc.

104.3.4 Workers and Equipment - The Contractor shall at all times provide all Superintendents, forepersons, laborers, inspectors, Subcontractors, sub-consultants, Equipment, Materials, and Incidentals needed to perform the Work in Conformance with the Contractor's Schedule of Work and within the Contract Time.

Any person employed by the Contractor or by any Subcontractor or any officer or representative or agent of the Subcontractor, who, in the opinion of the Resident, is intemperate or disorderly, shall be removed immediately by the Contractor or Subcontractor employing such person. The employee shall not be employed again in any portion of the Work without prior approval from the Resident.

Should the Contractor fail to remove such person or persons as required above or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Resident may suspend the Work by written notice until such orders are complied with.

During all hours of on-site activity, the Contractor shall provide an on-site, competent, English-speaking Superintendent experienced in the type of Work being performed. The Superintendent shall be capable of reading and understanding the Plans and Specifications, providing and receiving communications, and scheduling and coordinating the Work. The Superintendent shall have full authority to manage the Work in accordance with the Contract and will be responsible for managing the work of the Contractor’s employees and all Subcontractor’s present. Such superintendence must be provided regardless of the amount of Work being done.

All persons employed by or through the Contractor, except for registered trainees, shall have sufficient skill and experience to perform the Work properly. The Authority may require that the Contractor discharge any such person who the Authority determines jeopardizes safety of any person or successful completion of the Project without cost or liability to the Authority. If the Authority determines that such person's performance jeopardizes the intent of the Contract otherwise, the Authority may, but is not required, to notify the Contractor of such a determination. Neither the taking of any action by the Authority nor the failure of the Authority to take action under this paragraph will relieve the Contractor of its sole responsibility for safety and successful completion of the Project or otherwise affect the Contractor's duties regarding Workers, nor will it entitle the Contractor to any adjustment of compensation or time. Upon Receipt of such notice, the Contractor shall take any action it determines necessary to fulfill its obligations under the Contract. For related provisions, see Sections 104.5.4 - Discharge of Subcontractors, 105.1 - Intent of the Contract, and 105.2.3 - Joint Duty Regarding Safety.

104.3.5 Duties Regarding Inspection of Work

A. Safe Access The Contractor shall provide the Authority with safe access to all portions of the Work in Conformity with all applicable OSHA requirements. The Contractor shall furnish the Authority with all information and assistance required to make a detailed inspection. For a related provision, see Section 104.2.5 - Right to Inspect Work.

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.

B. Inspection By Others If any other governmental entity, Utility Company, or railroad is to pay for a portion of the Work or is otherwise authorized to inspect Work, then the Contractor must provide their representatives with safe access that Conforms to this

Section 104.3.5.

104.3.6 Project Records - Upon request by the Authority, the Contractor or any other person Working for the Contractor possessing Project Records must provide the Authority with copies of Project Records at all reasonable times without cost or liability to the Authority. Unless the context clearly indicates otherwise, Project Records are the property of the Authority. The Contractor must retain Project Records for at least three years after Final Acceptance or for any applicable warranty period, whichever is longer. For related provisions, see Sections 101.2 - Definition of Project Records and 111.1.6 - Contractor's Obligation to Keep Records.

104.3.7 Laws To Be Observed - The Contractor shall keep itself informed of and comply with all applicable federal and state laws, rules, regulations, orders, and decrees ("Law") affecting the Work including all environmental, wage, labor, equal opportunity, safety, patent, copyright, or trademark laws. The Contractor shall indemnify the Authority and hold the Authority harmless against any and all claims or liabilities arising from or based upon the violation or alleged violation of any law caused directly or indirectly by or through the Contractor.

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

State Wage Rates and Labor Laws

Unless otherwise expressly provided, this contract is governed by the Prevailing Wage provisions currently codified in Title 26, Chapter 15 of the Maine Revised Statutes Annotated. If state wage rates apply the classification of construction type and related wage rates established by the Maine Department of Labor will normally be set forth by Special Provision. If not so set forth, the Contractor shall contact the Authority before Bidding to determine the applicable wage rates in accordance with Section 102.5.2 - Bidder's Duty to Notify Authority if Ambiguities Discovered. The Contractor shall pay according to said rates and shall otherwise comply with all applicable federal and State labor laws, rules, and regulations. .

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's Special Provisions.

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 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.

104.3.9 Intellectual Property - If necessary in the judgment of the Authority, the Contractor must provide proof of legal right to use any intellectual property, including but not limited to designs, processes, devices, trademarks, Materials and copyrights. The Contractor indemnifies and holds harmless the Authority and any affected third party or political subdivision from all claims of infringement that arise from improper or illegal use of any intellectual property.

104.3.10 Responsibility for Damage to Work - Except as provided in Section 104.2.7 - Damage to Project Caused By Uncontrollable Events, the Contractor shall bear all risk of loss relating to the Work until Final Acceptance, regardless of cause, including completed Work, temporary Structures, and all other items or Materials not yet incorporated into the Work. For a related provision, see Section 110.3.6 - Builders Risk Insurance.

The Contractor shall, at its sole expense, rebuild, repair, restore, or replace such damaged Work or otherwise make good any losses that arise from such damage ("rebuilding, etc."). If the Contractor fails to Promptly commence and continue such rebuilding, etc., the Authority may, upon 48 hours advance written notice, commence rebuilding, etc. of the damaged property without liability to the Authority with its own forces or with Contracted forces and all costs

will be deducted from amounts otherwise due the Contractor. For the Contractor's responsibilities for the Work after Final Acceptance, see Section 106.9 - Warranty Provisions.

104.3.11 Responsibility for Property of Others - The Contractor and its Subcontractors shall not enter private property outside the Project Limits without first obtaining permission from the Owners.

The Contractor shall be responsible for all damage to public or private property of any kind resulting from any act, omission, neglect, or misconduct of the Contractor and its Subcontractors. The preceding sentence includes damage to vehicles passing through the Work area.

The Contractor shall, at its sole expense, rebuild, repair, restore, or replace such damaged property and otherwise make good any losses that arise from such damage. Within fifteen (15) days of occurrence Contractor shall submit in writing to the Authority a copy of their response to the claimant. If the Contractor fails to completely remedy the damage in a timely manner, the Authority may, upon 48 hours advance written notice, rebuild, repair, restore or replace the damaged property or pay the applicable claim for damages without liability to the Authority with its own forces or with contracted forces. All costs will be deducted from amounts otherwise due the Contractor.

104.3.12 Forest Protection and Laws - The Contractor shall obey all laws and regulations that govern Work within or adjacent to State or National Forests, keep the Project site orderly and clean, obtain all required Permits, prevent and assist with the suppression of forest fires, and cooperate with authorized forestry officials.

Pursuant to State law, the sale of harvested forest products must be reported to the Maine Forest Service at the end of each year. The Contractor is hereby designated as the Authority's agent for reporting of any such harvesting.

104.3.13 Materials and Items Found on the Project - With the Authority's approval, the Contractor may use suitable excavated Material in the Work and be paid for both the excavation and the placement of such Materials at the corresponding Contract Unit Prices. Except for Material used for riprap, stone ditch protection, and loam, the Contractor shall replace such excavated Material with other approved Material and properly compact it at no cost to the Authority. The Contractor shall obtain written permission from the Authority before performing any excavation outside the Project Limits.

Unless expressly provided otherwise, the Contractor shall remove and assume Ownership of all incidental Structures and Materials to be removed such as guardrail, Drainage pipe, Culverts, curbing, Bridges, and other manufactured Materials. Utility Facilities, traffic control devices, and lights, together with all supporting Structures, are excluded from the provisions of this Section 104.3.13. The cost of removal of such Structures and Materials is Incidental to the Contract unless expressly provided otherwise.

104.3.14Interpretation and Interpolation - The Contractor is responsible for all interpretations and interpolations made from information provided in the Bid Documents and Contract, including data and test results related to location, survey, hydrology, hydraulics, soils, ledge quality, existing Structures, Environmental Information, and Geotechnical Information. For related provisions, see Sections 102.3 - Examination of Documents, Site, and Other Information; 102.5.2 - Bidder's Duty To Notify Authority If Ambiguities Discovered; 104.3.3- Duty to Notify Authority If Ambiguities Discovered; and 105.6 - Construction Surveying.

104.4 - Communication and Coordination

104.4.1 Partnering

A. Definition, Purpose, and Applicability Partnering is a process of voluntary structured communication between the Authority, the Contractor, its principal Subcontractors and suppliers, and other Project stakeholders for the purpose of improving efficiency and minimizing Disputes. Partnering, including the establishment of a partnership charter, does not in any way waive, alter, or otherwise affect any provision of the Contract. For a related provision, see Section 111.1.3 - Relationship to Partnering.

Participation in Partnering is voluntary; either party may elect to not participate in Partnering for any reason. The associated costs of Partnering will be agreed to mutually and shared equally.

B. Initial Partnering Workshop If the Contractor and the Authority elect to participate in Partnering, representatives of both parties will arrange an initial Partnering Workshop. The Construction Program Manager and the Superintendent will determine Workshop attendees, agenda, duration, and location. The product of the initial Partnering Workshop will be a partnership charter. This charter will include mutually agreed upon Project goals and communication escalation procedures.

104.4.2 Preconstruction Conference - After the Contract has been executed and before the start of on-site construction by the Contractor, the Construction Program Manager and/or the Resident will schedule a preconstruction conference that must be attended by the Superintendent. Others may be invited to attend, including Subcontractors, local government representatives, environmental regulators, public relations firms, emergency service personnel, Utility Companies, municipal officials, impacted business representatives and/or landowners, or other Project stakeholders.

The agenda of the preconstruction conference may include, but is not necessarily limited to, the following topics:

A. Bid Amendments

B. Project Specific Permit Requirements

C. Special Provisions
D. Review of Plans and Notes on Plans
E. Pre-Construction Submittals
(1) Bonds - 103.5.1, 110.2.1
(1) Insurance Certificates - 103.5.2, 110.3
(2) Safety Program Information -105.2.1
(3) Emergency Contact List - 105.2.2
(4) Traffic Control Plan (if required) - 652
(5) Certification of Installation of Initial Traffic Controls (if required)
(6) Schedule of Work - 107.4.2
(7) Projected Payment Schedule - 107.4.3(if required)
(8) Soil Erosion and Water Pollution Control Plan - 656
(9) Certification of Installation of Initial Erosion Controls - 656
(10) Subcontractor's List and Certifications - 104.5.3
(11) Quality Control Plan - 106.4 (if required)
(14) Site Specific Safety Plan - 105.2.1
(15) Working Drawings Submittal Schedule
(16) Survey Layout Plan
F. Utility Coordination - 104.4.6
G. Bridge Restriction Notification (if required) - 104.4.10
H. Wage Rates - 104.3.8
(1)
I. Communications
(1) Outstanding Contractor request for information (RFIs), if any - 104.4.4
(2) Anticipated issues, Disputes, or claims (if any) - 104.4.5

The Resident will prepare minutes of the preconstruction conference and distribute them to all attendees. Any requests to revise the minutes must be made to the preparer within 7 Days of Receipt. These minutes will constitute the final record of the meeting.

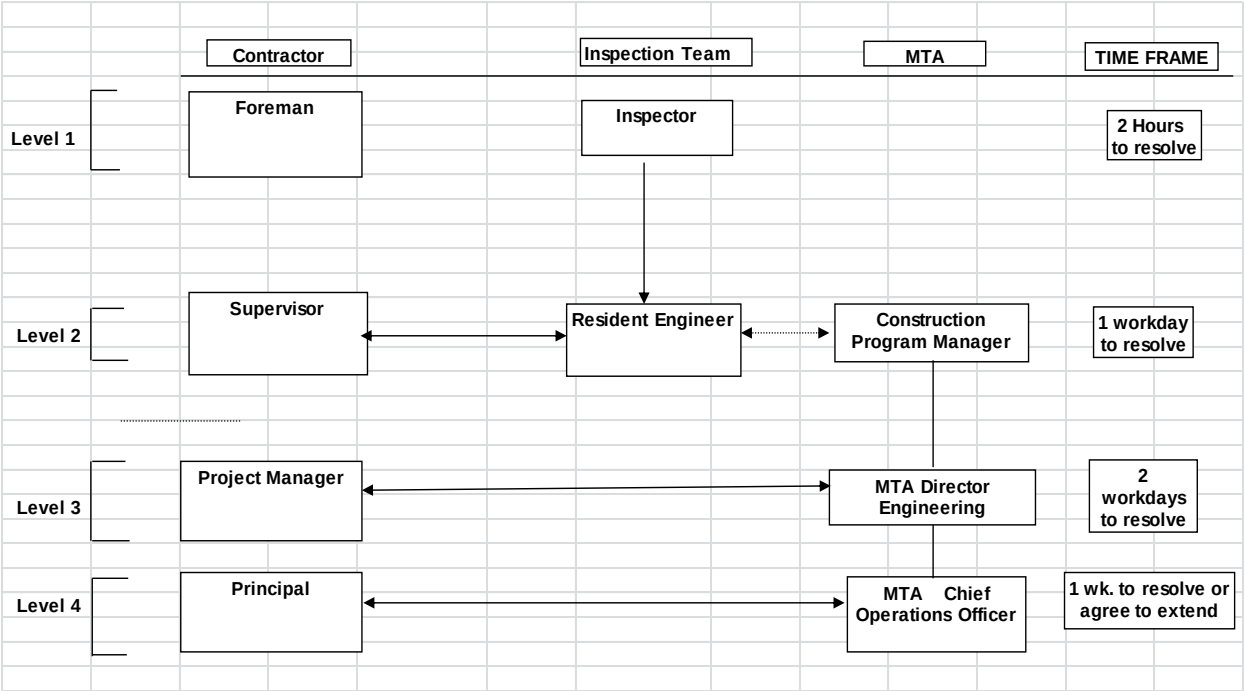
For related provisions, see Sections 104.4.6(A) - Preconstruction Utility Conference; 652 - Implementation of Traffic Control Plan, Preconstruction Field Review (if required); 656.4.1 - Temporary Soil Erosion and Water Pollution Control, Preconstruction Field Review; and 106.4 - Quality Control.

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 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:



104.4.3 Progress Meetings - Except as provided otherwise in this Section 104.4.3 - Progress Meetings shall be held at regular intervals, but at least monthly, throughout the duration of the Contract. The Resident and the Superintendent will co-chair Progress Meetings. All personnel of the Authority and the Contractor who have significant information relevant to agenda items shall attend. Others may be invited to attend including Subcontractors, , municipal officials, environmental regulators, emergency service personnel, Utility Companies, impacted landowners, impacted business representatives, public relations firms, or other Project stakeholders.

The Co-Chairs shall agree upon the Agenda for each Progress Meeting, which may include, but not necessarily be limited to:

A) Progress of Project since the last Progress Meeting
B) Expected activities before the next Progress Meeting
C) Contractor's Schedule of Work
D) Progress Payments
E) Field observations
F) Project control logs
G) Anticipated Traffic Delays or Related Issues

H) Working Drawing Submittals
I) Updates to Pre-Construction Submittals (if any)
J) Contract Modifications, RFIs, correspondence (if any)
K) Material deliveries
L) Safety Issues
M) Utilities
N) Issues, Disputes, claims and resolutions (if any)

The Resident will prepare minutes of these meetings and distribute them to all attendees. Any requests to revise the minutes must be made to the Resident within 7 Days of Receipt. These minutes will constitute the final record of the Progress Meeting.

In lieu of a Progress Meeting, the Resident and the Superintendent may exchange written communication (letter, fax, or e-mail) before or on the scheduled Progress Meeting date that indicates there is no need for the meeting because the Work is on schedule, compensation is current, communication is ongoing, and there are no significant outstanding or anticipated issues, Disputes or claims. The Superintendent's written communication shall also contain a description of: (A) progress of the Project since the last Progress Meeting or communication in lieu thereof and (B) expected activities before the next scheduled Progress Meeting.

104.4.4 Requests for Information - Either the Authority or the Contractor may request that the other party provide information that the requesting party needs to fulfill its Contract obligations by Delivering a written Request for Information (RFI). The request must: (A) be of reasonable scope limited to one subject, (B) explain why such information is necessary to fulfill Contract obligations, and (C) provide a requested response time, which must be reasonable in relation to its scope (at least 72 hours). The party receiving an RFI shall use its best effort to respond to the RFI within the time requested. The response shall be in writing. The status of outstanding RFIs shall be discussed at each Progress Meeting.

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. All questions contained in a single RFI must relate to the same subject.

104.4.5 Early Negotiation

A. Notice Required When the Contractor becomes aware of facts or circumstances that may cause the Contractor to seek additional compensation, time, or any other change in Contract requirements ("Issue"), then the Contractor shall notify the Resident

within 48 hours and before commencing any part of the Work relating to the Issue. The notice must describe the basic nature and extent of the Issue.

Such notice may not be verbal. Notice shall be in the form of a written memo signed by the Contractor with receipt acknowledged in writing by the Resident.

The written notice or confirmation will be known as a "Notice of Issue for Consideration". The Contractor will not be entitled to any additional compensation, time, or any other change to Contract requirements without a timely Notice of Issue for Consideration.

B. Negotiation When the Resident receives the Notice of an Issue for Consideration Conforming to Section 104.4.5(A) - Notice Required, the Resident and the Contractor will negotiate to attempt to resolve the Issue. Any resolution will be noted in the Progress Meeting minutes or confirmed otherwise in writing by the Authority. Any changes to the Contract that affect compensation, time, quality, or other Contract requirements shall be by written Contract Modification as provided by Section 109.8 - Contract Modifications.

For related provisions, see Sections 109.5 - Adjustments for Delay and 109.7 - Equitable Adjustments to Compensation and Time.

104.4.6 UtilityCoordination

A. Pre-construction Utility Conference: A pre-construction utility meeting may be held to coordinate the Work of the Contractor and the Work of affected Utility Companies. Usually this meeting will be held on the same day as and immediately before the pre-construction conference provided by Section 104.4.2 - Pre-construction Conference but, in any event, will be held before the start of on-site construction by the Contractor that affects Utility Facilities. The Authority for the Project, the Construction Manager, the Resident, the Contractor's Superintendent, and a representative of each affected Utility Company will be invited to attend. The Authority will prepare minutes of the pre- construction utility meeting and distribute them to all attendees. Any requests to revise the minutes must be made to the Authority within 7 Days of distribution. These minutes will constitute the final record of the meeting. For a related provision, see Section 104.4.2 - Pre-construction Conference(s).

B. Utilities Within Right-of-Way: Except as provided otherwise in the Contract including but not limited to subsection E - Temporary Relocations below, all Utility Facilities of all Utility Companies within the Right-of-Way will be relocated and adjusted as provided in the Contract by and at the expense of the affected Utility Company, provided, however, that the Contractor is responsible for scheduling its Work in accordance with the time allowed for utility relocation as provided in the Contract.

Utility relocation Work may not proceed without authorization from the Department.

C. Contractor's Responsibilities

1) Utility Coordination –The Contractor has primary responsibility for coordinating their work with utilities after contract award. The Contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the Contractor's schedule and prevent project construction delays. The Contractor shall notify the Resident of any issues. The contractor shall plan and conduct their work accordingly.

2) The Contractor must exercise every reasonable precaution to prevent damage to Utility Facilities or interruption to utility services known to or discovered by the Contractor, whether or not shown on the Plans. Such precautions must include notice to Utility Companies before undertaking Work that could damage Utility Facilities. The Contractor must provide each Utility Company with notice at least three Business Days before the date a Utility Company will have to support any pole.

3) The Contractor must take all reasonable precautions to determine the presence of underground Utility Facilities before commencing any excavation Work and must provide all affected Utility Companies with at least 72-hour prior notice of the proposed excavation. The Contractor must comply with 23 MRSA § 3360-A, entitled "Protection of Underground Facilities," Maine's "Dig Safe" statute and also contact the non-member underground facility operators in the Maine Public Utilities Commission's **"OK-TO-DIG"** directory. **Contractor shall coordinate with Resident to have MTA utilities located.**

4) The Contractor must maintain initial markings (spray paint, stakes, etc.) made by the authorized representative of a Utility Company to indicate the location of underground Utility Facilities and otherwise comply with 23 MRSA § 3360-A(4).

5) The Contractor must cooperate with Utility Companies in their relocation or operations so that these operations proceed in a logical sequence, minimize duplication of Work, and avoid unnecessary interruptions to utility service.

6) If utility services are interrupted as a result of the Contractor's Work, the Contractor must Promptly notify the appropriate Utility Company and must cooperate fully in the restoration of service. If service is interrupted, repair Work will be continuous until the service is restored. No Work can be undertaken around fire hydrants until the local fire authority has approved provisions for continued services.

7) The Contractor must schedule its Work so as to provide for all Utility Company Work and to complete the Work within the Contract Time. The estimated number of workdays required by each Utility Company to perform its relocation Work contained in the Contract is provided by the Utility Companies and are estimates only. Such Utility Facility relocation times assume normal Working times (Monday through Friday, 8 hours per day), and are dependent upon normal weather, normal Working conditions, and

freedom from emergencies. The Authority is not responsible for the accuracy of these estimates. If a Utility Company fails to perform its Work within the time frames set forth in the Contract or in the minutes of the pre-construction utility conference, and such failure impacts the Contractor's Critical Path, the Contractor may request a suspension of Work pursuant to Section 107.5.2 and such Delay will be analyzed in accordance with Section 109.5 - Adjustments for Delay.

8) Any clearing and tree removal that is a part of the Contract and that must be done in areas where Utility Companies are involved must be completed by the Contractor before the Utility Company can relocate its Utility Facilities. Any clearing, cutting of single trees, or limbing required for the temporary or permanent Utility Facility location must be approved by the Authority. The Contractor must provide the Authority with notice of at least 4 Days before removing or trimming any trees or other vegetation.

9) If blasting occurs on the Project, the Contractor must provide each Utility Company having Utility Facilities that could be damaged by the blast with at least 24-hour prior notice that includes the anticipated time of the initial blast.

10) If the Contractor actually observes a Utility Company Working within the Project Limits in a manner that (a) obviously violates the MUTCD, the Contractor's Traffic Control Plan, or an applicable OSHA requirement or commonly accepted safety practices, and (b) represents a clear and immediate risk of significant bodily injury to any person within the Project Limits, then the Contractor must notify the Resident and the Utility Company immediately.

11) The Contractor agrees to indemnify, defend, and hold harmless the Authority from and against any and all claims or causes of action arising from any act or omission of the Contractor, the Subcontractors or their respective agents, representatives, or employees for failure to comply with this Section. This clause is not meant to limit in any way the Contractor's general indemnification obligations under this Contract

D. Temporary Relocations The Contractor may request temporary changes of location of Utility Facilities for the Contractor's convenience. The Contractor must satisfy the Authority that the proposed temporary change will not interfere with the Work, the Work of Utility Companies, or the Work of other Contractors and will not impede the free and safe flow of traffic. If acceptable to the Authority, the Contractor may make its own request to the Utility Company or other party affected by such temporary changes. The expense and risk of temporary changes will be borne solely by the Contractor; no changes to compensation or time will be made.

E. Unforeseeable Utility Relocations The Authority may order utility adjustments in accordance with Section 109.4 - Differing Site Conditions.

F. Cost The cost of all Work related to utility coordination is Incidental to the Contract.

104.4.7 Cooperation With Other Contractors

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, and Contractor shall cooperate with all such efforts at no additional cost to the Authority.

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.

104.4.8 Coordination with Railroads - The Contractor shall: (A) perform Work within a railroad Right-of-Way without interfering with trains or railroad company traffic and (B) coordinate all Work crews and the Contractor's Schedule of Work to accommodate the railroad company Work. If the Bid Documents clearly show that Materials must be hauled across railroad tracks, the Authority will make preliminary arrangements with the railroad to permit such hauling. The Contractor shall, at its expense, negotiate and enter into any other Agreements with the railroad.

Special Provision will provide any additional conditions or requirements regarding railroad coordination.

104.4.9 Coordination with Marine Traffic - The Contractor shall not interfere with free and safe navigation of navigable waters except as provided by permit issued by the US Coast Guard and other applicable regulatory agencies. All Work must comply with all US Coast Guard permit conditions and all applicable Federal regulations affecting navigation.

When the basic nature and scope of marine traffic requirements is provided or referenced in the Bid Documents or is otherwise known or foreseeable to the Contractor, then the Contractor assumes all risks and liability associated with said requirements and the Contractor shall indemnify and hold harmless the Authority from all claims related to the maintenance or

obstruction of marine traffic that arise from the Contractor's acts or omissions.

104.4.10 Coordination of Road Closure/Bridge Closure/Bridge Width Restriction Notification - 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 general notification to the public, though the Contractor shall be fully and solely responsible for safety of the travelling public in the vicinity of the closure or restriction, including but not limited to compliance with traffic control planes. The Authority shall have the right to deny permission for any restriction or closure and to require the removal of any existing restriction or closure without cost to the Authority.

The closure shall be announced on a minimum of two portable/changeable message signs, placed in approved locations, beginning at least 10 days prior to the closure.

104.5Subcontracting

104.5.1 Limits on Subcontracting - The Contractor shall perform at least 30% of the value of the Work with its own Work force, excluding any specialty items as designated in the contract documents by the Authority.

The Contractor shall not carry the Workers of another Contractor or firm on its payroll or a Subcontractor's payroll. The Contractor shall not use any Subcontractors that are debarred from Bidding by the Federal Government or any agency of the State of Maine.

104.5.2 Contractor's Duties Regarding Subcontractors - Subcontractors are solely the responsibility of the Contractor. The Contractor is responsible for assuring that its Subcontractors have sufficient skill and experience to perform the Work properly and for coordinating and managing its Subcontractors to achieve the intent of the Contract. The Contractor agrees to indemnify, defend, and hold harmless the Authority from and against all claims and causes of action arising out of any act or omission of Subcontractors, their agents, representatives, and employees. The Contractor agrees to indemnify the Authority and hold the Authority harmless from any claims asserted by its Subcontractors including any claims to recover losses allegedly suffered by a Subcontractor. Subcontracting does not alter or diminish the Contractor's obligations under the Contract. For a related provision, see Section 105.1 - Intent of the Contract.

104.5.3 Documentation Regarding Subcontracting - before any Work is performed by a Subcontractor, the Contractor shall provide the Authority a list of all Subcontractors that the Contractor anticipates will be providing Work within the Project Limits. The Contractor shall continuously update the Subcontractor information and provide it to the Authority throughout the duration of the Project.

If requested the Contractor shall provide the Authority with copies of any subcontract or other document that establishes the relationship of the Contractor and any Subcontractors.

104.5.4 Discharge of Subcontractors - The Authority, upon written notice to the Contractor, may require that the Contractor discharge any Subcontractor without cost or liability to the Authority. If the Authority determines that a Subcontractor's performance jeopardizes the intent of the Contract otherwise, the Authority may, but is not required, to notify the Contractor of such a determination. Such notice, or lack thereof, does not affect the Contractor's duties regarding Subcontractors. Upon Receipt of such notice, the Contractor shall take any action it determines is necessary to fulfill its obligations under the Contract. The Authority does not have any duty to take any action under this paragraph, and neither the exercise of the Authority's rights under this paragraph nor the non-exercise of those rights will relieve the Contractor of its sole responsibility for the performance of Subcontractors. For related provisions, see Sections 104.3.4 - Workers and Equipment, 104.5.2 - Contractor's Duties Regarding Subcontractors, 105.1 - Intent of the Contract, and 105.2 - Health and Safety.

104.5.5 Prompt Payment of Subcontractors

A. Pay When Paid: The Contractor shall pay Subcontractors in full for all Work satisfactorily performed and Invoiced by the Subcontractor no later than 30 Days from the date the Contractor receives payment from the Authority for such Subcontractor's Work. Contractor will ensure that its Subcontractors pay all of their ~~Sub-~~Subcontractors, including suppliers and material men, no later than 30 days from the date they receive payment from the Contractor.

B. Retainage: The Contractor shall return to the Subcontractor all retainage withheld from the Subcontractor within 30 Days after the date the Subcontractor's Work is satisfactorily completed. If there is a Delay in such return of retainage, the Subcontractor may pursue all rights it may have under the claims procedure referenced in Section 104.5.6 - Subcontractor Claims for Payment.

104.5.6 Subcontractor Claims for Payment - The Contractor agrees to notify all Subcontractors of the claim filing procedure of Payment and Performance bonds required by 110.2.1. The Department may use retainage and other remaining project funds to pay outstanding claims for Accepted Work.

104.5.7 Flow Down - All subcontracts of the Contractor, and all lower tier subcontracts, shall contain or reference all applicable provisions of the Contract, including all safety, wage, Prompt payment, labor, environmental, and equal opportunity provisions. The Contractor indemnifies and hold harmless the Authority against any and all claims or liabilities arising from the failure to include such flow down provisions and agrees that any such claims and liabilities may be paid by the Authority using retainage, other Project funds, or as a setoff from payments otherwise due to the Contractor on this or other Contracts.

104.5.8 No Third Party Beneficiaries - The Contractor and the Authority agree that this Contract is not intended to create any third-party beneficiaries or to authorize anyone not a party to the Contract to maintain an action under Contract provisions.

104.5.10 Warranty and Maintenance Bonds - Warranty and Maintenance Bonds may be required of the Contractor or a subcontractor for specified items that the Department deems appropriate. Specific requirements will be given via Special Provision. These bonds may be for specified items in the Contract Schedule of Items. The Bond must name the "Maine Turnpike Authority" as an oblige. The Contractor shall provide a copy of said bond to the Authority before the performance of any affected on-site Work. Should a subcontractor be required by special provision to provide a Warranty or Maintenance Bond, the Contractor hereby authorizes the Authority to directly contact that Subcontractor and/or its Surety in the event of a failure of the bonded item to perform as specified.

SECTION 105 - GENERAL SCOPE OF WORK

Scope of Section - This Section contains Work requirements that are generally within the scope of all Projects. These include provisions related to health and safety, traffic control, maintenance of Work, hauling of Materials and Equipment, construction surveying, Working Drawings, the environment, historic and archeological considerations, equal opportunity and civil rights. This Section is not all-inclusive. The scope of these items is often described more specifically and fully elsewhere in the Contract Documents.

This Contract is not federally funded, unless expressly provided otherwise in the Bid Documents.

105.1 Intent of the Contract - The intent of the Contract is to provide for the construction and Completion of a functionally complete Project in Conformity with the Contract. The Contractor shall furnish all Work to achieve this intent including all Work that may be reasonably inferred to be required from the Contract or from prevailing industry or trade custom, whether or not specifically called for.

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 Health and Safety

105.2.1 Safety Responsibility - The Contractor has the overall responsibility to maintain

safety of their employees and of all other persons in the work area or on the worksite. The Contractor shall provide all safeguards, safety devices, and protective Equipment and take all other action that is necessary to continuously and effectively protect the safety and health of all persons from hazards related to the Work. Such safeguards include providing a sufficient number of security guards.

105.2.2 Health and Safety Plan - A copy of the Contractor's Health and Safety Plan must be on file with the Engineering Department of the Authority prior to commencement of work. A copy of the Safety Plan will be provided to the Authority in an electronic media format prior to commencement of work. The Contractor shall designate which portions of such submission, if any, it considers confidential business information. If such program is revised during the Contract Time, the Contractor shall provide the updated program to the Authority. The Contractor shall comply with its safety program and this Section 105.2 - Health and Safety. The Contractor shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the Authority from all claims and damages arising from such non-compliance.

105.2.3 Project Specific Emergency Planning - Unless the Contract provides for closure of an existing facility, the Contractor shall ensure that essential police, fire, rescue, and ambulance services have reasonable and timely access to and through the Project Limits. The Contractor shall contact all emergency service providers in the area, discuss potential impacts on emergency operations (including water supply for fire suppression), and minimize any negative impacts. Fire hydrants within or adjacent to the Project Limits shall be kept accessible to fire apparatus at all times, unless the fire department agrees otherwise in writing. For a related provision, see Section 104.3.12 - Forest Protection and Laws.

If the nature of the Work involves deep trenching, confined spaces, toxic chemicals, or any other unusual hazards that could require specialized rescue, the Contractor shall inform and cooperate with the appropriate fire department, rescue service, or EMS.

The Contractor shall provide the Resident with and post and maintain in conspicuous places within the Project Limits, a list containing (A) emergency response numbers with the names and telephone numbers (including cellular phone and pager numbers, if applicable) of local ambulance, police, fire, rescue, and hospitals, (B) emergency response numbers for hazardous Materials spills as required by Section 656.3.4(f) - Spill Prevention, (C) the Contractor's personnel with phone numbers who may be reached in case of emergency, and (D) the Authority’s personnel with phone numbers who may be reached in case of emergency.

105.2.4 Unsafe Conditions - The Contractor will immediately eliminate all unsafe conditions brought to the Contractor's attention by the Resident or any other Authority staff. If the Contractor actually observes any person(s) performing Work in a manner that (A) the observing party actually knows is not in compliance with the MUTCD, the TCP, an applicable OSHA requirement, or commonly accepted safety practices, and (B) creates a clear and

immediate risk of significant bodily injury to any person, then the observing party shall immediately notify such person(s) Working in an unsafe manner and the other party to the Contract. The Contractor and the Authority agree to cooperate in eliminating all such unsafe conditions. For related provisions, see Sections 104.3.4 - Workers and Equipment, 104.4.6 - Utility Coordination, 105.3 - Traffic Control and Management, and 105.4 - Maintenance of Work. Nothing in the foregoing 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. {Neither the Resident or any other Authority staff member or agent is responsible for jobsite safety.}

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.

105.2.5 Compliance with Health and Safety Laws The Contractor shall comply with all applicable federal, State, and local laws, regulations and Authority policies governing safety, health, and sanitation including all applicable laws and regulations of OSHA. The Contractor shall comply with these laws and regulations and ensure compliance by its subcontractors. The Contractor is responsible for correcting any health and safety violations.

For related provisions, see Sections 105.2.3 - Joint Duty Regarding Safety, 105.3 - Traffic Control and Management, and 105.4 - Maintenance of Work.

105.2.6 Convenience of the Public - At all times the Contractor shall perform the Work to minimize obstructions to pedestrian, vehicular, railroad, and marine traffic. All temporary and permanent pedestrian access ways must comply with the Americans with Disabilities Act (ADA). Footways, gutters, sewers, inlets, and portions of the Highway adjacent to the Work must not be obstructed unless allowed by the Contract.

If the Contractor receives notice from the Authority that the Contractor has failed to comply with the provisions of this Section 105.2 - Health and Safety, the Contractor shall remedy such non-compliance immediately. If the Contractor fails to do so, the Authority may remedy such non-compliance by any means and deduct the cost of the remedy from amounts otherwise due the Contractor.

105.2.7 Use of Explosives - The use of explosives is permitted, however, prior to any blasting

the Contractor must submit a detailed blasting plan to the Resident at least three (3) weeks prior to commencing drilling and blasting operations. The blasting plan shall contain the following information:

a. Site plan with location of nearest structures and abutters. Plan shall also show the location of all private wells;

b. Plan of each blast showing hole-spacing and delay pattern;

c. Diameter and depth of each hole;

d. Amount of explosive per hole;

e. Total pounds of explosives per delay;

f. Total amount of explosives per blast;

g. Type of non-electric delays to be used;

h. Amount of stemming in each hole;

i. Type of explosive to be used;

j. Soil and rock profile in blast zone;

k. Scale distance to the nearest abutting structure;

l. Type and location of seismograph to be used;

m. Size of blasting mats and cover to be used; and,

n. Safety precautions to be followed.

After submission of the blasting plan, but prior to the start of the blasting program, the blasting Contractor shall meet with the Resident, Maine Turnpike Authority officials, State Police (turnpike barracks), and affected utility representatives. The purpose of the meeting is to advise them of their blasting plan and schedule, accept feedback on the proposed plan, and coordinate the blasting effort.

Should field conditions warrant a change in the general blasting plan, the blasting Contractor shall provide a sketch and blasting plan details based on the actual field conditions prior to the blast for inclusion in the Project records.

The following general requirements are to be adhered to:

A. Blasting permits shall be obtained by the Contractor from all local, State and Federal agencies having jurisdictions. Blasting will not be authorized by the Resident without proper permits.

The Contractor shall comply with all applicable laws, rules, ordinances, and regulations of the Federal Government, the State of Maine, and the city or town governing the transportation, storage, handling, and the use of explosives. All labor, materials, equipment, and services necessary to make the blasting operations comply with such requirements shall be provided at no additional costs to the Authority.

The Contractor shall obtain and pay for all permits and licenses required to complete the work of this Section.

In case of conflict between regulations or between regulations and Specifications, the Contractor shall comply with the strictest applicable codes, regulations or Specifications.

B. Obtain the services of a qualified vibration and blasting expert to monitor the blasting. All seismographic instruments shall be capable of producing a permanent record of the information required to determine the particle velocity at any time during all phases of the blasting operation. A copy of all recording shall be furnished to the Authority within two (2) working days after a blast. Seismographic recordings shall be taken at the critical locations and additional instruments shall be furnished, located and operated as deemed necessary by the Resident.

Persons responsible for blasting shall be Licensed Blasters in the State of Maine and shall have had acceptable experience in similar excavations in rock and controlled blasting techniques.

C. Non-electric detonation systems shall be used. Electric blasting caps will not be permitted.

D. The Contractor shall conduct all blasting activity in such a manner that the peak particle velocity of ground vibration, measured at the locations of the nearest structures to the blast, does not exceed the “safe limits” recommended by the U.S. Bureau of Mines in

FIGURE B of BUMINES RI 8507, as follows:

FIGURE B

BUMINES RI 8507

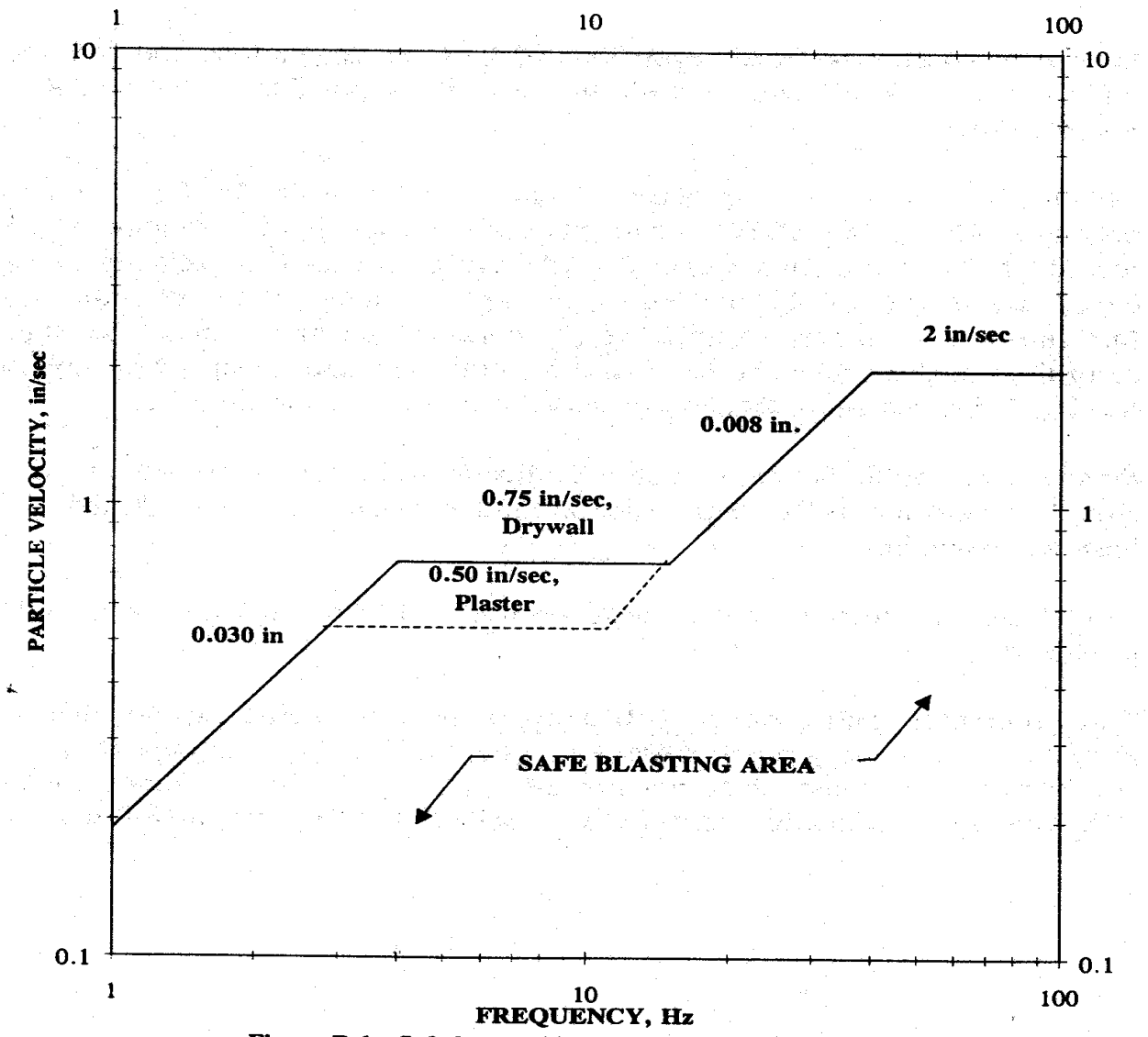


Figure B-1 - Safe levels of blasting vibration for houses using a combination of velocity and displacement

ALTERNATIVE BLASTING LEVEL CRITERIA

E. The Contractor shall conduct all blasting activity in such a manner that the peak airblast overpressure measured at the locations of the nearest above ground occupied structures to the blast (considering wind direction) does not exceed 0.014 psi.

F. Scaled distance factors permitted for various distances from blast:

Distance from blast site (ft)	Scaled distance factor to be used without seismic monitoring (ft)
0 to 300	50
300 to 5000	55
5000 and beyond	65

G. The Contractor shall advise the Resident at least five (5) working days in advance of the dates on which he proposes to perform blasting operations, providing an approximate hour for the Resident's approval. The Authority will provide police at the turnpike site, who will stop traffic in both directions while the blast is detonated. The Contractor will be responsible for obtaining the necessary permits and police officials required to close local streets during periods of blasting.

H. Safety Precautions

1. Clearing Danger Area Before Blasting - no blasting shall be permitted until ***all*** personnel in the danger area have been removed to a place of safety. A loud, audible warning system, devised and implemented by the Contractor, shall be sounded before each blast. The Contractor shall familiarize all personnel on the Project, Authority, Police Officers, Residents, and the general public with the implemented system. The danger area shall be patrolled before each blast to make certain that it has been completely cleared, and guards shall be stationed to prevent entry until the area has been cleared by the blaster following the blast.

2. Explosives shall be stored, handled and employed in accordance with Federal, State and local regulations.

3. No explosives, caps, detonators or fuses shall be stored on-site during non-working-hours.

4. Blasting mats may be used to cover the top and vertical face of all blasts in order to minimize the possibility of excessive throw of rock. The use of blasting mats is not required.

5. The Contractor is advised that the Authority's Maintenance Forces and State Police use two-way radios in the vicinity of the Project. These radios cannot be turned off during loading operations. Therefore, non-electric detonation systems shall be used. Electric blasting caps will *not* be permitted.

6. The Contractor shall be responsible for determining any other safety requirements unique to blasting operations at these particular sites so as not to endanger life, property, utility services, any existing or new construction, or any property adjacent to the site.

7. No requirements of, or omissions to, require any precautions under this Contract shall be deemed to limit or impair any responsibility or obligations assumed by the Contractor under or in connection with this Contract; and the Contractor shall at all times maintain adequate protection to safeguard the public and all persons engaged in the work, and shall take such precautions as will accomplish such end, without undue interference to the public. The Contractor shall be responsible for and pay for any damage to adjacent roadways or structures resulting from work executed under this Section.

8. The Contractor is required to secure all travelways, entrances and exits within 300 feet of the blast zone. No vehicles or pedestrians will be allowed within the 300-foot-zone until the blast is complete, all debris is cleaned from the roadways, and the site is deemed safe by the Resident.

I. General Blasting Procedures

1. The time during which explosives may be restricted to non-peak travel periods. The use of explosives is not permitted on Friday, weekends (Saturday and Sunday), holidays, on the eve of a holiday, or during non-daylight-hours unless approved in writing by the Resident. A blast may be allowed early on a Friday morning before 6:00 a.m. if it can be completed during daylight-hours. Specific allowable blasting times are outlined in the Special Provisions. In order to minimize traffic disruptions, the Contractor shall schedule blasting such that all disrupted traffic shall be cleared between any two successive blasts detonated anywhere on the Project. The Contractor will be allowed as many mainline traffic stoppages as can be cleared in the designated blasting window, provided the blast schedule can be safely coordinated. Each stoppage will be counted as one complete stoppage of mainline traffic. The Authority may withhold permission to blast if, in the opinion of the Authority, actual or anticipated traffic volumes will produce mainline or local road congestion that cannot be cleared in a reasonable amount of time. The Contractor's blasting operations shall be performed using extreme care to minimize the inconvenience and interruption to traffic and damage to the existing pavement, structures and surrounding areas.

2. The Contractor shall have sufficient equipment available on-site to clear the pavement of blast rock, if it is necessary. At a minimum, the Contractor shall have a vehicle to sweep the pavement and a half-ton pickup equipped with a plow. The blast will not be allowed to occur if this equipment is not present.

3. The Contractor shall coordinate all blasting with the Resident on-site who shall determine in advance when the charges may be set.

4. Blast hole diameter shall not be greater than three inches.

5. No free flowing, pourable or pumpable explosives shall be used unless approved by the Resident. All explosives shall be in cartridges or other semi-rigid containers.

J. Pre-Blast Condition Survey

The Contractor shall provide a pre-blast survey as described below:

Prior to start of excavation (earth/rock) or blasting work, the Contractor shall conduct a pre-blast condition survey of all existing structures and conditions on the site, adjacent to the site, or in the vicinity of the site. This survey shall extend to such structures or conditions as may be affected by the Contractor's construction operations. As a minimum, condition surveys shall be performed on all structures within 500 feet of anticipated blasting areas. The Contractor is responsible for the following:

1. Coordinate activities, issue notices, obtain clearances and provide whatever photographic and secretarial assistance is necessary to accomplish the survey.

2. Give notice, in writing, to the owner of the property concerned and tenants of the property. Advise in notice, the dates on which surveys are to be made so that they may have representatives present during the examination. Provide copies of all notices to the Resident.

3. The survey shall consist of a description of the interior and exterior conditions of the various structures examined. Descriptions shall locate any existing cracks, damage or other defects existing, and shall include such information so as to make it possible to determine the effect, if any, of the construction operations on the defect. Where significant cracks or damage exist, or for defects too complicated to describe in words, photographs shall be taken and made part of the record.

4. The survey shall include a test of all private wells in the area. Water quality tests shall be obtained so that a baseline condition may be developed.

   Contractor's record of the pre-blast condition survey shall consist of written documentation and photographs of the conditions identified, or a good quality videotape survey with appropriate audio description of conditions and defects. Prior to start of work, one copy of the Contractor's record of conditions survey shall be submitted to the Resident for review and retention.

   Upon completion of all excavation (earth/rock) and blasting work, the Contractor shall make an examination similar to the pre-construction survey of any properties, structures, and conditions where complaints of damage have been received or damage claims have been filed. Notice shall be given to all interested parties so that they may be present during the final examination. Records of the final examination shall be distributed the same as the original preconstruction survey.

K. Payment

No separate measurement or payment will be made for the work outlined in this Section including the detailed blasting program, pre-blast and post-blast surveys, blasting and permit acquisitions. All cost associated with this work shall be incidental to the Rock Excavation item(s).

L. Indemnity

Notwithstanding full compliance with these Specifications, approval of blasting plan, and successful limitation to maximum peak particle velocity noted above, the Contractor shall be solely responsible for any damage, direct or indirect, arising from blasting and shall hold the Authority and Resident harmless from any costs, liens, charges, claims or suits, including the costs of defense, arising from such damage, real or alleged. The Authority and Resident shall be additionally-named insured on any insurance policy covering blasting carried by the Contractor, and this requirement shall also be enforced on any subcontractor.

The Contractor shall provide a pre-blast and post-blast survey including photographs. An inspection of all facilities within and adjacent to the Contract limits shall be made to determine any changes that may occur due to the blasting operations.

The Resident's approval shall not relieve the Contractor of any responsibility for any hazards or damages related to this work. The use of explosives shall conform to all Federal and State laws and regulations. Explosives must not be stored within the turnpike right-of-way. Explosives shall be in the care of competent watchmen at all times, and placement and detonation shall be performed under the direction of a qualified blaster licensed in the State of Maine.

105.3 Traffic Control and Management - The Contractor shall provide continuous and effective traffic control in compliance with Section 652 - Maintenance of Traffic. For Related Provisions, see Special Provision Section 526, Concrete Barrier, and Section 652, Maintenance of Traffic.

105.3.1 Notices Required - The Contractor shall plan paving operations so that the Resident will have sufficient advance notification to provide the necessary inspection and testing. 48 hours will be considered sufficient notice. In the event that paving is suspended, the 48-hour notification shall be required again before restarting the paving operations unless otherwise agreed by the Resident. A verbal warning will be given before starting the offense process for paving notification.

The Contractor shall plan granular material operations so that the Resident will have sufficient advance notification to provide a proctor for the material to be placed. Sufficient notification will be considered 7 days. Changes in source will also require this notification.

Failure to provide the above notifications will result in the following actions:

First offense - written warning
Second and subsequent - liquidated damages will be charged for one calendar day

105.4 Maintenance of Work

105.4.1 Maintenance During Construction - The Contractor shall maintain the Project and all related Work in a safe and satisfactory condition until Final Acceptance. Such maintenance requires continuous and effective Work conducted daily. Once physical work commences, the Contractor is responsible for maintenance of roads and sidewalks that are open to public travel within the Project limits.

Trenches Where existing pavement carries traffic and is removed, the pavement shall be replaced daily with a temporary pavement consisting of a minimum of three inches of acceptable hot or cold bituminous mixture. Cold bituminous mixture shall contain aggregates, asphalt cutbacks, liquefiers and wetting agents. No separate payment will be made for furnishing, placing, maintaining, and removing temporary pavement, and all cost of such work will be considered incidental to the contract.

Before placing any permanent pavement over backfilled trenches, the edge of the adjoining existing pavement shall be cut even and vertical, and coated with tack coat to form a tight joint between the new and the existing pavements. The permanent pavement depth and type (HMA or PCC) will match the existing roadway structure. No separate payment will be made for cutting and tack coating the joint.

Paved Surface - The Contractor is responsible for maintaining the existing paved shoulder, ramps, and travel lanes on the Maine Turnpike in good condition. Unless specially allowed by special provisions all travel lanes open to traffic must have a paved surface. 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.

If the Contractor fails to meet the conditions of Section 105.4.1, the Authority will notify the Contractor of such failure. The Contractor shall remedy such failure within 4 hours after receiving such notice. If the Contractor fails to do so, this may be considered a traffic control violation in accordance with Section 652 and the Authority may remedy the situation with its own or Contracted forces without liability to the Authority and all costs will be deducted from amounts otherwise due the Contractor. When the Contract involves placing material on, or use of previously constructed subgrade, base course, pavement, or structure, the Contractor shall maintain such previously constructed Work in a safe and satisfactory condition until Final Acceptance.

Except as expressly provided otherwise in the Contract, the cost of complying with this Section 105.4.1 is Incidental to the Contract.

105.4.2 Use of Granular Materials - The Authority may authorize and pay for granular Materials that are capable of supporting traffic and necessary to maintain the specified traffic Lane widths upon the following conditions.

A. The Contractor must prepare the area where the granular Materials are to be used by eliminating objectionable Material and providing adequate temporary Drainage before the granular Material is placed.

B. Quantities of granular Materials will be determined by the most appropriate method of measurement that applies at the time the Material is placed and that is in accordance with the Specifications for the particular type of granular Material authorized for use. For a related provision, see Section 108.1 - Measurement of Quantities for Payment.

C. Payment for granular Material will be made at the Unit Price for the Material authorized for use.

D. Payment as Common Excavation will be made when Material for maintenance of traffic is removed.

105.4.3 Maintenance During Winter Construction

Except as provided in the following paragraphs, when the Contractor performs Work during winter weather conditions, the Contractor shall plow snow from the portions of a Project that carry vehicular or pedestrian traffic, including all Bridges and Sidewalks, so as to allow the free and safe flow of such traffic. The State or local governmental agency that would otherwise be responsible for winter maintenance will sand and salt such portions of a Project.

On such portions of a Project that (A) have been untouched or left by the Contractor in a suitable condition to carry traffic as determined by the Authority and (B) are unaffected by the construction operations, the State or local governmental agency responsible for winter maintenance will plow, sand, and salt.

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

The Contractor is responsible for the maintenance of erosion control and traffic control devices. The Contractor is also responsible for snow plowing and ice removal from all work areas, areas around traffic control devices to maintain visibility of traffic control devices, drainage paths, and catch basins within limits of traffic control, in order to maintain drainage away from the paved travel way. The snow plowing by the contractor shall include the snow plowed to the side of the road by the Authority to the areas listed above. No claims will be allowed from the Authority's snow plowing operations.

105.4.4 Maintenance During Suspension of Work

A. Work Responsibilities Prior to suspension, the Contractor must make the Project suitable for the free and safe flow of traffic as determined by the Authority including covering or removal of signs. To provide space for snow removal, all areas to be used by traffic must be clear for the entire usable Roadway including Shoulders, or curb-to-curb including Sidewalks.

During suspension, the Contractor must: (1) take precautions necessary to prevent damage to the Work and to allow the Authority to provide maintenance (such precautions include providing Drainage and erecting any necessary Structures, signs, or other facilities); (2) maintain all temporary Structures and traffic control devices; and (3) continuously maintain, in an acceptable growing condition, all living plant Material, including newly established seedings and soddings furnished under the Contract and take precautions to protect vegetative growth from damage.

After suspension, the Contractor must clean up all evidence of the snow and ice control at its expense, including removing excess sand and debris from the Roadway and replacing all base or subbase Material that was lost as a result of maintenance activity.

If a Work suspension is not approved, the Contractor will remain responsible for maintaining the Project, including plowing snow, controlling ice, and patching or retreating the surface.

B. Cost Responsibilities All costs related to suspending and resuming Work related to approved suspensions will be considered incidental to the contract. For related provisions, see Sections 104.2.6 – Right to Suspend Work and 107.5 – Suspension of Work.

105.4.5 Maintenance of Existing Structures

When new Bridge or Minor Span is being installed on a new alignment and the existing

structure is to remain in service, the Authority will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours, prior to removal of the existing structure. In the case, the Authority will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but no limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others.

105.5 Hauling of Materials and Equipment

105.5.1 General Requirements - Except as provided otherwise and limited in this Contract, the Contractor may use any public Road or Bridge for the hauling of Materials and Equipment in legally registered vehicles that are carrying legal loads and operating otherwise in accordance with all applicable State or federal laws. If the Contractor violates such laws or the terms of this Contract relating to hauling, the Contractor shall, at its expense, repair damage to any Road or Bridge that the Authority determines was caused by the Contractor to the satisfaction of the governmental entity that maintains the Road or Bridge.

The Contractor must abate any dust nuisances caused by such hauling. For a related provision, see Section 637 - Dust Control and Section 656 - Temporary Soil Erosion and Water Pollution Control.

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 to the Contract.

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:

NUMBER OF OCCURRENCES	FINE
First	$250

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.

105.5.2 Bond for Use of Municipal Roads - If the Contractor wants to use Roads maintained by a municipality for hauling, the municipality may require the Contractor to purchase a bond for each mile of traveled length. The face value for such bond shall not exceed $50,000/ mile. of traveled length. The face value for such bond shall not exceed $50,000/mile. The cost of said bond shall be Incidental to the Contract.

105.5.3 Posted Roads or Bridges - The Contractor must comply with all restrictions set forth pursuant to 29-A MRSA §2395, including springtime posting of load restrictions. An overlimit movement permit pursuant to 29-A MRSA §2382 will not relieve the Contractor of its obligation to repair damage to such posted Roads or Bridges. For a related provision, see Section 104.3.2 - Furnishing of Other Property Rights, Licenses, and Permits.

105.5.4 Narrow Roads The Contractor shall not haul on Roads having a bituminous surface width of less than 20 feet unless there is no practical alternative.

105.5.5 Overlimit Loads -

A. Within Project Limits Within the Project Limits, the Contractor shall not haul over the base courses, surface course, or accepted subgrades with loads that exceed legal limits, except for Equipment used in grading operations including the preparation of the subgrade.

B. Outside Project Limits Outside the Project Limits, the Contractor must comply with State Law including 29-A MRSA §2382 - Overlimit Movement Permits and Authority regulations before moving vehicles or hauling loads in excess of legal limits. The Contractor is responsible for all damage caused by the movement of loads in excess of legal limits whether under permit or not.

105.5.6 Restrictions on Movement and Storage of Heavy Loads and Equipment on Bridges - The Contractor shall comply with legal load restrictions and with special restrictions required by the Contract when hauling or storing materials, including demolition debris, and moving or storing equipment on Bridges within the Project Limits, that are under construction or completed but not yet open to traffic.

The Contractor shall not operate equipment mounted on crawler tracks or steel-tired wheels on or across concrete or bituminous surfaces, unless otherwise approved by the Resident. The Contract requirements may impose special restrictions on speed, load distribution, surface protection, or other precautions.

When construction operations require crossing an existing Bridge with otherwise prohibited equipment or loads, the Contractor shall use Authority approved methods of load distribution or bridging, at no additional cost to the Authority.

The Contractor will not be relieved of liability of damages resulting from the operation and movement of construction equipment because of issuance of a special permit, or by adherence to any other restrictions imposed.

Unless otherwise allowed by the Contract or approved by the Authority, the Contractor shall temporarily store construction materials, including demolition debris, or park equipment on a Bridge deck during construction in accordance with the following limits, which have been established to reflect typical design live loads:

A. Stockpiles shall not weigh more than 65,000 pounds per 1,000 square feet.

B. Individual stockpiles of materials (including pallets of products, reinforcing steel bundles and aggregate stockpiles) shall not weigh more than 25,000 pounds per 100 square feet, or

C. No single vehicle or piece of equipment shall weigh more than 80,000 pounds and no combination of vehicles, materials and other equipment shall weigh more than 200,000 pounds per span, for span lengths greater than 40 feet.

The Contractor may submit alternate loadings with calculations stamped by a licensed Professional Engineer, within 30 Days prior to placement of the load(s).

105.6 Construction Surveying

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 a minimum of

three points. For Projects between 1,500 and 5,000 feet in length the Authority will provide a minimum of five points. For Projects in excess of 5,000 feet in length the Authority will provide at a minimum 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 shall not take advantage of any ambiguity or error contained data provided by the Authority, and upon discovery of any ambiguity or error shall notify the Authority before proceeding as provided by Subsection 104.3.3, Duty to Notify Authority 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.

105.6.2.2 Electronic Design Data and Digital Terrain Model (DTM) - If provided by the Authority at the request of the Contractor, any electronic project design data will not be deemed a part of the contract, and is supplied as a courtesy only. The Contractor shall not take advantage of any ambiguity or error contained in said data, and upon discovery of any ambiguity or error shall notify the Authority before proceeding. The Contractor may convert any electronic data provided by the Authority into a format required by the Contractor's system and equipment at the Contractor's expense.

Any Digital Terrain Model (DTM) to be used for construction shall be submitted to the Authority in a format acceptable to the Authority at least 14 days prior to the pre-construction meeting. In RoadsDTM or LandXML formats are preferred – any other format must be preapproved

prior to submittal. No changes shall be made to the electronic model after submittal without prior written consent by the Project Resident. The Authority may review and may provide comments to the Contractor within 14 days of receipt of the DTM submittal

105.6.2.3 Survey Work Plan - The Contractor shall provide a Survey Work Plan to the Authority prior to, or at, the preconstruction meeting.

The Survey Work Plan shall include:

A. Make and model of equipment and software used for project layout.
B. Make and model of equipment and software used for machine guidance and control.
C. Manufacturer-stated specifications for vertical and horizontal accuracy attainable by the equipment.
D. Equipment calibration procedures and date of last calibration.
E. Narrative of methodology used to establish any additional horizontal or vertical project control points. Field notes for new vertical control shall be submitted to the Authority.
F. Site Calibration (Localization) and control verification procedures, including a timetable and tolerances. A Site Calibration report shall be submitted to the Authority, including the values of calculated residuals of each point used in the calibration.
G. Type and locations of base stations to be used, including methodology for establishing on-site base broadcast positions and localization procedures used for off-site bases.
H. Describe methodology used to overcome Real Time Kinematic (RTK) signal losses in a portion or portions of the project, and methodology to ensure signals for both inspection operation areas and construction operation areas (i.e. multiple bases operating simultaneously)
I. Describe procedures used to integrate vertical refinement equipment (i.e. laser); including the process of determining and verifying transmitter set-up location and communicating any necessary adjustments to the machine control equipment.
J. Name(s) and qualifications of the Contractor's designated on-site surveyor(s) or engineer(s) responsible for performing the project layout.
K. Design software and version used to develop the Digital Terrain Model (DTM).

The Authority will review and provide comments to the Contractor within 7 days of receipt of the Survey Work Plan.

105.6.2.4 Contractor Provided Equipment to the Authority - The Contractor shall furnish a Global Navigation Satellite System (GNSS) or Global Positioning System (GPS) Rover and/or Robotic Total Station (RTS) equipment to the Authority with the same capabilities as those used by the Contractor. This equipment shall be compatible with the system(s) used by the Contractor and be provided to the Project Resident prior to commencing Work using electronic layout methods. This equipment shall be readily available to the Authority at times needed by the

Authority. Any augmented features (such as laser refinement) used by the Contractor shall be included in the features available on the equipment provided to the Authority.

The Contractor shall provide manufacturer-certified training on the use of the GNSS, GPS and/or RTS equipment and the Contractor's systems to Authority project personnel prior to beginning any Work. This training is for the purpose of providing Authority project personnel with an understanding of the equipment, software, and electronic data being used by the Contractor.

105.6.2.5 Field Layout Specifications - All Work accomplished through electronic layout methods and/or machine control must meet the same accuracy requirements as the conventional grading construction standards detailed in the Standard Specifications. The contractor shall not use GNSS, GPS or RTS equipment for a construction activity that requires a greater precision than the machine's capability as per the manufacturer's recommendation.

105.6.2.6 Basis of Payment - No payment shall be made by the Authority for the Contractor's elected use of electronic methods of project location layout and control. Any delays arising from the operation of GNS, ,GPS, or RTS layout or machine control systems will not result in adjustment to the bid price or quantity of any construction items or be justification for granting any type of contract extension. Any costs incurred through incorrect use of GNSS, GPS, or RTS layout or machine control systems or re-work necessary through their use are the sole responsibility of the Contractor. Training of Authority project personnel in the use of GNSS, GPS or RTS will be paid on a reimbursable basis based on submitted invoices, without Contractor markup.

105.6.3 Quality Assurance - It is the Authority's perogative to perform construction survey quality assurance. Consuruction 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 tthe 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 but not limited to claims arising from 14 MRSA § 7554-A. For a related provision, see Subsection 104.3.11, Responsibility for Property of Others.

105.7 Working Drawings

105.7.1General - The Contractor shall provide all necessary Working Drawings to the

Authority for review. The Contractor shall not allow final assembly or fabrication of structural units before the Authority completes its review of the applicable Working Drawings and comments on them. The Contract price shall include the cost of furnishing and revising all Working Drawings.

The Authority's review of and comment on Working Drawings may be limited to basic Contract requirements relating to design compliance and Material type(s). Such review shall not relieve the Contractor of responsibility under the Contract including the overall correctness of Working Drawings including Engineering and mathematical computations, shop fits, and field connections.

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 on the face of the drawing or cover page of the submittal 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 solely 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

105.7.2 Review Times - The Contractor's Schedule of Work shall allow the Department the following review and comment times prior to the start of production. For a related provision, see Section 107.4 - Scheduling of Work.

First Submission: 21 Days or 1 day per drawing, whichever is greater.

Second Submission: 10 Days or 1/2 day per drawing, whichever is greater.

Each subsequent submission: 10 Days or 1/2 day per drawing, whichever is greater.

The above review times shall double for submittals that include design computations.

The Authority may combine separate submissions of analytically common elements of Work and require the per drawing review times set forth above when it determines that the Contractor has divided Working Drawings into separate submissions for the purpose of avoiding said per drawing review times.

Delay caused by exceeding the time periods listed above will be analyzed in accordance with Section 109.5 - Adjustments for Delay.

105.7.3 Cost of Review - The Authority will review the first and second submission at no cost to the Contractor. For subsequent submissions, the Authority will charge the Contractor a rate of $75 per person-hour of review. Such costs will be deducted from amounts otherwise due the Contractor.

105.7.4 Submittal Requirements - The Contractor shall indicate the order of preference for review and return of Working Drawings and organize all Drawings in the order of their importance.

The Contractor shall submit 3 sets of Drawings and an electronic (PDF) copy to the Resident.

All submittals shall use the same system of units as that used in the Authority's Plans.

105.7.5 Review Standards and Procedures - If the first submission does not meet accepted industry standards for Working Drawings or Engineering design Drawings and Specifications, as determined by the Authority, the entire submission will be returned without review and will be recorded as the first submission. When resubmitted, the review time requirements shall be those applicable to a first submission.

One set of reviewed Working Drawings will be marked with comments and returned to the Contractor. The Contractor shall then revise its Working Drawings accordingly. Except as provided otherwise in the Contract, the Contractor shall furnish the Authority with 2 reproducible copies of the final Working Drawings before construction of the element(s) depicted in the Working Drawing(s).

105.8 Environmental Requirements

105.8.1 Temporary Soil Erosion and Water Pollution Control - The Contractor shall provide continuous and effective soil erosion and water pollution control in compliance with Section 656 - Temporary Soil Erosion and Water Pollution Control.

105.8.2 Permit Requirements -

A. Permits Granted to Authority Permits are to be included in or incorporated by reference into the Bid Documents. If Permits are not so included and the Contractor is aware the Work will impact a regulated resource such as water bodies or wetland, the Contractor shall notify the Authority before Bidding. For a related provision, see Section 102.5.2 - Bidder's Duty to Notify the Authority If Ambiguities Discovered.

The Contractor is responsible for complying with all Permit conditions. If the Contractor desires to modify or seek interpretation of any permit granted to the Authority, it must coordinate any such requests through the Authority.

B. All Other Permits Except as expressly provided otherwise in the Contract, the Contractor, at its expense, shall procure all other environmental or land use Permits, licenses, or other permissions that are necessary or appropriate to perform the Work. At the time of application, the Contractor shall provide the Authority with notice of all applications for such Permits, licenses, or other permissions, and upon request, a copy of all such applications. For a related provision, see Section 104.3.2 - Furnishing of Other Property Rights, Licenses, and Permits.

105.8.3 Wetland and Waterbody Impacts -

A. General Prohibition: Except as specifically allowed by the Contract, there shall be no permanent or temporary impacts to water bodies or wetlands identified on the Plans or otherwise known to the Contractor. For a related provision, see Section 656.3.4 - "Water Pollution Control Requirements".

B. Wetlands Outside Project Limits: If the Contractor desires to conduct an activity that can disturb the soil in an area that is outside the Project Limits, but is contiguous or in close proximity to such Limits, the area first must be examined and analyzed by a qualified wetlands specialist in order to determine whether wetlands exist, and if so, to delineate them. The Contractor must notify the Authority of all such examinations and analyses and the results thereof. Wetlands so delineated must not be impacted unless properly permitted.

Any fill Material generated from this Project shall not be placed, stored, or disposed of in a wetland at an off-site location unless the Contractor provides the Authority with written evidence that all Permits necessary for such use have been obtained. Such evidence must be signed by the Owner of such site and otherwise acceptable to the Department.

C. Temporary Structures: Temporary or permanent impacts to wetlands are prohibited without proper permitting or modification to existing Permits. Temporary Structures in a waterbody must comply with any Contract provisions regarding Instream Work.

105.8.4 Hazardous Materials - If the Contractor encounters any condition that indicates the presence of uncontrolled petroleum or hazardous Materials, the Contractor shall immediately stop Work, notify the Department, treat any such conditions with extreme caution, and secure the area of potential hazard to minimize health risks to Workers and the public, and to prevent additional releases of contaminants into the environment. Such conditions include the presence of barrels, tanks, unexpected odors, discoloration of soil or water, an oily sheen on soil or water, excessively hot earth, smoke, or any other condition indicating uncontrolled petroleum or hazardous Materials. The Contractor shall continue Work in other areas of the Project unless otherwise directed by the Authority. The Contractor hall utilize approved vendors and comply with all federal, State, and local laws concerning the handling, storage, treatment, and disposal of uncontrolled petroleum or hazardous Material. If the condition meets the definition of a Differing Site Condition under Section 109.4.1, the Contractor may be eligible for an Equitable Adjustment.

105.8.5 Dredge Spoils (Dredge Materials) - Unless otherwise provided in the Contract, dredge spoils may not be used as fill within the Project Limits. Any use or disposal of dredge spoils must be in accordance with all applicable federal and State laws.

105.8.6 Pit or Quarry Requirements -

A. General: Pits or quarries that are sources of Material for the Project, including loam fields, shall meet the requirements of this Section 105.8.6. The Contractor must procure an Agreement from the Owners of such sources stating that the Owners will comply with these requirements. If requested by the Authority, the Contractor will provide the Authority with a copy of such Agreement. The Contractor shall provide the Resident with the center of the source GPS coordinate pairs (latitude and longitude) in decimal degrees (DD.DDDDDD), name, and town in which the source is located.

B. Excavation: Requirements Surface Material stripped from the pit shall be stored to allow for restoration of the pit. The Contractor shall not excavate from pit faces that are vertical or have an overhang. The Contractor must stop excavating within a 2 horizontal to 1 vertical slope 10 feet inside of a property line of a deposit, even though the Material within the pit may have a steeper angle of repose. The exception may be when an additional Agreement is reached with an adjacent property Owner to allow the extension of a pit onto the adjacent property Owner's land. The Contractor must insure that hazards such as steep pit faces and ponds are protected by flattening slopes or by erecting suitable fencing.

C. Rehabilitation: If the pit is licensed by MDEP or LURC, the Contractor shall follow the rehabilitation provisions of said license. In the absence of such license requirements, pits, including loam fields, shall be rehabilitated as provided below and in Section 657 - Rehabilitation of Pits.

1) Newly opened pits and loam fields from which any Material has been removed for the Project shall be completely rehabilitated, as defined below.

2) Areas of extensions of existing pits from which common borrow, granular borrow, gravel borrow, rock borrow, or loam have been removed for the Project shall be completely rehabilitated.

3) Areas of extensions of existing pits that have become depleted, as defined below, by the removal of other gravel, sand, Aggregate items, or loam for the Project shall be completely rehabilitated.

4) Areas of extensions of pits which have not become depleted by the removal of other gravel, sand, Aggregate items, or loam shall be rehabilitated to the extent of grading the slopes to 1 horizontal to 1 vertical or flatter.

For the purposes of this Section 105.8.6, the following definitions apply:

"Completely Rehabilitated" means grading all areas disturbed as a result of the Project and treating of the ground surface in accordance with Section 657 - Rehabilitation of Pits.

"Depleted" means when the only remaining Material is within 10 feet of a property line on a 1 horizontal to a 1 vertical slope or when the character of the Material so radically changes that it can no longer be used as originally anticipated.

105.8.7 Environmental Non-compliance - Remedies and Costs - The Contractor shall be in non-compliance if it, or Subcontractors at any tier, fail to comply with the terms of this Contract or, pursuant to Section 104.3.7 - Laws To Be Observed, any applicable environmental or land use law or regulation including Project specific permit conditions.

If the Contractor is in non-compliance, the Authority may, at its discretion:

A. Withhold all Progress Payments, or any portion thereof, during the period the Contractor is in non-compliance;

B. Remedy such non-compliance using Authority forces or another Contractor and deduct all costs incurred by the Authority from Progress Payments. Such costs include direct costs, Project Engineering costs, and Contractor costs from amounts otherwise due the Contractor, and/or

C. Suspend the Work for cause and without cost or liability to the Authority.

Said suspension shall continue until the Contractor has addressed all non-compliance issues as directed by the Authority.

The Contractor shall be responsible for any fines and penalties assessed by environmental or land use regulatory agencies due to such non-compliance. Such penalties may be withheld from amounts otherwise due the Contractor. For related provisions, see Sections 108.5 - Right to Withhold Payments and 108.9.3 - Amounts Due the Authority.

105. 9 Historic and Archaeological Considerations - If the Contractor or any Subcontractor discovers any object of potential archaeological or other historic interest, all work that could disturb the object will immediately cease and will not resume until investigation of the object and related deposits have been completed, and if necessary recovered. The Contractor will notify the Authority immediately. (Some non-exclusive first indications of deposits may be burial grounds or campsites of Native Americans that reveal the bones of the dead and implements. Also the exposure of marine fossils or shells found mainly in clay deposits, as well as, exposure of dumps in landfill areas, abandoned campfire sites, and building foundations.)

Any delay of the Contractor's operations resulting from the above will be analyzed in accordance with Section 109.5 - Adjustment for Delay, except that in no event will such delay be a compensable delay.

Any artifacts, specimens, materials or other objects found on or beneath land owned by the Authority belong to the Maine Turnpike Authority.

105.10 Equal Opportunity and Civil Rights - VACANT

105.10.2 Requirements Applicable to All Contracts - Unless expressly provided otherwise in the Bid Documents, the provisions contained in this Section 105.10.2 apply to this Contract.

A. Maine Code of Fair Practices and Affirmative Action: The Contractor must comply with the provisions of Maine's Code of Fair Practices and Affirmative Action, 5 MRSA §781, et seq., and all regulations promulgated thereunder. This Code, at 5 MRSA§784(2), reads as follows.

"During the performance of this Contract, the Contractor agrees as follows:

1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religious creed, sex, national origin, ancestry, age, sexual orientation, physical and/or mental disability. Such action shall include, but not be limited to, the following: Employment, upgrading, demotions, transfers, recruitment or recruitment advertising; layoffs or terminations; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, State that all qualified applicants will receive consideration for employment without regard to race, color, sexual orientation, religious creed, sex, national origin, ancestry, age, physical handicap, or mental handicap.

3) The Contractor will send to each labor union or representative of the Workers with which he has a collective or bargaining Agreement, or other Contract or understanding, whereby he is furnished with labor for the performances of [sic] his Contract, a notice, to be provided by the Contracting Department or agency, advising the said labor union or Workers' representative of the Contractor's commitment under this Section and shall post copies of the notice in conspicuous places available to employees and to applicants for employment.

4) The Contractor will cause the foregoing provisions to be inserted in all Contracts for any Work covered by this Agreement so that such provisions will be binding upon each Subcontractor.

For Contracts exceeding $50,000, 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.

B. Maine Human Rights Act The Contractor must comply with the provisions of Maine's Human Rights Act, 5 MRSA §4551, et seq., and all regulations promulgated thereunder. This Act provides, among other things, that it is unlawful discrimination for any employer to fail or refuse to hire or otherwise discriminate against any applicant for employment because of race or color, sex, physical or mental disability, religion, age, ancestry, national origin, or sexual orientation except when based on a bona fide occupational qualification.

C. EEO Notice to Labor Sources Contractors and Subcontractors that are required by Maine's Code of Fair Practices and Affirmative Action or by federal law to notify a labor union or a representative of workers with which the Contractor or the Subcontractor has a collective or bargaining agreement, contract or understanding through which labor is furnished must provide notice on the letter shown on this page below. The letter must be written on the Contractor's or Subcontractor's letterhead stationery. A list of Maine Department of Labor Career Center Job Service Centers follows the letterform.

To:_____

(Union, employment agency or employee's representative)

_____

(Address)

Subject: Equal Employment Opportunities on

State Project No.: _____

Federal Aid Project No.: _____

Location: _____

Description of Work: _____

For Work related to the construction of the above listed Project to be performed under State Contract No.:_____, I have pledged to provide equal employment opportunities without regard to race, color, religion, sex, national origin, sexual orientation, or disability. This pledge applies to all employees and applicants for employment in connection with:

- Hiring, Placement, Upgrading, Transfer or Demotion
- Recruitment, Advertising or Solicitation for Employment
- Treatment During Employment
- Rates of Pay or Other Forms of Compensation
- Selection for Training, Including Apprenticeship
- Layoff or Termination

Inquiries and complaints should be addressed to:

President's Committee on Equal Employment Opportunity
Washington, D.C. 20425

Signed: _____

_____

(Title)

For: _____

(Contractor)

_____

_____

(Address)

_____

(Dated)

Maine Department of Labor
Career Centers & Job Service Centers

Augusta Career Center
21 Enterprise Drive, Suite 2
109 State House Station
Augusta, ME 04333-0109
Toll Free Phone: 1-800-760-1573
Local Phone: (207) 624-5120
Fax No: (207) 287-6236
TTY Users Call Maine Relay 711
Email: augusta.careercenter@maine.gov

Bangor Career Center
45 Oak Street, Suite 3
Bangor, ME 04401-7902
Toll Free Phone: 1-888-828-0568
Local Phone: (207) 561-4050
Fax No: (207) 561-4066
TTY Users Call Maine Relay 711
Email: bangor.careercenter@maine.gov

Calais Career Center
1 College Drive
Calais, ME 04619-0415
Toll Free Phone: 1-800-543-0303
Local Phone: (207) 454-7551
Fax No: (207) 454-0349
TTY Users Call Maine Relay 711
Email: calais.careercenter@maine.gov

Lewiston Career Center
5 Mollison Way
Lewiston, ME 04240-5805
Toll Free Phone: 1-800-741-2991
Local Phone: (207) 753-9001
Fax No: (207) 783-5301
TTY Users Call Maine Relay 711
Email: lewiston.careercenter@maine.gov

Presque Isle Career Center
66 Spruce Street, Suite 1
Presque Isle, Maine 04769-3222
Toll Free Phone: 1-800-760-1572
Local: (207) 474-4914
Fax (207) 760-6350
TTY Users Call Maine Relay 711
Email: presqueisle.careercenter@maine.gov

Skowhegan Career Center
98 North Ave
Skowhegan, ME 04976-1923
Toll Free Phone: 1-800-760-1572
Local Phone: (207) 474-4950
Fax No: (207) 474-4914
TTY Users Call Maine Relay 711
Email:skowhegan.careercenter@maine.gov

Springvale Career Center
9 Bodwell Court
Springvale, ME 04083
Toll Free: 1-800-343-0151
Local: (207) 324-5460
Fax: (207) 324-7069
TTY Users Call Maine Relay 711
Email:springvale.careercenter@maine.gov

Wilton Career Center
865 US Route 2E
Wilton, ME 04294-6649
Toll Free Phone: 1-800-982-4311
Fax No: (207) 645-2093
TTY Users Call Maine Relay 711
Email: wilton.careercenter@maine.gov

D. Prevention of Sexual Harassment 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.

SECTION 106 - QUALITY

Scope of Section This section contains general provisions related to the Quality of Work including roles, standards, Materials, Quality Control, Acceptance, Non-conforming Work, and warranties.

106.1 Roles Regarding Quality -

106.1.1 Cooperation - The Contractor and the Authority shall work cooperatively within their respective Quality Assurance (QA) responsibilities to produce and document a high quality project, meeting or exceeding the quality requirements of the contract.

106.1.2 Role of the Contractor - The Contractor is responsible for all aspects of the quality of construction, including labor, equipment, materials, incidentals, processes, construction methods, and QC. Unless required by Special Provision the Authority does not require a QCP. When required by the contract special provisions, the Contractor shall develop, submit for approval, implement, and adjust if necessary a QCP for the work specified.

106.1.3 Role of the Authority - The Authority will perform acceptance sampling, testing, and inspection for any element of the work to monitor compliance with the QCP, if required, and contract requirements. The Authority may also perform IA and Verification sampling and testing at any time.

106.2 Quality Standards -

106.2.1 Conformity with Contract - The Contractor shall comply with all contract requirements in performance of the work. Any required plans such as QCP, the TCP, and the SEWPCP, as approved by the Authority, are binding upon the Contractor as contract requirements.

106.2.2 Conformity with Other Standards - Unless otherwise provided in the contract, all work shall conform to the following standards, as applicable.

A. MaineDOT
B. AASHTO

C. ASTM
D. AREMA
E. Standard conditions and special conditions contained in any permit
F. Manual on Uniform Traffic Control Devices (MUTCD)
G. American with Disabilities Act (ADA)

106.2.3 Industry Standards - If there is no applicable standard set forth in this Contract for a particular item of work, then the Contractor shall perform that item of work in accordance with industry standards prevailing at the time of bid.

106.3 Material Quality -

106.3.1 General - Materials and manufactured products incorporated into the work shall be new unless otherwise specified, free from defect, and in conformity with the contract.

When material is fabricated or treated with another material or where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, the Authority may reject the finished product if any of the components do not comply with the specifications.

Title to all hot mix asphalt to be furnished by the Contractor shall pass to the Authority immediately before installation. The preceding sentence shall not in any way affect any right or remedy the Authority has relating to the quality of the material, installation, or workmanship.

106.3. 2 Quality Requirements - Materials shall meet the requirements of the contract at the time they are incorporated into the work. The Contractor shall test proposed sources of materials using accepted procedures and equipment no more than 60 days prior to use. Materials shall not be used in the work until passing results are obtained and provided to the Authority. The Contractor shall provide the Resident with a copy of the passing test results including the source of the material as identified in Section 105.8.6.

The Contractor shall perform QC inspection, sampling, testing, and documentation in accordance with the contract requirements. For work without specific QC requirements, the Contractor shall perform inspection, sampling, and testing, as the Contractor deems necessary to ensure adequate process control and end product quality.

The Contractor shall provide all facilities, testing equipment, and material samples as the Authority may require to collect and forward Acceptance and IA samples, and conduct related field tests.

The Contractor shall supply materials and perform work using methods and equipment in a manner, which will not degrade the quality of the materials. Materials with prior approval that become unfit for use or fall outside the specification limits will result in the affected product being declared non-conforming work. For a related provision, see Section 106.8 - Non-conforming Work.

The cost of the Contractor's QC activities and for furnishing facilities, testing equipment, and samples for the Department's Acceptance and IA activities is incidental to the related Pay Items.

106.3.3 Sources -

A. General: The Contractor shall furnish all materials and products required to complete the work, except as otherwise provided in the Contract. Unless otherwise specified in the Contract, the Contractor shall use only those products contained on the MaineDOT's Qualified Products List (available on the MaineDOT internet site) if a list is established for that type of product or material. For any material on the MaineDOT qualified products list that is being considered for incorporation into the Work, it shall be the Contractor's responsibility to verify that the material is appropriate for the use being considered.

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.

At least thirty (30) days prior to use the Contractor shall inform the Resident in writing of the sources from which Contractor proposes to obtain the materials required for the Project and statements of quality of these materials.

B. Authority Furnished Materials: The Contract may specify that the Authority will furnish certain materials. If the Contractor reasonably believes that the Authority furnished material is deficient in any way, the Contractor shall immediately notify the Authority before accepting delivery. After acceptance of delivery, the Contractor is responsible for all risk of loss or damage to Authority furnished material. The cost of inspecting, handling, and storing Authority furnished materials after delivery is incidental to the Contract. The Authority may deduct from amounts otherwise due the Contractor all costs necessary to make good any shortage, damage, or deficiencies discovered after the Contractor accepts delivery including any demurrage or car hire charges.

106.3.4 Storage - The Contractor shall store materials to preserve their quality and fitness for the work. If materials fail to meet the requirements of the Contract, the materials will be rejected. The Authority may inspect stored materials at any time. The Contractor shall locate stored materials to facilitate their prompt inspection. The Authority may approve portions of land within the Right-of-Way for storage purposes and for the placing of the Contractor's equipment, but the Contractor shall provide any additional land required without cost to the Authority. The Contractor shall not use private property for storage purposes without written permission of the owner, with copies of the written permission furnished to the Authority upon request. The Contractor shall restore all storage sites, whether within the Right-

of-Way or on private property, to original condition at the completion of the project, without cost to the Authority.

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.

106.3.5 Handling - The Contractor shall handle all materials in a manner that preserves their quality and fitness for the work. The Contractor shall transport aggregates in tight vehicles to avoid loss or segregation of materials after loading and measuring.

106.3. 6 Unacceptable Materials - The Authority may reject materials not conforming to the Specifications at any time, and the Contractor shall remove them immediately from the project site unless otherwise instructed by the Authority. The Contractor shall not store or use rejected materials on any Authority project.

106.3.7 Sampling and Testing - Qualified Authority personnel may take samples for Acceptance Testing. Work in which material is used without the approval will be at the Contractor's sole risk and the work will be considered non-conforming work. Unless otherwise designated, the Authority's testing costs will be at the expense of the Authority. Materials being used are subject to inspection, testing, or rejection at any time. The Authority will furnish copies of test reports to the Contractor upon request.

The Contractor is responsible for the quality of construction and materials incorporated into the work. The Contractor shall perform all necessary QC inspection, sampling, and testing in accordance with the approved QCP. If a QCP is not required, the Contractor is still responsible for all QC necessary for a high quality project. The Contractor shall not rely on the results of the Authority's Acceptance Testing being available for process QC.

The Contractor may observe the Authority's sampling and testing activities. If the Contractor observes a deviation from the specified sampling or testing procedures, then the Contractor shall describe the deviation to the Authority immediately and document the deviation in writing within 24 hours. Failure to properly describe and document the deviation will constitute a waiver by Contractor of any right to dispute the sampling or testing procedure concerned.

When directed by the Authority, the Contractor shall sample and test any material, which appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or corrected by the Contractor. All sampling shall be in accordance with Authority, AASHTO, or ASTM procedures as specified for the material being sampled.

106.4 Quality Control

106.4.1 General - When required by Special Provision, the Contractor shall develop, submit, and implement a Quality Control Plan (QCP), approved by the Authority, for those items of work specified that will result in work that meets or exceeds the quality

requirements of this Contract. Regardless of whether a QCP is required, Quality Control for all work is the Contractor's responsibility.

A.Submittal: Within 21 Days of Contract Execution or at least 30 days before any related work is to be performed, the Contractor shall submit three copies of its QCP to the Authority.

B. Approval: Within 14 Days of Receipt, the Authority will determine if the QCP is in accordance with the requirements of this Section 106.4 and (1) notify the Contractor that its QCP is approved or (2) return it for any needed revisions. If returned for revision, the Contractor shall resubmit three copies of its revised QCP as provided above within 7 days and the Authority will have 7 days from receipt of the revised plan to notify the Contractor whether its QCP is approved or again requires revision. Additional iterations will occur in a like manner until the Authority approves the Contractor's QCP. Failure to submit an approvable QCP shall not be cause for any adjustment to compensation or time.

C. Standard QC Plans: For items included in Section 400 - Pavements, the Contractor may choose to submit a standard QCP which includes any items common to all of their plants and paving operations. Standard plans shall be submitted to the Quality Assurance Engineer by March 1. The standard plan will apply to all projects constructed by the Contractor until a new standard plan is approved the following year. In addition to the standard plan, the Contractor must submit a supplemental QCP for each project which includes any required items and project specific details not covered by the standard plan. Approval of both standard and project specific QCPs shall be as outlined in paragraph B above, with the exception that the initial 14 day review period for standard plans will begin on March 1.

Upon final approval of the QCP, the Contractor shall provide 5 bound copies or an electronic version to the Authority. All Contractor QC personnel shall also be issued their own copy of the approved QCP. The Contractor shall communicate the applicable contents of the approved QCP to all Contractor and Subcontractor personnel involved in completing the work items covered by the QCP.

The Contractor's QCP shall consist of plans, procedures, responsibilities, authority, and an organizational structure that demonstrates that an effective level of QC will exist and that the end result products will comply with all Contract requirements. The Contractor shall provide all necessary QC inspection, sampling, and testing to implement the QCP. The QCP shall include an organizational structure and reporting requirements that demonstrate that QC personnel have sufficient independence to allow them to be primarily concerned with quality, as opposed to schedule and budget.

The individual administering the QCP shall be a full-time employee of or a consultant engaged by the Contractor. The individual shall have full authority to institute any and all actions necessary for the successful implementation of the QCP.

The Authority will not sample or test for process control or assist in controlling the Contractor's production operations. The Contractor shall provide QC personnel and testing equipment capable of providing a quality product that meets or exceeds the Contract requirements. Continued production of non-conforming work for a reduced price as determined by the Authority, instead of making adjustments to bring work into conformance, is not allowed.

106.4.2 Quality Control Plan Requirements - The QCP shall include, at a minimum, the following:

Construction items covered by the QCP, as specified in the Contract
Sampling location and techniques
Tests and test methods
Testing frequencies
Inspection frequencies
Detailed description of production and placement equipment and methods
Documentation procedures, including:

- Acceptable Control Charts
- Inspection and test records
- Temperature measurements
- Accuracy, calibration, or recalibration checks performed on production or testing equipment

The QCP shall identify the Contractor's QC personnel, including the company official ultimately responsible for the quality of the work. The Authority's QCP approval process may include inspection of testing equipment and a sampling and testing demonstration by the Contractor's QC inspector(s) to assure an acceptable level of performance.

106.4.3 Testing - Qualified technicians in laboratories approved by the Authority shall perform all QC testing covered by the QCP. Technician qualifications shall be as described in the Contract for the corresponding item of work.

Laboratory facilities shall be clean and all equipment shall be maintained in proper working condition. The Authority shall be permitted unrestricted access to inspect the Contractor's laboratory facility. The Authority will advise the Contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies, or testing personnel and procedures. Deficiencies shall be grounds for the Authority to order an immediate stop to incorporating materials into the work until deficiencies are corrected. Work already in place affected by QC deficiencies is non-conforming work.

The Contractor shall maintain original documentation of all inspections, tests, (including all associated data such as measurements, weights, dial readings, etc. used in the completion of the test), and calculations used to generate reports. The records shall indicate the nature, number, and type of deficiencies found, the quantities approved and rejected, and the nature of corrective actions taken. The Contractor shall maintain standard testing equipment and

qualified personnel as required by the Contract.

The QCP shall include the testing and record keeping requirements for each item as contained in the Contract. The number preceding each item refers to the item and specification number in the Standard Specifications. When testing requirements are not specified, the Contractor shall perform all testing and record keeping as recommended by the manufacturer, vendor, or supplier.

If an item is required to be in the QCP but the Contract does not specify testing requirements, the Contractor shall propose testing requirements in the QCP.

The Contractor shall maintain Control Charts in a manner and location acceptable to the Authority. At a minimum, the Control Charts shall identify the project number, the Pay Item number, each test parameter, the upper and lower control limits applicable to each test parameter, and the running average of the last three Contractor test results. The Contractor shall use the Control Charts as part of a process control system for identifying production and equipment problems and for identifying potential quality reductions before they occur. Acceptable Control Charts are a required component of an acceptable QCP.

After final records review, the Contractor will certify in writing to the Authority that the project has been constructed and inspected, and all materials have been tested in accordance with the Contract. All Paving certs shall be submitted on the Paving Company's Letterhead.

106.4.4 QC Inspector Qualifications - When a QCP is required, the Contractor's QC Inspectors shall hold all certifications from MCTCB or NETTCP that apply to the items included in the QCP. The Authority may require the Contractor to remove Inspectors from the project that are not certified as required or that are otherwise unqualified or unable to fulfill their duties in a good and workmanlike manner.

106.4.5 Inspection Requirements - The QCP shall cover all construction operations on the site and at off-site production facilities, keyed to the proposed construction materials, sequence and schedule. The QCP shall also identify QC personnel (including qualifications), procedures, controls, tests, records, and forms to be used.

The Contractor shall provide a copy of each completed QC report to the Authority by 1:00 PM on the day following each construction activity, unless other arrangements are made with the Resident. Failure to provide this report will constitute non-compliance with the QCP and the Contract.

If an item is required to be in the QCP but QC Inspection requirements are not specified in the Contract, the Contractor shall propose inspection and record keeping requirements for such items in the QCP.

106.4.6 QCP Non-Compliance - The Contractor shall comply with the approved QCP and shall take all other steps necessary to assure a high quality project.

Failure by the Contractor to comply with the approved Quality Control Plan will result in the following actions:

1st Incident: Written warning. If the Contractor does not take corrective action upon receipt of written warning, the Authority will escalate immediately to the 2nd Incident.

2nd Incident: Mandatory work suspension until compliance and loss of 1% of the Bid Price of all Pay Items covered by the QCP, as described in this Section.

3rd Incident: Mandatory work suspension until compliance and loss of an additional 2% of the Bid Price of all Pay Items covered by the QCP, as described in this Section.

4th and subsequent Incidents: Mandatory work suspension until compliance and loss of an additional 3% of the Bid Price (each occurrence) of all Contract Pay Items covered by the QCP, as described in this Section.

During all periods of the Contractor's failure to follow the approved QCP, no positive pay incentives will be calculated or paid if the Authority accepts the material.

Disincentives for failure to comply with the approved QCP are cumulative, and the Authority will deduct any disincentives due from amounts otherwise due the Contractor. These disincentives are intended to encourage the Contractor to comply with its approved QCP, and are not related to the quality of the material provided.

106.5 Quality Assurance - The Authority will conduct Quality Assurance by:

-Review of QC Reports provided by the Contractor.
-Monitoring Contractor compliance with the QCP.
-Random inspection of production, placement and workmanship
-Randomly accompanying the Contractor's inspector during QC Inspections/Testing.
-Acceptance a Verification and IA sampling and testing of materials or completed work.

The Authority's objective is a high quality project through a cooperative effort with the Contractor. Items, which are to be buried, covered, are of high cost, or affect the long-term durability of the work, will receive extra attention in the QA effort.

Unacceptable work found by the Authority's Inspector will be brought to the attention of the Resident, who will determine what corrective action the Contractor will take. The Contractor shall schedule the corrective work with the Resident, and both the QC and Authority's Inspectors will witness the corrective work. Failure of the Contractor to correct unacceptable work in a timely manner, as determined by the Authority, may result in the withholding of progress payment(s), suspension of the work, or both. The Contractor will not be eligible for either additional monetary compensation or a time extension should this happen. If necessary for protection of the work or for public convenience, the Authority may accomplish corrective work by other means and deduct the cost from any monies due the Contractor.

The Authority may review and obtain copies of all QC test reports (including original test data), inspections reports, and control charts at all reasonable times without cost to the Department.

If the Authority decides to inspect the materials or operations at the plant, then the following conditions shall be met:

A. The Authority shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has arranged for materials.

B. The Authority shall have full access at all times to the parts of the plant that concern the manufacture and production of the materials being furnished.

C. If required, the Contractor shall arrange for an approved testing laboratory building for the sole use of the Authority. The building shall be located near the plant and conform to the requirements of Section 639 - Engineering Facilities.

D. The Contractor shall provide any needed equipment for safe access to plant stockpiles, equipment, and operations.

106.6 Acceptance - The Authority is responsible for determining the acceptability of the Work. Acceptance of the material is based on the visual inspection of the construction, monitoring of the Contractor's QCP, and Acceptance Test results. Acceptance sampling and testing is the responsibility of the Authority (unless alternate procedures are specified) except for furnishing facilities, testing equipment, transportation, and material samples as required.

106.7 VACANT -

106.8 Non-Conforming Work -

106.8.1 Substantially Conforming Work - If the Authority determines the work substantially conforms to the Contract, the Authority may accept the non-conforming work, and may require a credit to the Authority to be deducted from amounts otherwise due the Contractor. If the Authority and Contractor cannot agree to the amount of the credit, the work shall be unacceptable work.

106. 8.2 Unacceptable Work - The Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by the Authority at the expense of the Contractor, without cost or liability to the Authority.

106.8.3 Unauthorized Work - Prior to Final Acceptance and upon written order by the Department, the Contractor shall remove or uncover unauthorized work. After examination, the Contractor shall rebuild the uncovered work to a condition conforming to the Contract at the expense of the Contractor and without cost or liability to the Department. Any delay arising

from unauthorized work shall be an inexcusable delay.

106.8.4 Uninspected Work - Prior to Final Acceptance and upon written order by the Authority, the Contractor shall uncover uninspected work. After examination, the Contractor shall rebuild the uncovered work to a condition conforming to the Contract. If the Authority determines that the uninspected work is acceptable, the uncovering, removing, and rebuilding will be paid as extra work, and any resulting delay shall be an excusable delay. If the Authority reasonably determines that the uninspected work is unacceptable, the uncovering, removing, and rebuilding shall be at the Contractor's expense and any resulting delay shall be an inexcusable delay.

106.8.5 Failure to Disapprove not Controlling - 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.

106.8.6 Corrective Steps - If the Contractor fails to promptly take any action required of it under this Section the Authority may take such action using its own or contracted forces, and deduct the costs incurred in doing so from amounts otherwise due to the Contractor.

106.9 Warranty Provisions -

106.9.1 Warranty by Contractor - The Contractor unconditionally warrants and guarantees that the Project will be free from warranty defects for one year from the date of Physical Work Complete. For a related provision, see Section 107.9.3.

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.

For a related provision regarding obligations regarding plantings, see Section 621.0036 – Establishment Period

106.9.2 Warranty Definitions - Notwithstanding any other provision of the Contract, the following words or phrases have the following definitions for the purposes of the Contractor's warranty obligation under this Contract.

WarrantyDefects: Warranty Defects are conditions that result from material, manufacture, or workmanship and that are not in conformity with the Contract or with industry standards applicable to the work prevailing at the time of submission of the bid. Warranty defects do not include (A) normal wear and tear, (B) conditions caused by occurrences clearly beyond the Contractor's control and not attributable to material, manufacture, or workmanship, and (C) Defects in landscape items that are the subject of Landscape Establishment Period Obligations.

Emergency: Emergency means necessary for public safety or convenience, as deter-

mined by the Authority.

Promptly: Unless an emergency, "Promptly" means in the first construction season after the Contractor has been notified of the defect(s), but always within one year of such notice. In case of emergency, Promptly means within 48 hours.

Remedial Work: "Remedial Work" means all work necessary to make the item in like new condition as reasonably determined by the Authority and performed in accordance with the Contract and in a good and skillful manner. Remedial Work includes all design, permitting, project management, supervision, materials, and labor, including erosion control and traffic control.

Remedial Work Procedure and Requirements: Within (30) Days of being notified of warranty defects, the Contractor shall submit to the Authority for approval a Remedial Work Plan including the scope of work, conceptual work methods, schedule, construction phasing, and other significant aspects of the work (the "Work Plan"). Unless otherwise provided by the Authority in writing, any work commenced prior to Authority's approval of the Work Plan will be at the Contractor's sole risk. Before starting any on-site work, the Contractor shall deliver to the Authority certificates of insurance complying with Section 110.3 - Insurance. If the estimated cost of remedial work exceeds $100,000, the Contractor shall provide performance and Payment Bonds complying with Section 110.2 - Performance and Payment Bonds.

If (A) the Contractor fails to submit a Remedial Work Plan, (B) the Contractor does not comply otherwise with written instructions from the Authority, or (C) a State of emergency exists in which delay would cause serious risk of loss or damage, then the Authority may perform or Contract for such remedial work and the Contractor will be responsible for all claims, costs, damages, losses, and expenses arising out of such work including fees and charges of engineers, consultants, attorneys, dispute resolution professionals, and court costs.

Upon a 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 year after such acceptance.

106.9.4 Other Warranty Provisions - The Contractor hereby assigns to the Authority the right to enforce all manufacturer's warranties or guarantees on all materials, equipment or products purchased for the work that exceed the nature or duration of the warranty obligations assumed by the Contractor under this Contract.

The Performance Bond and/or Warranty Bond required by Section 110.2.1 - Bonds shall cover all warranty obligations of the Contractor provided by this Contract. Final Acceptance by the Authority does not relieve the Contractor of any warranty obligations provided by this Contract.

The Contractor agrees that the warranty obligations provided by this Contract shall be

reported as an outstanding obligation in the event of bankruptcy, dissolution, or the sale, merger, or cessation of operations of the Contractor.

SECTION 107 - TIME

Scope of Section This Section contains general time-related provisions of the Contract including the Contract Time, allowable Work times, schedule requirements, Liquidated Damages, and Project Closeout.

107.1 Contract Time and Contract Completion Date - All Work must be Complete by the Contract Completion Date and within the Contract Time. Unless expressly provided otherwise by the Authority in writing, the Contract Time shall be all time between the Contract Execution and the Completion Date specified in the Contract, and any authorized extensions.

107.2 Commencement of Contract Time and Work - Unless provided elsewhere in this Contract or in writing from the Authority, the Contract Time will commence on the date of Contract Execution. For related provisions, see Sections 101.2 - Definitions of Contract Execution and 103.8 - Execution of Contract by the Authority.

Unless specified otherwise (see Section 104.4.2), Work may commence upon Contract Execution, unless the Contractor has not secured and provided the Performance and Payment Bonds and Insurance Certificates required by Sections 103.5 - Award Conditions, 110.2 - Bonding, and 110.3 - Insurance. Any Work performed before the requirements of these sections are met is Unauthorized Work and is at the sole risk of the Contractor. Pursuant to Section 110.1 - Indemnification, the Contractor and Surety shall indemnify and hold harmless the Authority from any claims arising from Work.

107.3 Allowable Work Times

107.3.1 General - Work can be performed at any time except Sundays and Holidays, unless expressly specified otherwise in this Contract, including any applicable Permit conditions. If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Authority, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Authority's approval.

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

107.3.2 Night Work - If the Contractor performs Work during periods of darkness, the Contractor shall comply with Contract requirements governing night Work. If the Contractor elects to perform Work during periods of darkness on its own initiative and without direction from the Authority, then the Contractor shall also comply with all municipal ordinances

affecting such Work including noise ordinances. When pricing and scheduling the Work, the Contractor shall not assume that such non-directed night Work will be allowed. Accordingly, the Contractor shall not be entitled to any adjustment to either compensation or time due to its inability to secure any required municipal approvals.

107.3.3 Sundays and Holidays - The Contractor shall not carry on construction operations on Sundays or Holidays unless: (A) expressly specified otherwise in this Contract, (B) authorized by the Authority, or (C) necessary to avoid or eliminate a clear and immediate risk of significant bodily injury to any person.

107.3.4 Seasonal Work Restrictions - The Contractor shall meet all seasonal restrictions on time of Work contained in the Contract including all Permits.

107.4 Scheduling of Work -

107.4.1 General Duty of Contractor - The Contractor is solely responsible for the planning and execution of Work in order to complete the Work within the Contract Time.

107.4.2 Schedule of Work Required - At least 3 days before the pre-construction meeting and before beginning any on-site activities, the Contractor shall provide the Authority with its Schedule of Work in a Critical Path Method (CPM) in the form of an activity on node (AON) diagram. This CPM schedule will become the basis for claims involving delay. The Authority will waive this CPM requirement for appropriate contracts through a special provision. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Authority to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

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

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

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

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

In addition to the Schedule required the Contractor shall submit, no later than 12:00-noon every Thursday, a schedule of his operations for the following two weeks, including a detailed plan of the first week's activities. This plan shall show the type of Work to be done and the traffic lanes that are to be impacted, including all lane closures that are anticipated for the week. This updated plan will be used by the Resident to schedule the appropriate resources and inform other interested parties of the proposed Work. Lane closures that are not shown on this plan will only be allowed if they are deemed emergency lane closures by the Resident.

107.4.3 Projected Payment Schedule V A C A N T

107.4.4 Schedule Revisions - The progress of the Work shall be compared against the Schedule of Work at each Progress Meeting. If the Authority determines that the Contractor's actual progress is not in Substantial Conformity with the Schedule of Work, then the Contractor shall either increase Project resources to get back on schedule or submit a revised Schedule of Work to the Authority.
No Pay Requisition will be approved for payment until the revised schedule is accepted by the Authority.

107.4.5 No Separate Payment - Unless expressly provided otherwise, the cost for providing a Schedule of Work, a Projected Payment Schedule, and all revisions and updates is Incidental to the Contract.

107.5 Suspension of Work

107.5.1 Winter Suspensions -

A. Start of Winter Suspension: The Contractor may request in writing that the Authority approve a Winter Suspension. If the Authority determines that winter weather conditions make it impossible to perform all or specified portions of the Work, the Authority will approve the Contractor's request with respect to such portions and set the start date of the Winter Suspension.

B. Monitoring and Communications: During the Winter Suspension, the Contractor is responsible for monitoring weather conditions and requesting approval from the Authority to resume Work as soon as possible. In any case, the Contractor shall notify the Project Manager or Resident 14 Days before the end date of the Winter Suspension specified in Section 107.5.1(C).

C. End of Winter Suspension: Upon request by the Contractor or upon its own initiative, the Authority may determine the end date of the Winter Suspension and the Contractor is responsible for resuming Work immediately after said end date. If the end date is not

otherwise determined by the Authority in writing, Winter Suspensions shall end on April 15th.

D. Impact on Liquidated Damages: Liquidated Damages will not be assessed for any portion of a Winter Suspension that occurs after expiration of the Contract Time. Winter Suspensions will not otherwise affect the assessment of Liquidated Damages. For a related provision, see Section 107.7 - Liquidated Damages.

107.5.2 Suspensions Due To Uncontrollable Events - Upon request of the Contractor or upon its own initiative, the Authority may suspend the Work due to Uncontrollable Events. Any Delay related to such a suspension will be analyzed in accordance with Section 109.5 - Adjustments for Delay. For a related provision, see Section 101.2 - Definition of Uncontrollable Event.

107.5.3 Suspensions for Cause - The Authority may suspend the Work if the Contractor violates any provision of the Contract that may affect the quality, cost, public safety, timeliness or Conformity of the Work. Any Delay related to such a suspension will be an Inexcusable Delay. For a related provision, see Section 109.5 - Adjustments for Delay.

107.5.4 Suspensions for Convenience - The Authority may suspend the Work for any other reason it determines is in the best interest of the Authority. Any Delay related to such a suspension will be analyzed in accordance with Section 109.5 - Adjustments for Delay.

107.5.5 Pre-Suspension Work - If Work is to be suspended for an extended period of time, the Contractor shall store all Materials in a manner that does not obstruct the free and safe flow of vehicular, pedestrian, railroad, or marine traffic and that protects the Materials from damage. The Authority may direct the Contractor to install guardrail or other traffic control devices necessary to protect the traveling public. The Contractor shall take all precautions to prevent damage or deterioration of the Work already performed, provide suitable Drainage of the Roadway by opening ditches and Shoulder drains, erecting temporary Structures, and providing temporary erosion control where necessary. The cost of such pre-suspension Work will be analyzed in accordance with Section 109.5 - Adjustments for Delay.

For related provisions, see Sections 104.2.6 - Right to Suspend Work, 105.4.4 – Maintenance During Suspension of Work, 107.7 - Liquidated Damages, and 109.5 - Adjustments for Delay.

107.6 Completion Incentives and Disincentives - When provided in the Contract, financial incentives for early Completion and disincentives for late Completion will be added to or deducted from amounts otherwise due the Contractor. Incentives/Disincentives are separate and distinct from Liquidated Damages and Supplemental Liquidated Damages.

107.7 Liquidated Damages -

107.7.1 General - The Authority and the Contractor acknowledge that time is an essential element of the contract, and that delay in completing the work beyond the designated completion date will result in damages including but not limited to, damages to the State of Maine due to public inconvenience, obstruction to traffic, interference with business, as well as increased engineering, inspection, and administrative costs to the Authority. The Authority and the Contractor acknowledge the difficulty of making a precise determination of such damages and, as a result, they have agreed to a sum of money in the amount stipulated in the contract that will be charged against the Contractor for each calendar day that the work remains uncompleted after the expiration of the designated completion date, not as a penalty but as Liquidated and Supplemental Liquidated Damages.

Except as expressly provided otherwise in this Contract, the Contractor or, in case of default, its Surety, shall owe the Department the per diem amount specified in Section 107.7.2 - Schedule of Liquidated Damages, as well as any per diem amount of Supplemental Liquidated Damages as specified in the Special Provisions, for each Calendar Day that any portion of the Work remains incomplete after the Contract Time has expired. Should the Contractor or its Surety, fail to complete the work by the Completion date, a deduction of the amount stipulated in the Contract as Liquidated and Supplemental Liquidated Damages will be made for each and every calendar day that such contract remains uncompleted. This amount will be deducted from any money otherwise due the Contractor or its Surety under the Contract or other contracts with the Authority, and the Contractor and its Surety will be liable for any Liquidated and Supplemental Liquidated Damages in excess of the amount due.

The Contractor acknowledges that the specified amounts per diem of Liquidated and Supplemental Liquidated Damages in the Supplemental Specifications and Special Provisions, respectively (if applicable) are reasonable, and agrees to stipulate to their reasonableness in any suit for the collection of or involving the assessment of said damages. The damages referred to herein are intended to be and are cumulative, and will be in addition to every other remedy now or hereafter enforceable at law, in equity, by statute, or under the contract.

Permitting the Contractor to continue and finish the work or any part thereof after the expiration of the completion date shall in no way operate as a waiver on the part of the Authority of its rights to assess and recover Liquidated and Supplemental Liquidated Damages, or any other rights, under the Contract.

For related provisions, see Sections 107.1 - Contract Time, 107.5.1(D) - Winter Suspensions - Impact on Liquidated Damages, and 109.5 - Adjustments for Delay.

107.7.2 Schedule of Liquidated Damages - The specific per diem rates for Liquidated Damages are set forth below. By executing the Contract, the Contractor acknowledges that such an amount is not a penalty and that the daily amount set forth in the Contract is a reasonable per diem forecast of damages incurred by the Authority due to the Contractor's failure to Complete the Work within the Contract Time. Liquidated Damages will cease upon the acceptable physical completion of the Work, evidenced by the Authority's written acceptance

of the same under Subsection 107.9.3.

Original Contract Amount		Per Diem Amount of Liquidated Damages
From More Than	To and Including	Calendar Day
0	$100,000	$225
$100,000	$250,000	$350
$250,000	$500,000	$475
$500,000	$1,000,000	$675
$1,000,000	$2,000,000	$900
$2,000,000	$4,000,000	$1000
$4,000,000	and more	$2,100

107.8 Supplemental Liquidated Damages - Supplemental Liquidated damages on a calendar day basis in accordance with Subsection 107.7.2 or as modified by the Special Provisions, shall be assessed for each calendar day that substantial completion is not achieved. Supplemental Liquidated damages for substantial completion will end when substantial completion is accepted by the Resident. 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. If substantial completion is not completed by the Contract Completion date both supplemental liquated damages and liquated damages will be incurred

Supplemental Liquidated Damages will be deducted from amounts otherwise due the Contractor.

107.8.1 Fabrication Time - The Authority may have budgeted specific amounts of continuous full time fabrication/shop inspection for certain Work components, which will be specified by Special Provision.

The Contractor is responsible for requiring their fabricators and suppliers to produce these products for the Work continuously until finished, including any needed actions to correct unacceptable workmanship or materials. If the Authority determines that shop inspection beyond these times is required, then the corresponding Supplemental Liquidated Damages will be deducted as they occur from the amounts otherwise due the Contractor. The Contractor will be notified by the Authority when these times begin and when the allotted time will expire.

If a fabricator or supplier works more than one shift per day and the Authority determines that inspection is required for each shift, each shift will count as a calendar day and the LD rate will be the noted amount per shift per calendar day in lieu of per calendar day.

Inspection is required for the following activities:

For metal fabrication work – welding, including tack welding, heat correcting, nondestructive examination, assembly verification.

For precast prestressed concrete fabrication work – tensioning of strands, batching and casting of concrete, breaking of test cylinders, de-tensioning.

107.9 Project Closeout

107.9.1 Final Cleanup and Finishing - To prepare for final inspection the Contractor shall clean the Project and all ground, lawns, streams, Structures, and other areas adjacent to the Project of all rubbish, excess Material, temporary Structures, and Equipment. The ground shall be backfilled with Material that is generally the same as the surrounding Material, graded to drain properly, and finished such that the surface matches the surrounding surface (examples - loam and seed, compacted gravel, pavement). The Contractor must leave all areas impacted by the Work in a condition that is acceptable to the Authority. 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.

107.9.2 Notice/Inspection/Punch List - The Contractor will notify the Authority in writing that it considers the Project complete. As soon as practicable thereafter, the Authority will inspect the Work. If incomplete or unsatisfactory Work is noted, the Authority will prepare a written list of all items that must be completed or corrected before the Physical Work is Complete ("Punch List"). The Contractor shall immediately take such measures as are necessary to complete all Punch List items.

107.9.3 Notices / Final Inspections / Physical Work Completion - The Contractor shall notify the Authority in writing when all Punch List items have been completed and/or corrected and that the Contractor considers the Project Complete. As soon as practicable thereafter, the Authority will make another inspection of the Work. The Authority and the Contractor will attend this inspection jointly. If incomplete or unsatisfactory Work is noted, the Authority will prepare a revised Punch List [which may include items not on previous Punch List(s)] and the Contractor shall immediately take such measures as are necessary to complete the revised Punch List items. Additional iterations will occur in a like manner until the Authority finds that the Physical Work is Complete and in Conformity with the Contract, at which point the Authority will provide the Contractor with written notification that the Physical Work is complete and the Authority has conditionally accepted the Project, If the Contractor has not already done so, the Contractor will Promptly remove all temporary traffic control devices upon receipt of said written notification.

107.9.4 Closeout Documentation - Within 75 Days of conditional acceptance by the Authority under subsection 107.9.3, the Authority will advise the Contractor in writing of the Final Quantities and any damages to be assessed for the Project. The Contractor shall resolve any Project issues that remain and provide all Closeout Documentation to the Authority within 30 Days thereafter.

107.9.5 Final Acceptance - The Authority will present a project for Final Acceptance to the Authority's governing board at the board's next regularly scheduled meeting which is scheduled 14 Days or more after the Authority's receipt of acceptable Closeout Documentation. The Authority will make Final Payment, including the release of all remaining retainage, and release any escrowed bid documents, within 30 days of Final Acceptance.

If the Contractor fails to resolve issues and deliver Closeout Documentation within the 30 Days provided in Section 107.9.4, the Authority may provide a final notice informing the Contractor in writing that unless the Contractor Delivers all Closeout Documentation within 30 Days of the date of Receipt of final notice, the Contractor shall be in Default under the Contract. The Contractor shall become ineligible to Bid on any Authority Contracts. The Authority may then pursue all remedies provided by the Contract or by law, including withholding Final Payment. For a related provision, see Section 102.1.1 - Eligibility to Bid - Basic Requirements.

107.9.6 No Waiver of Legal Rights - Final Acceptance does not preclude the Authority from correcting any measure, estimate, or certificate made. The Authority may recover from the Contractor or its Surety, or both, overpayments made due to failure to fulfill Contract obligations.

A waiver on the part of the Authority of any breach of any part of the Contract is not a waiver of any other or subsequent breach.

The Contractor retains liability following Final Acceptance for latent Defects, fraud (or such gross mistakes as may amount to fraud), and warranty obligations.

SECTION 108 - PAYMENT

Scope of Section This Section contains general provisions related to payment including measurement of quantities, progress payment, retainage, the right to withhold payment, and other payment-related terms.

108.1 Measurement of Quantities for Payment - 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.

108.1.1 Use of Plan Quantities - Payment for all items labeled in the Bid Documents as

"Plan Quantity" will be based upon the estimated quantity for the work described in the Bid Documents. The Contractor shall accept such payment as full and complete compensation for that item without physical measurement. Quantities included in the plan quantity amount but not accomplished will be calculated by the Authority using standard estimating procedures and deducted from the plan quantity. Areas not included in the plan quantity amount but completed will be measured and added to the plan quantity. Upon mutual written Agreement by the Authority and the Contractor through a Contract Modification, the estimated quantity of any item of Work may be used as the final quantity for that item without physical measurement.

108.1.2 General Measurement Provisions - The Authority will use the U.S. Customary system for all measurements unless the Contract utilizes the International System of Units (SI). Measurement of Bid Items shall include all resources necessary to complete the Pay Item of Work under the Contract. The Authority will measure items for payment in accordance with the "Method of Measurement" provisions of the applicable Specification. For all items of Work, other than those paid for by lump sum, the Authority shall determine the quantities accepted as the basis for Final Payment after the Physical Work is Completed.

108.1.3 Provisions Relating to Certain Measurements - Unless expressly provided otherwise, the Authority and the Contractor shall use the following general measurement provisions.

Lump Sum or Each Lump Sum payment is total reimbursement for all resources necessary to complete the item of Work. Quantities provided for items measured and paid by Lump Sum are estimated quantities and are provided for informational purposes, only. There will be no additional payment made by the Authority or reduction in payment to the Contractor if the actual, final, quantities for items measured and paid by Lump Sum are different than the quantities estimated by the Authority. The only exception to this is when an item is eliminated, in which case Standard Specification Section 109.2, Elimination of Items, would take precedence.

Each is payment per complete unit.

Length: Length is defined as linear measurement parallel to the item base or foundation. A station is 100 feet.

Area: Area refers to the length, as defined above, multiplied by the width, which is defined as the linear measurement perpendicular to the item base or foundation. When calculating area for payment, use horizontal, longitudinal, and plan (neat) transverse measurements for surface area computations. Make no deductions for individual fixtures having an area of 1 square yard or less. For purposes of the preceding sentence, "fixtures" means small subareas that do not receive material(s) or on which no Work is performed.

Volume: Measure Structures using plan (neat) or approved Contract Modification dimensions. Use the average end area method to compute excavation volumes. Use hauling

vehicles approved by the Authority when transporting Materials measured by volume. Measure materials at the point of delivery. Ensure the body shape allows contents to be accurately measured. Load and level vehicles to the lesser of their water level or legal capacity. Obtain the Authority's approval to convert Materials specified for measure by mass to volume. Use specified conversion factors.

Measure water to the nearest gallon with calibrated tanks, distributors, certified scale weights or water meters.

Measure bituminous materials by the gallon or ton.

Use net certified scale weights or certified rail car volumes. Correct for bituminous Material lost, wasted, or otherwise not incorporated in the Work. Correct net certified Bituminous Material weights or volumes for loss or foaming when shipped by truck or transport.

Measure timber by the board foot. Base measurement on nominal widths and thicknesses and individual maximum lengths.

Mass: One ton is 2,000 pounds. Use certified scales to determine mass (weight). Accept certified "car weights" for Material shipped by rail, except for Material to be subsequently processed in mixing plants. Obtain certified haul truck tares as specified. Each Haul Truck shall display a legible identification mark.

Measure cement by the pound or ton.

Accept nominal mass or dimensions for standard manufactured items unless otherwise specified.

Accept industry-established manufacturing tolerances, unless otherwise specified.

Measure Aggregate mass in the saturated surface dry condition.

The Contractor shall furnish and maintain weigh systems tested and certified by the State or use certified permanently installed commercial scales. The Contractor shall provide certifications after each set-up and before use or as requested by the Department. The weigh system shall be scaled after certification and display a certification stamp. Only mechanical or electronic scales shall be used.

The beams, dials, platforms, and other scale Equipment shall be arranged for safe and convenient viewing by the operator and inspector. Scales shall be tested for accuracy before use at a new site. Platform scales shall be level and with rigid bulkheads at each end. The Authority will adjust quantities of Materials received on scales found to be outside of specified tolerances, using a correction based on the last documented test within specified tolerances.

All materials which are measured or proportioned by weight shall be weighed on approved weighing systems. When a delivery slip is required for payment of Materials measured by weight, weighing, except for automatic ticket printer systems, shall be performed on approved platform truck scales by a Licensed Public Weighmaster furnished by the Contractor, in accordance with the following requirements.

(A) Licensed Public Weighmaster: A Licensed Public Weighmaster shall be any person satisfying the requirements of the State Sealer of Weights and Measures and granted a license as a Public Weighmaster. Each Licensed Public Weighmaster shall provide him/herself with an impression seal as required by the State Sealer and shall impress this seal upon delivery slips issued by him/her. When completed by a Licensed Public Weighmaster, delivery slips shall be considered as the Weight Certificates required by the Maine Weights and Measures Law, MRSA Title 10. The Weighmaster shall perform all duties required of him/her by law and the specifications.

(B) Weighing Trucks: Tare weights of trucks hauling stone, bituminous mixes and similar items shall be determined twice daily, once during the forenoon and once during the afternoon. The tare weight thus found shall be used to determine the net load until the next tare weighing of the empty truck. Tare weights of trucks hauling liquid and bituminous cement materials or other items not generally on a repeat basis shall be determined immediately before being loaded and the weight thus found shall be used for that load only. The tare weight of a truck shall be defined as the weight of the empty vehicle including the driver, but with no passengers.

(C) Platform Truck Weighing Systems: An approved platform truck scale meeting the following requirements shall be provided, installed and maintained, when required, by the Contractor or be available to him/her at an approved nearby location:

1) The weighing system shall conform to the specifications, tolerances and regulations for commercial weighing devices of the National Institute of Standards and Technology and shall be accurate within maximum tolerances of plus or minus 2 pounds for every 1000 pounds of load.

2) No auxiliary indicators, in combination with the beams or dial of the weighing system shall be used to increase the maximum allowable load above 105 percent of the manufacturer's rated capacity, as stated in the National Institute of Standards and Technology Handbook 44 S.1.7.

3) The platform of the weighing system shall be sufficient size to accommodate the entire vehicle or combination of vehicles. If a combination of vehicles must be divided into separate units in order to be weighed, each unit shall be entirely disconnected before weighing and a separate weight certificate, delivery slip, or

ticket shall be issued for each separate unit.

4) The value of the minimum graduation on the indicator of the scale shall not be greater than 20 pounds. All weighing shall be read and recorded to the nearest 20 pounds or one-hundredth ton.

5) The weighing system shall be set on concrete or other approved foundation. The recording mechanism of the scale shall be suitably housed or protected from weather.

6) The Contractor shall have the weighing system inspected and approved by the State Sealer of Weights and Measures or by a Repairman registered and approved by the State Sealer within a period of 12 months preceding the date of any weighing and again after each change of location.

(D) Check Weighing for Platform Truck Weighing System: Check weighing shall be made on the weights and on the weighing in scales during production in the following manner:

1) At least twice during 5 days of production, in the presence of a State Inspector, a loaded truck which has been weighed and issued a weigh slip shall be turned and a new weighing made of the truck and load with the truck heading in reverse direction and at the opposite end of the weighing system platform from the first weighing. The new weight will be recorded. If the variation from the first weight is 0.2 percent or less, the fact will be so noted in the project records. However, if the variation exceeds 0.2 percent, the scales may not be used until rechecked and resealed by the State Sealer of Weights and Measures.

2) At least twice during 5 days of production, a loaded truck which has moved off the weighing system will be intercepted, directed back to the scales, and reweighed under supervision of a State Inspector.

3) At least twice during 5 days of production, in the presence of a State Inspector, a truck which has been emptied will be directed to the weighing system before being loaded at a time other than the normal tare weighing and weighed again for a check on the tare weight.

4) Check weighing will be on a plant basis and, although a plant may produce material for more than one project or Contract, check weighing will not be required for each project or Contract.

5) Additional checks will be made occasionally at the discretion of the Resident, which additional checks shall be made at least twice during every 5 days of production. Claims by the Contractor for delays or inconvenience due to check weighing will not be considered.

(E) Reciprocal Agreements: Weighing of materials on weighing systems located outside the State of Maine will be permitted for materials produced or stored outside the State, when requested by the Contractor and approved. Out-of-state weighing, in order to be approved, must be performed by a Licensed Public Weighmaster or a person of equal authority in the State concerned, on scales accepted in the State concerned and meeting the requirements of this Section.

(F) Delivery Slips: Serially pre-numbered delivery slips of acceptable size and format for stating the following minimum information shall be furnished by the Contractor, in as many copies as may be necessary. One copy shall be retained by the Resident or Inspector upon accepting delivery of the material.

1) Vehicle identification

2) Date loaded

3) Work identification number & location

4) Identification of material:
   a) Item number
   b) Source location of supplier
   c) Type and grade
   d) Tank number from which loaded, if liquid

5) Quality information as necessary for bituminous liquids
   a) Specific gravity at 60°F
   b) Serial number of the Certificate of Analysis as furnished according to Division 700, General Statement
   c) The Certificate Statement as required in Division 700, General Statement
   d) The Viscosity of the material: if asphalt cement, in poises at 140°F and in centistokes at 275°F; if other bituminous liquid, the specified viscosity according to the type and grade shown in Section 702

6) Quantity information as necessary: gross, tare and net weights, volume of load if not material requiring weighing, net gallons at 60°F if bituminous liquids

7) Signatures (legible initials acceptable) of: Weighmaster (if weight measured material), Contractor's representative (if volume measured material), and Resident (Cover Slips).

If materials are shipped by rail the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for materials to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily, at such times as

directed. Each truck shall bear a legible identification mark.

Rail shipments of bituminous liquid shall be measured directly by volume. Correction shall be made when liquid bituminous material has been lost from the car, wasted, or otherwise not incorporated in the work. Other shipments of bituminous liquids will be measured by the gallon or ton. Volumes will be measured at 60°F or will be corrected to the volume at 60°F using the tables in ASTM D1250.

When bituminous liquids are shipped by truck or transport, net certified weights or volume subject to correction for loss or foaming may be used for computing quantities. Net certified weight shall be determined upon loading for all bituminous liquids when shipped by truck or transport. The net weight of each load shall be converted to net gallons at 60°F by a conversion factor expressed in pounds per gallon.

(G) Time Measure Equipment by hours in accordance with Section 631 - Equipment Rental.

(H) Quantities Greater than Shown on Plan No allowance will be made for work over a greater limit than indicated on the Plans or otherwise authorized, not limited to excavation removed or embankment placed beyond the slope lines shown on the cross-sections.

108.2 Progress Payments

108.2.1 Generation of Progress Payment Estimates - The Resident will make current estimates in writing from time to time as the Work progress warrants, normally no more frequently than once each month, on or before the date set by the Resident. Estimates 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.

If the Contract requires, the Contractor will submit an application for progress payment with a detailed written explanation of the payments requested, on forms and media approved by the Authority, to the Resident for approval. The Resident may request that the Contractor submit backup documentation including copies of receipts, invoices, and itemized payments to Subcontractors.

108.2.2 Payment - The Authority will make payment within 30 days of Contractor and Resident concurrence on the amount of a progress payment. These payment obligations shall not apply in the event of unforeseeable circumstances such as insufficient legislative appropriations, information systems failure, and other Uncontrollable Events. All payments made are subject to

correction in subsequent Progress Payments and the Final Payment. For related provisions, see Sections 108.8 - Final Payment, and 108.9.2 - No Inflation Adjustments/ Interest.

108.2.3 Mobilization Payments - Mobilization includes the mobilization and demobilization of all resources as many times as necessary during the Work.

Upon approval of all pre-construction submittals required for approval by this Contract including those listed in Section 104.4.2 - Preconstruction Conference, the Contractor will receive payment of 50% of the Lump Sum price for Mobilization, not to exceed 5% of the Bid less the amount bid for Mobilization. After the Authority determines that the Work is 50% complete, the Contractor will receive the other 50% of the Lump Sum price for Mobilization, not to exceed 5% of the Bid less the amount bid for Mobilization. Any remaining Mobilization will be paid upon Final Acceptance.

108.3 Retainage - The Authority shall deduct 7.5% of each Progress Payment, to be retained by the Authority until after the completion of the entire Contract in an acceptable manner.

If, in the judgment of the Authority, based upon 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 liquidated damages which are likely to accumulate, as well as any actual damages that the Authority has documented, 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 which is chargeable to the Contractor, from a Subcontractor or other third party, 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 from a company acceptable to the Authority and in a form acceptable to the Authority 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.

When requested by the contractor an 80 percent reduction of retainage will be considered by the Authority when the Project is substantially complete. When requesting a reduction, 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.

108.4 Payment for Materials Obtained and Stored - 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.

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

Item 403.102	Mot Mix Asphalt - Special Areas
Item 403.206	Hot Mix Asphalt - 25 mm
Item 403.207	Hot Mix Asphalt - 19 mm
Item 403.2071	Hot Mix Asphalt - 19 mm (Polymer Modified)
Item 403.2072	Hot Mix Asphalt - 19 mm (Asphalt Rich Base)
Item 403.2073	Warm Mix Asphalt - 19 mm
Item 403.208	Hot Mix Asphalt - 12.5 mm
Item 403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)
Item 403.20813	Warm Mix Asphalt - 12.5 mm (Polymer Modified)
Item 403.2083	Warm Mix Asphalt - 12.5 mm
Item 403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)
Item 403.210	Hot Mix Asphalt - 9.5 mm
Item 403.2101	Hot Mix Asphalt - 9.5 mm (Polymer Modified)
Item 403.2102	Hot Mix Asphalt - 9.5 mm (Asphalt Rich Base)
Item 403.2103	Warm Mix Asphalt - 9.5 mm
Item 403.2104	Hot Mix Asphalt - 9.5 mm (3/4" Surface)
Item 403.211	Hot Mix Asphalt - Shim
Item 403.2111	Hot Mix Asphalt - Shim (Polymer Modified)
Item 403.2113	Warm Mix Asphalt - Shim
Item 403.212	Hot Mix Asphalt - 4.75 mm (Shim)
Item 403.2123	Warm Mix Asphalt - 4.75 mm (Shim)
Item 403.213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)
Item 403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)
Item 403.2132	Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate course)
Item 403.2133	Warm Mix Asphalt - 12.5 mm (base and intermediate course)
Item 403.214	Hot Mix Asphalt - 4.75 mm (Surface)
Item 403.2143	Warm Mix Asphalt - 4.75 mm (Surface)
Item 403.301	Hot Mix Asphalt (Asphalt Rubber Gap-Graded)
Item 404.70	Colored Hot Mix Asphalt - 9.5mm (Surface)
Item 404.72	Colored Hot Mix Asphalt - 9.5mm (Islands, sidewalks, & incidentals)
Item 461.13	Maintenance Surface Treatment

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

The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price

and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.

Item 403.102-6.2%
Item 403.206-4.8%
Item 403.207-5.2%
Item 403.2071-5.2%
Item 403.2072-5.8%
Item 403.2073-5.2%
Item 403.208-5.6%
Item 403.2081-5.6%
Item 403.20813-5.6%
Item 403.2083-5.6%
Item 403.209-6.2%
Item 403.210-6.2%
Item 403.2101-6.2%
Item 403.2102-6.8%
Item 403.2103-6.2%
Item 403.2104-6.2%
Item 403.211-6.2%
Item 403.2111-6.2%
Item 403.2113-6.2%
Item 403.212-6.8%
Item 403.2123-6.8%
Item 403.213-5.6%
Item 403.2131-5.6%
Item 403.2132-6.2%
Item 403.2133-5.6%
Item 403.214-6.8%
Item 403.2143-6.8%
Item 403.301-6.2%
Item 404.70-6.2%
Item 404.72-6.2%
Item 461.13-6.4%

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

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

Period Price: The period price of performance graded binder will be determined by the Department by using the average New England Selling Price (Excluding the Connecticut

market area), listed in the Asphalt Weekly Monitor current with the paving date. The maximum Period Price for paving after the adjusted Contract Completion Date will be the Period Price on the adjusted Contract Completion Date.

108.5 Right to Withhold Payments - The Authority may withhold payments claimed by the Contractor on account of:

A. Defective Work,
B. Damages for Non-conforming Work,
C. Failure to provide the Authority the opportunity to inspect the Work,
D. Damage to a third party,
E. Claims filed or reasonable evidence indicating probable filing of claims,
F. Failure of the Contractor to make payments to Subcontractors or for Materials or labor, or failure of Subcontractors to make payments to ~~Sub-~~Subcontractors or for Materials or labor,
G. Evidence that the Project cannot be completed for the unpaid balance,
H. Evidence that the amount due the Authority will exceed the unpaid balance,
I. Regulatory non-compliance or enforcement,
J. Failure to submit Closeout Documentation,
K. 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.
L. Contractor's failure to submit required schedule or schedule updates
M. All other causes specifically authorized by the Contract Documents.
N. All other causes that the Authority determines negatively affect the Authority's interests.

108.6 Taxes, Fees, Allowances, and Notices - The Contractor shall pay all taxes, charges, fees, and allowances and give all notices necessary and incidental to the due and lawful prosecution of the Work. Except as expressly provided otherwise in this Contract, all such taxes, charges, fees, and allowances are Incidental to the Contract.

Most items are exempt from Maine sales tax. The Contractor shall Bid in accordance with the Maine statutory exemption from sales tax located at 36 MRSA §1760, subsections (2) and (61).

108.7 Damages for Non-Conforming Work - If the Contractor performs Non-conforming Work that causes the Authority to incur costs including environmental costs or penalties, failure of the Federal Highway Administration to participate in certain costs for reasons due to the Contractor's performance, Authority staff time related to the non-Conformity, penalties, or other damages of any nature whatsoever ("damages"), then the Contractor shall be liable to the Authority for such Damages. The Authority, at its option, and without liability, may deduct

such Damages from amounts otherwise due the Contractor and/or postpone disbursement of Progress Payments until the non-Conformity is corrected.

108.8 Final Payment Following conditional acceptance of the physical Work under subsection 107.9.3 the Authority will prepare a final Invoice reflecting final quantities of the items of Work performed. The Authority may require the Contractor to provide information necessary to substantiate Pay Items, including Statements itemizing Force Account Work. The Authority will make final payment upon approval of the Authority's board, in the amount of the Work done, less all previous payments and all amounts to be retained or deducted under the provisions of the Contract. For a related provision, see Section 107.9.5 - Final Acceptance.

The Acceptance by the Contractor of the final payment, as evidenced by cashing of the final payment check, constitutes a release to the Authority from all claims and liability under the Contract. Upon Final Acceptance, the Contractor is released from further obligation, except for warranty obligations provided for in this Contract.

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.

108.9 General Payment Provisions

108.9.1Full Compensation - Payments to the Contractor shall be full compensation for furnishing all labor, Equipment, Materials, services, and Incidentals used to perform all Work under the Contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of any kind arising from the nature or prosecution of the Work.

108.9.2 No Inflation Adjustments/Interest - No payments due the Contractor will be adjusted for inflation. No interest shall be due and payable on any payment due the Contractor.

108.9.3 Amounts Due the Authority - Unless expressly provided otherwise in this Contract, in cases where the Authority may deduct sums from amounts otherwise due the Contractor and where the sums to be deducted are more than the funds otherwise due the Contractor, the Contractor shall remit all amounts due the Authority within 30 Days of receiving an Invoice from the Authority. After such 30 Days, the Contractor shall be in Default of this Contract and shall not be entitled to any additional cure period. Statutory interest shall accrue after 60 Days of Receipt of the Invoice.

SECTION 109 - CHANGES

Scope of Section This Section contains general provisions related to changes in quantities,

scope, time and payment.

109.1 Changes in Quantities -

109.1.1Changes Permitted - The Authority may increase or decrease Pay Item quantities from the estimated quantities shown in the Bid Documents, and such increase or decrease shall not be considered Extra Work. Except as expressly provided otherwise in this Contract, the Contractor shall be paid for actual quantities in place and Accepted at the Unit Prices contained in the Contractor's Bid. The Contractor accepts such payment as full and complete compensation. 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 - If quantities of Major Items vary from the estimated quantities contained in the Bid Documents by more than 25%, then the Department may increase or decrease the Unit Price of such item using the extra work process. For related provisions, see Section 109.3 - Extra Work and Section 109.8 - Contract Modification. If an adjustment to the Unit Price is made, it will apply only to that portion of the actual quantity that is less than 75% of the estimated quantity or more than 125% of the estimated quantity.

109.2 Elimination of Items - Upon written notification to the Contractor, the Authority may entirely eliminate item(s) of Work for any reason, in which case the Authority would be entitled to a credit. For Minor Items, the credit shall be the Contractor's Bid price for the eliminated item(s). For Major Items, the amount of the credit shall be the Contractor's Bid price for the eliminated item(s), less: (A) direct costs actually incurred by the Contractor after Award, including mobilization, shipping, and restocking expenses that the Contractor cannot recoup on other Projects as reasonably determined by the Authority, and (B) 10% for overhead and profit. The Authority may withhold said credit from amounts otherwise due the Contractor.

109.3 Extra Work - The Authority reserves the right to revise the Contract by adding Extra Work. Such revisions neither invalidate the Contract nor release the Surety. The Contractor and/or its Surety agree to perform all such Extra Work. The Authority will compensate for Extra Work by written Contract Modification in accordance with Section 109.7.1 - General and Section 109.7.2 - Basis of Payment. Any Delay related to Extra Work will be analyzed in accordance with Section 109.5 - Adjustments for Delay. For a related provision, see Section 109.8 - Contract Modification.

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 48hours, 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, 104.4.5 Early Negotiation and 109.7.5, Force Account Work.

109.4 Differing Site Conditions -

109.4.1 Definition - "Differing Site Conditions" are subsurface or latent physical conditions that, at the time of Bid submittal, were:

(A) Materially different from conditions indicated in the Bid Documents,
(B) Not discoverable from a reasonable site investigation prior to Bid,
(C) Materially different from conditions ordinarily encountered and generally recognized as inherent in Work like that specified by the Contract by Contractors experienced in such Work, and
(D) Actually unknown to the party seeking relief due to such conditions, which in the case of the Contractor includes its Subcontractors.

109.4.2 Risk of Other Conditions - All costs, Work, Delays, or other damages related to or arising from site conditions that are not Differing Site Conditions are the sole risk and responsibility of the Contractor.

109.4.3 Notice and Procedural Requirements - If the Contractor discovers what it considers to be Differing Site Conditions that may justify adjustments to compensation, time, or other Contract requirements, the Contractor shall provide a "Notice of Issue for Consideration" within 48 hours of discovery and before doing any Work relating to such conditions as provided in Section 104.4.5 - Early Negotiation. The Contractor shall then comply with all other requirements of Section 104.4.5 - Early Negotiation, and Section 111 - Resolution of Disputes. The Contractor will not be entitled to any change to compensation, time, or Work requirements without proper notice as specified herein. Failure to provide such notice or to otherwise comply with this Section 109.4 will constitute a waiver of all claims related to such conditions.

If the Authority discovers what it considers Differing Site Conditions that may justify adjustments to compensation, time, or other Contract requirements, then the Authority will provide the Contractor with notice within 48 hours of discovery. If the Contractor disagrees with the Authority's finding of Differing Site Conditions or the related adjustments,

then the Contractor shall provide "Notice of Issue for Consideration" within 48 hours and comply with the requirements of Section 104.4.5 - Early Negotiation and Section 111 - Resolution of Disputes.

109.4.4 Investigation/Adjustment - Upon notification by the Contractor or upon the Department's own initiative, the Department will investigate the conditions. If the Authority determines that Differing Site Conditions exist and that the Differing Site Conditions justify an increase in the cost or time allowable for performance of the Work, then the Contractor is entitled to an Equitable Adjustment for the additional costs in accordance with Section 109.7, Equitable Adjustments to Compensation and Time, - Basis of Payment that are caused directly and solely by the Differing Site Conditions. If the Authority determines that Differing Site Conditions exist and that the Differing Site Conditions have caused a decrease in the cost or time required for the performance of the Work, then the Authority is entitled to a credit in the amount of savings to compensable items in accordance with Section 109.7, Equitable Adjustments to Compensation and Time, that are caused directly by the Differing Site Conditions. Delays caused by Differing Site Conditions will be considered in accordance with Section 109.5 - Adjustments for Delay.

109.5 Adjustments for Delay -

109.5.1 Definitions – Types of Delays - Delays are defined as follows and may be divided into more than one type depending upon cause.

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

B. Compensable Delay: A "Compensable Delay" is a Delay to the Critical Path that is directly and solely caused by: (1) 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 and receives project-specific emergency funds, and the Contractor can show proof that the Work was delayed by this weather event, (2) an Uncontrollable Event caused by a Utility Company , for which the Utility Company reimburses the Authority, (3) an Uncontrollable Event caused by other third party (not Subcontractors) Working on Project-

related Work within the Project Limits if, and only if, the third party offers the Authority reimbursement for such Delay, (4) acts by the Authority that are in violation of applicable laws or the Contract, or (5) a flooding event at the effected location of the Project that results in a Q50 headwater elevation, or greater. Theoretical Q50 headwater elevations will be determined by the Authority; actual headwater elevations will be determined by the Contractor and verified by the Authority.

C. Inexcusable Delay: "Inexcusable Delays" are all Delays that are not Excusable Delays or Compensable Delays.

For a related provision, see Section 101.2 - Definition of Uncontrollable Event.

109.5.2 Entitlement to Adjustments

A. Types of Adjustments: Provided the Contractor meets the requirements of Section 109.5.2(B) below and complies with the notification, documentation, and procedural requirements set forth in the Contract, the Contractor is entitled to certain adjustments to the Contract depending upon the type of Delay.

1. If an Excusable Delay, the Contractor is entitled to an extension of time, but no additional compensation.

2. If a Compensable Delay, the Contractor is entitled to an extension of time and an Equitable Adjustment as set forth in Section 109.7 - Equitable Adjustments to Compensation and Time.

3. If an Inexcusable Delay, the Contractor is entitled to neither an extension of time nor additional compensation.

For related provisions, see Sections 104.2.7 - Damage to Project Caused By Uncontrollable Events and 104.3.10 - Responsibility for the Damage to Work.

B. Requirements for Entitlement: To be entitled to any adjustments for an Excusable Delay or a Compensable Delay, the Contractor must demonstrate all of the following.

1. The Contractor consistently utilized its Schedule of Work to schedule, coordinate, and manage the Work as evidenced by documentation created as the Work progressed including Progress Meeting minutes;

2. The Delay impacted the Critical Path of the Schedule of Work; and

3. There are no concurrent Inexcusable Delays.

C. Concurrent Delays: The Contractor is not entitled to a time extension for the period of time when Excusable and Inexcusable Delays are concurrent. The Contractor also is not entitled to either time extension or an Equitable Adjustment for the period of time when Compensable and Inexcusable Delays are concurrent. In the event Compensable and

Excusable Delays are concurrent, the Contractor is only entitled to time extension, not an Equitable Adjustment, for the period of time such Delays are concurrent.

109.5.3 Early Completion Date Delay Claims - For the purposes of this Section 109.5.3, a "Contractor's Early Completion Date" means a Project Completion date shown on the Contractor's initial Schedule of Work submitted in accordance with Section 107.4.2 - Schedule of Work Required that is earlier than the Contract's specified Completion date. The Authority will not be liable for any claims or expenses related to the period of time between the Contractor's Early Completion Date and the Contract's specified Completion date, unless the Contractor demonstrates, by clear and convincing evidence that: (A) all requirements of Section 109.5.2(B) - Requirements for Entitlement are met, and (B) that the Contractor's Early Completion Date was reasonable at the time of Bid in light of the surrounding facts and circumstances, including the Contractor's available resources, and the requirements of the Work.

109.5.4 Notice and Procedural Requirements - If the Contractor becomes aware of facts or circumstances that may cause a Delay for which the Contractor may seek adjustments to compensation, time, or other Contract requirements, the Contractor must notify the Resident of such "Issue" within 48 hours and before doing any Work relating to such facts or circumstances as provided in Section 104.4.5 - Early Negotiation. Except as otherwise provided in this Section 109.5, the Contractor shall then comply with all other requirements of Part 111 - "Resolution of Disputes". The Contractor will not be entitled to any change to compensation, time, or Work requirements without proper and timely notice. Failure to provide such notice constitutes a waiver of all claims related to such conditions.

109.5.5 Documenting the Delay and Request for Adjustments -

A. Weekly Reports During Delay: To be entitled to any adjustments for Delay, the Contractor must keep records as provided in Section 111.1.6 - Contractor's Obligation to Keep Records. Further, the Contractor must submit weekly written reports containing the following information.

1. Number of Days of impact to the Critical Path.
2. A summary of all operations that have been Delayed, or will be Delayed on the impact of the Contractor's Critical Path.
3. A narrative describing how the cause of the Delay meets the definition of "Excusable Delay" or "Compensable Delay" contained in Section 109.5.1(A) or (B).
4. Itemization of all extra costs being incurred, including (A) how the extra costs relate to the Delay, (B) the identification of all non-salaried Project employees for whom costs are being compiled, and (c) a summary of time charges for Equipment, identified by the manufacturer's number for which costs are being compiled.

B. Request and Report After Completion: Within 14 Days of Completion of the phase of Work that the Contractor claims has been Delayed, the Contractor shall submit a written report to the Authority that contains the following information.

1. A description of the operations that were Delayed and the documentation and narrative of how the cause for the Delay meets the definition of "Excusable Delay" or "Compensable Delay" contained in Sections 109.5.1(A) or (B), including all reports prepared for the Contractor by consultants, if used;
2. An as-built chart showing when Work operations were actually performed;
3. A graphic depiction of how the operations were Delayed and the impact on the Critical Path; and
4. An item-by-item request for additional time and compensation for items allowed under Section 109.7.5 - Force Account Work, including measurement and explanation.

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

109.5.6 Decision by Construction Program Manager - Within 30 Days of receiving all information described in Section 109.5.5(B) - Request and Report After Completion, the Construction Program Manager will Deliver a written decision on the request made to the Contractor. Failure to provide a decision within said 30-day period shall be considered a denial of the Contractor's request, unless the parties mutually agree to an extension of time for such decision.

109.5.7Additional Consideration By Authority - If the Contractor does not agree with the decision of the Construction Program Manager the issue should be considered a Dispute and shall be resolved as outlined in Section 111 –Resolution of Disputes.

109.6 Value Engineering -

109.6.1 Overview- General Requirements - A Value Engineering Change Proposal (VECP) is a proposal made by the Contractor after Contract Execution that is intended to produce cost savings without impairing essential characteristics of the Project including function, serviceability, safety, durability, maintainability, and aesthetics, all as determined by the Authority.

A VECP shall contain proven features that have been used under similar conditions. A proposal is not a VECP if equivalent options are already provided in the Contract.

A VECP must be approved by the Authority, in its sole discretion. Unless otherwise agreed in writing, the Contractor and the Authority will equally share the Net Savings generated by the VECP as provided in Section 109.6.4(C) - Contract Modification - Amount of Payment.

Unless mutually agreed otherwise, the VECP approval process will occur in three steps: (A) Conceptual VECP submission and review, (B) Detailed VECP submission and evaluation, and if approved, (C) Contract Modification including the amount of payment due to the Contractor and credit due to the Authority. When the nature and scope of a VECP warrants, the parties may agree to truncate the VECP approval process.

The Maine Turnpike will not participate in any costs borne by the Contractor that are not in accordance with Maine Turnpike policies. 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.

109.6.2 Conceptual VECP

A. Submittal: To propose a VECP, the Contractor must submit a written "Conceptual VECP" to the Resident. The Conceptual VECP is not a formal and complete submittal based upon detailed technical analysis, but instead relays a conceptual idea based upon the Contractor's knowledge and experience. The Conceptual VECP should include the following information:

1. General Description: A narrative that describes the proposed change in concept and includes the basic differences between the existing Contract and the proposed change.

2. Advantages and Disadvantages: A listing and brief description of the comparative advantages and disadvantages of the VECP including effects on function, serviceability, safety, durability, maintainability, aesthetics, and any other factors significantly altered by the VECP.

3. Estimate of Net Savings: An estimate of the Net Savings as defined in Section 109.6.4(C) - Contract Modification - Amount of Payment.

4. Savings and Schedule Impacts: An estimate of the time necessary for the Contractor to submit a Detailed VECP. Such estimate must specify the date by which the Authority must approve the VECP to obtain the maximum cost reduction, and the latest date by which the Authority must approve the VECP for the Contractor to avoid significant impacts on the estimated Net Savings or the Contractor's Schedule of Work. If the Authority determines that the time for response is insufficient for review, the Contractor will be so notified.

B. Conceptual Review and Response: The Authority will use its best efforts to review a Conforming Conceptual VECP and respond to the Contractor within 14 Days of Receipt. The Authority may, at its sole discretion, (1) invite the Contractor to submit a Detailed VECP, (2) reject the Conceptual VECP for reasons that will be described

briefly, or (3) request additional information. The Authority may also, in its sole discretion, agree to partially reimburse the Contractor for the costs to develop and submit a Detailed VECP.

109.6.3 Detailed VECP -

A. Submittal: If the Authority invites the Contractor to submit a Detailed VECP, it shall contain the following information that is sufficient in detail to clearly define and explain the proposed change(s):

1. Updated and more complete information regarding items included in the Conceptual VECP, including the general description of the VECP, advantages and disadvantages, use, or testing performed elsewhere a detailed computation of the estimated Net Savings generated in accordance with Section 109.6.4(C) - Contract Modification - Amount of Payment, actual VECP development costs to date, and estimated savings and schedule impacts including approval date(s) required. If the Department determines that the proposed time for response is insufficient for review, the Contractor will be notified promptly.

2. A complete set of Plans and Specifications showing the proposed revisions relative to the original Contract features and requirements. All VECP's that require engineering design, computations, or analysis shall be prepared under the responsible charge of, and sealed by, a Professional Engineer licensed in the State of Maine.

B. Evaluation

1. Additional Information: The Authority may request any additional information that it determines is necessary to properly evaluate the VECP. Where design changes are proposed, such additional information may include results of field investigations and surveys, design computations, specifications, and field change sheets. The Contractor will promptly provide any such requested information.

2. Cost Verification: The Authority may require the Contractor to provide additional information to verify the Contractor's cost analyses.

C. Response: The Authority will evaluate a Conforming Detailed VECP and provide the Contractor with a written response within 14 Days of Receipt of all of the information it has determined is necessary to properly evaluate the VECP. Such response will include a brief description of the Authority's reason(s) for its decision. The Authority, at its sole discretion, will either: approve the Detailed VECP, approve it with conditions, or reject it. The Authority may base its decision on any reason that is in the best interest of the Authority including, but not limited to: (1) unacceptable impact on the function, serviceability, safety, durability, maintainability, or aesthetics of the Project, (2) insufficient testing or use of the VECP concepts elsewhere, (3) insufficient justification of cost

savings, (4) unacceptable schedule impacts, (5) insufficient review time, or (6) differing engineering judgment. The Contractor may request that the Authority reconsider certain portions of the decision. If requested, the Authority may reconsider its decision or may decline to reconsider its decision. Any decision by the Authority under this subsection is final and not subject to review or appeal.

D. Termination of VECP Process: If the Authority rejects the VECP or the Contractor does not desire to proceed with the VECP as approved by the Authority, the VECP process will terminate and the Authority will reimburse the Contractor for . 100 percent of all VECP development costs incurred by the Contractor to date.

109.6.4 Contract Modification-Amount of Payment - If the VECP is approved, or if it is approved with conditions, and the Contractor wants to proceed, a Contract Modification will be executed by the parties. In addition to the requirements of Section 109.8 - Contract Modifications, the VECP will set forth the net savings generated by the VECP, which shall be split equally between the Contractor and the Authority, per the following formula:

NS EGS - CDC – DVEC

Where:

NS = Net Savings, generated by the VECP, as determined by the Department.

EGS Estimated Gross Savings, which is the difference between the cost of performing the Work as originally specified in the Contract and the cost of performing the Work as revised by the VECP, at agreed upon or lump sum prices.

CDC Contractor's Development Costs, related to the preparation of the Detailed VECP including costs of the Contractor's design subconsultants and Subcontractors. The Department shall reimburse the Contractor for these costs.

AVEC Authority's VE Costs, related to review, approval, and implementation of the VECP including design costs, field inspection, and the value of any Authority provided property.

Once the Contract Modification is executed, the Contractor may be paid for its actual Authority Costs. The Contractor's share of the Net Savings shall not be disbursed until the work is complete and the actual Net Savings is known.

The Contract Modification shall also set forth any adjustments to Contract Time related to the Work as revised by the VECP, if any.

109.6.5 Subsequent Payment Adjustments - Upon Completion of the portion of the Work

revised by the VECP, the Authority, on its own initiative or upon request by the Contractor, may review the actual net savings realized by the VECP. The Contractor will be afforded an opportunity to review and comment on such a review. If the actual net savings was greater than set forth in the Contract Modification, the increased savings will be shared equally by the parties. If the net savings was less than set forth in the Contract Modification, the reduction in savings will be borne equally by the parties.

109.6.6 General Conditions Regarding VECP's -

A. VECP's will remain the property of the Contractor, provided that the Authority will have the unrestricted right to use any approved VECP, or any VECP in which the Authority has reimbursed the Contractor for any portion of the development costs, on other Authority Projects without notice, cost, or liability to the Contractor.

B. Only the Contractor may submit VECP's. The Contractor shall review, be responsible for, and submit all proposals initiated by the Contractor's Subcontractors.

C. The Contractor shall not anticipate Authority approval of a VECP when Bidding or otherwise. The Contractor is responsible for all Delays caused by the VECP that were not negotiated in the Contract Modification.

D. If a VECP is rejected, the Contractor shall perform the Work in accordance with the Contract.

E. Except as otherwise provided in this Section 109.6, the Contractor shall have no claim against the Authority for additional compensation or time resulting from the Delayed review or rejection of a VECP, including, but not limited to, development costs, loss of anticipated profits, and increased Material or labor costs.

F. Cost sharing applies only to the Contract for which the VECP was submitted.

G. Because the Authority has no obligation to change the terms of the original Contract, all VECP decisions by the Authority are final and are not subject to the Dispute resolution provisions provided in this Contract or otherwise available at law.

109.7 Equitable Adjustments to Compensation and Time -

109.7.1 General - Equitable Adjustment means an adjustment to compensation due to a change in the nature or scope of Work as defined in this Section 109.

This Section 109.7 applies to all changes to the nature or scope of the Work excepting: (A) changes in quantities, which are governed by Section 109.1, (B) elimination of items of Work which is governed by Section 109.2, and (C) payment for Value Engineering Change Proposals, which is governed by Section 109.6.

109.7.2 Basis of Payment - Adjustments will be established by mutual Agreement based upon Unit or Lump Sum Prices which include labor, materials, mark-up, overhead, and time. These agreed upon Unit or Lump Sum prices will be full compensation and no additional overhead, profit, mark-ups or fees are allowed. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 - Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment.

109.7.3 Reserved- VACANT

109.7.4 Non-Compensable Items - The Contractor is not entitled to compensation or reimbursement for any of the following items:

A. Lost profits or lost opportunity costs,

B. Labor inefficiencies,

C. Consequential damages, including but not limited to loss of bonding capacity, loss of Bidding opportunities, and insolvency,

D. Indirect costs or expenses of any nature,

E. Dispute resolution costs of any nature including attorney's fees, claims consultant fees, expert witness fees, claims preparation expenses, and costs related to DRB proceedings, mediation, arbitration, or litigation, and

F. Interest.

109.7.5 Force Account Work - Compensation for Force Account Work will be computed according to this Subsection.

A. Labor: The Contractor will receive the actual hourly wages paid to Workers actually engaged in the changed Work and the foreman in direct charge of the changed Work as determined from certified payrolls, plus 90 percent of the sum thereof for all fringe benefits, payroll taxes, overhead, and profit.

B. Materials: For Materials incorporated in the permanent Work, the Contractor will receive the Actual Cost of Materials including freight and Delivery charges (but excluding any sale or use tax) plus a single 15 percent markup. For all Materials not incorporated in the permanent Work, the Contractor will receive the difference of actual value of such Material at the time of its use less the fair salvage value of Material when released, plus 15 percent of said difference. There shall be no markup on markups.

C. Equipment: For all authorized usage of power-operated machinery, trucks, or other Equipment, the Contractor will receive the rental rates for the actual time to the nearest 1/4 hour that such Equipment is in operation on the Work. Time spent moving Equipment within the Project Limits and any approved idle time may be measured for

payment when authorized. Time spent servicing, maintaining, and changing attachments will not be paid for. The rental rates shall include the cost of all fuel oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, small tools, and all other Incidentals.

The maximum Hourly Equipment rental rates (R) will be determined using the most current Blue Book rates and the following formula:

$$R = A \times B \times E + C + D$$

Where:

A Blue Book monthly rate divided by 176
B Blue Book regional adjustment factor for Maine
C Blue Book estimated operating costs per hour
D Operator's hourly payroll rate plus 90 percent
E Factor from the Rate Adjustment Table for the year the machine was made

When the Contractor's Equipment is ordered to be available for Force Account Work, but is idle for reasons not the fault of the Contractor, standby time will be paid at 70% of the hourly Equipment rental rate excluding all operating costs.

For each piece of Equipment, the Contractor shall provide the following information: the manufacturer's name, Equipment type, year of manufacture, model number, type of fuel used, horsepower rating, attachments required, together with its size or capacity and any further information necessary to ascertain the proper rate. The Contractor shall also provide a photocopy of the appropriate pages from the Blue Book that were used to arrive at the rates and prepare a chart that fully shows all the details of the Equipment costs.

Unless otherwise specified, manufacturer's ratings and manufacturer-approved modifications will be used to classify Equipment for the determination of applicable rental rates. A unit of at least the minimum rating recommended by the manufacturer shall power equipment that has no direct power unit.

If the Authority specifies Equipment not listed in the above publication, the Authority will establish a suitable rate for such Equipment. 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.

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% markup for administrative costs.

D. Superintendence: No part of the salary or expense of anyone connected with the Contractor above the grade of foreman or having general supervision of the Work will be included in the labor items as specified above, except when the Contractor's entire on-site Workforce is occupied with Force Account Work, in which case the salaries of the Superintendent may be included in the labor item specified above when the nature of the Work is such that their services are required, as determined by the Department.

E. Documentation Requirements: All Statements shall be accompanied and supported by Receipted Invoices for all Materials used and transportation charges. If Materials used on the Force Account Work are not specifically purchased for such Work but are taken from the Contractor's stock, then instead of Invoices, the Statements shall contain or be accompanied by an affidavit of the Contractor certifying that such Materials were taken from stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the Actual Cost to the Contractor, excluding storage costs.

No payment will be made for Work performed on a Force Account basis until the Contractor has furnished duplicate itemized Statements of the cost of such Force Account Work detailed to the following:

1) Name, classification, date, daily hours, total hours, rate, and amount for each foreman and laborer.

2) Designation, dates, daily hours, total hours, rental rate, and amount for each unit of Equipment.

3) Quantities of Materials, prices, and amounts.

4) Transportation charges on Materials.

F. Subcontractor Quoted Work When accomplishing Force Account Work that utilizes Subcontractors quoted Work, the Contractor will be allowed a maximum markup of 5% for profit and overhead on the Subcontractor's portion of the Force Account Work. If the Department does not accept the Subcontractor quote, then the Subcontractor work will be subject to the Force Account provisions with a 5% markup for profit & overhead.

109.8 Contract Modification: Excepting changes to quantities as provided in Section 109.1.1 - Changes Permitted, all changes to the Contract that affect compensation, time, or quality must be made by written Contract Modification. The Contract Modification will describe the underlying issue that resulted in the Contract Modification and will specify adjustments to compensation, time, or other Work requirements, as applicable. If adjustments to compensation or time are not shown on the face of the Contract Modification, then there are no such adjustments.

All Contract Modifications must be signed by the Project Manager or Resident. By signing a Contract Modification, the Contractor agrees to all the terms thereof and waives any and all

claims for additional compensation, time, or other Work requirement adjustments relating to the issue that is the subject of the Contract Modification. All Contract Modifications are to be noted in Progress Meeting minutes.

SECTION 110 - INDEMNIFICATION, BONDING AND INSURANCE

Scope of Section This Section contains general requirements for indemnification, bonding, and insurance by the Contractor.

110.1Indemnification - The Contractor agrees to indemnify , defend , and hold harmless the Authority and its officers, directors, employees, agents and consultants from and against all claims, actions, torts, costs, losses, and damages for bodily injury (including sickness, disease, or death) and property damage arising out of or relating to this Contract or the performance of Work by the Contractor, its Subcontractors, subconsultants, Engineers, suppliers, any individuals or entities directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, excepting only claims directly and solely caused by the negligence of the Authority. Damages covered include, but are not limited to, all Dispute resolution costs including court costs, attorney's fees, and the fees of Engineers and consultants, arbitrators, and other professionals related to Dispute defense and preparation.

This indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any Subcontractor, subconsultant, Engineer, supplier, or other individual or entity under Workers' Compensation acts, disability benefit acts, or other employee benefit acts.

110.2 Bonding

110.2.1Bonds - The Bidder to whom the Contract is awarded shall furnish a Surety Corporation Bond, satisfactory to the Authority, from a company 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. If the Surety becomes insolvent, ceases to be licensed or approved to do business in the State of Maine, or ceases operations in the United States, the Contractor shall forthwith furnish and maintain as above provided, other security satisfactory to the Authority, within 10 Days of the date the Contractor is notified of such change.

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 designees for compensation not to exceed the Contract Price less the aggregate of prior payments to the Contractor.

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time of performance, quality, warranties, and the Authority's self-help remedy provided in Section 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 these bonds, 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. This notice shall be provided both to the claimant and to the Authority. 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.

If the Surety becomes financially insolvent or stops operating in the United States, the Contractor shall file new bonds complying with this Section within 10 Days of the date the Contractor is notified of such change.

For a related provision, see Section 106.9.4 - Other Warranty Provisions.

110.2.2 Bond for Use of Municipal Roads - A bond for use of municipal Roads may be required as provided in Section 105.5 - Hauling of Materials and Equipment.

110.2.3 Bonding for Landscape Establishment Period - The Contractor shall provide a Landscape Warranty Bond acceptable to the Authority, to the Authority as a condition of Final Acceptance.

The Bond shall be in the full amount of 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. Payment shall be incidental to the Contract. 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 Authority'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 - The Contractor shall provide signed, valid, and enforceable certificate(s) of insurance complying with this Section. All insurance must be procured from insurance companies licensed or approved to do business in the State of Maine by the State of Maine, Department of Business Regulation, Bureau of Insurance. The Contractor shall pay all premiums and take all other actions necessary to keep required insurances in effect for the duration of the Contract obligations, excluding warranty obligations.

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 Authority 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. All costs thereof shall be included in the prices bid for the various items scheduled in the Proposal.

The Authority reserves the right to adjust the liability coverage and limits required by this section by Special Provision on a Project by Project basis.

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.

110.3.1 Workers' Compensation - For all operations performed by the Contractor and any Subcontractor, the Contractor and each Subcontractor shall carry Workers' Compensation Insurance or shall qualify as a self-insurer with the State of Maine Workers' Compensation Board in accordance with the requirements of the laws of the State of Maine. If maritime exposures exist, coverage shall include United States Long Shore and Harbor Workers coverage.

110.3.2 Commercial General Liability - With respect to all operations performed by the Contractor and any Subcontractors, the Contractor and any Subcontractors shall carry commercial general liability insurance in an amount not less than $1,000,000.00 per occurrence and $2,000,000.00 in the Aggregate. The coverage must include products, completed operations, and Contractual liability coverages, and Insurance Services Office (ISO) form #CG25031185 or equivalent. The Contractual liability insurance shall cover the Contractor's obligations to indemnify the Department as provided in this Contract including Section 110.1 - Indemnification. The coverage shall also include protection against damage claims due to use of explosives, collapse, and underground coverage if the Work involves such exposures.

When the work to be performed entails the use of barges, tug boats, work boats, supply boats, etc., Protection and Indemnity coverage shall be provided at the limits called for under Commercial General Liability insurance.

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.

110.3.3 Automobile Liability - The Contractor shall carry Automobile Liability Insurance covering the operation of all motor vehicles including any that are rented, leased, borrowed, or otherwise used in connection with the Project. The minimum limit of liability under this Section shall be $1,000,000.00 per occurrence.

110.3.4 Professional Liability - 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. "Design Work" includes the design of temporary Structures and all other Work that

requires design computations. This policy shall cover "Wrongful Acts," meaning negligent acts, errors or omissions by the Contractor, or any entity for whom the Contractor is legally liable, arising out of the performance of, or failure to perform, professional services. The Department reserves the right to adjust liability coverage on a project-by project basis as it deems appropriate.

110.3.5 Owners and Contractors Protective Liability - For Projects with a Contract price in excess of $500,000, an "Owner's Protective" policy, naming the Authority as the sole insured party with a $5,000,000 limit, shall also be provided.

110.3.6 Builders Risk - Unless required by Special Provision, the Department does not require the Contractor to carry Builders Risk Insurance. However, the Contractor is advised of its risks for damage to the Work as provided in Section 104.3.10 - Responsibility for Damage to the Work. The Contractor is responsible for managing and insuring these risks as it deems appropriate.

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.

110.3.7 Pollution Liability - If required by Special Provision, the Contractor shall carry Pollution Liability insurance to cover the risk of sudden or accidental discharge of pollutants during the prosecution of the Work. The limits of liability for this coverage shall be in the amount of $1,000,000.00 per occurrence and $2,000,000.00 in the Aggregate. Regardless of whether such insurance is carried by the Contractor, the Contractor is responsible for managing these risks as it deems appropriate.

110.3.8 Railroad Protective Liability - When working adjacent to a railroad, the Contractor and Subcontractors shall carry Railroad Protective Liability Insurance as required by the Railroad.

110.3.9 Administrative & General Provisions

A. Additional Insured

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. Contractor shall provide the Authority with adequate proof of its Additional Insured status, including but not necessarily limited to Certificates of Insurance and copies of Endorsements from the applicable policies evidencing the status of the Authority as Additional Insured.

B. Defense of Claims Each insurance policy shall include a provision requiring the carrier to investigate, defend, indemnify, and hold harmless all named insureds against any and all claims for death, bodily injury, or property damage, even if groundless.

C. Primary Insurance The insurance coverage provided by the Contractor shall be primary insurance with respect to Authority. Any insurance or self-insurance maintained by the Authority is in excess of the Agent's insurance and shall not contribute with it.

D. Reporting Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Authority.

E. Separate Application The insurance provided by the Contractor shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

Nothing in this document constitutes a waiver of any defense, immunity or limitation of liability that may be available to the Department, or its officers, agents or employees under the Maine Tort Claims Act (Title 14 M.R.S.A. 8101 st. seq.), and shall not constitute a waiver of other privileges or immunities that may be available to the Department.

SECTION 111 - RESOLUTION OF DISPUTES

Scope of Section This Section contains provisions for resolving Disputes early, efficiently, fairly, and as close to the Project level as possible. For related provision, see Section 104.4 - Communication and Coordination.

111.1 General -

111.1.1Definitions - "Dispute" is defined in Section 101.2 - Definitions. "Issue," is defined in Section 104.4.5 – Early Negotiation. Additionally, an "Issue" as used in Sections 111.1 through 111.3 below, is a matter that may give rise to a Dispute.

111.1.2 Escalation Process - 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 may be appealed to the MTA Executive Director. If the Contractor is dissatisfied with the MTA Executive Director's decision, the Contractor may request an Alternate Dispute Resolution (ADR) process, as outlined in this Section. All costs of ADR shall be shared equally.

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.

It is the intent of this Specification to retain maximum flexibility for the specific procedures for 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.

111.1.3 Relationship to Partnering - With the exception of the decision matrix developed pursuant to Section 104.4.2 Preconstruction Conference, partnering including the establishment of a partnership charter, does not in any way waive, alter, or otherwise affect any provision of the Contract including those requiring notice and all other provisions governing the resolution of Issues or Disputes. For a related provision, see Section 104.4.1 - Partnering.

111.1.4 Mandatory Notice - The Contractor shall comply with all notice provisions of this Contract relating to Issues or Disputes including those contained in Sections 104.3.3 - Duty to Notify If Ambiguities Discovered; 104.4.5(A) - Early Negotiation, Notice Required; 109.4.3 - Differing Site Conditions, Notice and Procedural Requirements; 109.5.4 - Adjustments for Delay, Notice and Procedural Requirements; and 111 - Resolution of Disputes. In order to promote the purposes of this Section 111, all notice provisions are mandatory and are to be strictly construed. Failure to provide Conforming notice constitutes waiver by the Contractor of any and all claims to additional compensation, time, or modification of Contract requirements related to the Issue or Dispute.

111.1.5 Work to Proceed Despite Issue or Dispute Regardless of the status or disposition of any Issue or Dispute, the Contractor and the Authority must perform their Contractual responsibilities Promptly and diligently. Unless expressly directed otherwise by the Authority, the Contractor shall proceed without Delay to perform the Work or to Conform to the decision or Order of the Authority.

111.1.6 Contractor's Obligation to Keep Records Throughout the course of any Issue or Dispute, the Contractor shall keep daily records, including supporting documentation, of extra costs and time related to the Issue or Dispute. Such records shall include all non-salaried labor, Material costs, Equipment expenses, and location for all operations that are affected by the Issue or Dispute. The Contractor will not be entitled to any change to compensation, time, or Work requirements without such records. The Contractor shall permit the Department daily access to and shall provide copies of these and any other records needed for evaluating the Dispute. The Contractor shall retain those records for the duration of the Dispute and as provided in Section 104.3.6 - Project Records.

111.1.7 Dispute Resolution Time Extensions All deadlines provided in this Section 111 may be extended only by mutual written consent signed by both parties.

111.1.8 V A C A N T

111.1.9 Contract Modification Required All changes to the Contract that regard Issues or Disputes and that affect compensation, time, quality, or other Contract requirements must be made by written Contract Modification as provided by Section 109.8 - Contract Modification.

SECTION 112 - DEFAULT AND TERMINATION

Scope of Section This Section contains general provisions related to Default and termination of the Contract.

112.1 Default

112.1.1 Grounds for Default The Contractor and the Surety are in Default of the Contract if the Contractor or the Surety:

A. Fails to Promptly begin the Work under the Contract after being authorized to proceed,

B. Fails to perform the Work with sufficient labor, Equipment, or Materials to assure the timely Completion of the Work,

C. Performs Defective Work, neglects or refuses to uncover, remove or rebuild Unacceptable Work, or neglects or refuses to uncover Unauthorized or Uninspected Work when directed by the Authority,

D. Discontinues the prosecution of the Work without Authority approval,

E. Continues to perform Work after the Authority directs that Work be stopped,

F. Fails to resume Work which has been suspended as required by the Contract,

G. Becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency that could affect the Work in any way,

H. Allows any final judgment to stand against the Contractor unsatisfied for a period of ten Days,

I. Makes an assignment for the benefit of creditors without authorization by the Authority, or

J. In any other manner, fails to perform the Work in Substantial Conformity with any

material provision of the Contract.

112.1.2 Notice of Default/Cure - Except as otherwise provided in this Contract, if Default occurs, the Authority may give written Notice of Default to the Contractor and its Surety. Failure to give Notice of Default is in no way a waiver by the Authority of any provision of the Contract.

If the Contractor or Surety fails to completely cure such Default within a period of 14 Days after Notice of Default, then the Authority may (A) terminate the Contract for cause in accordance with Section 112.2.1 - For Cause, or (B) take prosecution of the Work away from the Contractor without violating the Contract,.

112.2 Termination - The Authority may, by written order to the Contractor, terminate the Contract as provided in this Section 112. Termination of the Contract or portion thereof shall not relieve the Contractor of its Contractual responsibilities for the Work completed (including warranty obligations), nor shall it relieve the Surety of its obligation for claims arising from the Work or the Contract.

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.

112.2.1 For Cause - If the Contractor fails to completely cure all Defects identified in the Notice(s) of Default provided for in Section 112.1.2 within the 14-day cure period provided, the Authority may immediately terminate the Contract for cause by written Notice of Termination For Cause. In this event, the Authority may use any or all Materials and Equipment for the Work and may enter into an Agreement with another entity for the Completion of the Work, or use such other methods as in the opinion of the Authority are required for the Completion of the intent of the Contract in an acceptable and timely manner.

The Authority will pay for all Accepted items of Work as of the date of Termination at agreed upon prices. Items eliminated in their entirety by Termination will be paid for as provided in Section 109.2 - Elimination of Items, except that there will be no reductions in the amount of the credit to the Authority. The Contractor shall make all Work records available to the Authority upon request regarding payment under this Section. All costs and charges incurred by the Authority, together with the cost of completing the Work specified in the Contract, will be deducted from amounts otherwise due the Contractor. If such expenses exceed the sum that would have been payable under the Contract, then the Contractor and the Surety are liable and shall pay to the Authority the amount of such excess within 30 Days of the Delivery of a Statement setting forth such expenses to the Contractor and the Surety, as applicable.

If the Contractor files for bankruptcy at any time before expiration of the warranty periods provided by this Contract, then the Contractor and its Surety agree, if requested by the Authority and within 30 Days of such request, to take all actions necessary or convenient to

reject or accept this Contract under the executory Contract provisions of the federal bankruptcy code.

112.2.2 For Convenience - The Authority may terminate this Contract for convenience or for any reason that is in the best interest of the Authority. Terminations caused without fault of or for reasons beyond the control of the Contractor are Terminations for Convenience. The Authority will notify the Contractor of such terminations by sending a Notice of Termination for Convenience.

In case of a Termination for Convenience, the Authority will pay for all Accepted items of Work as of the date of termination at agreed upon prices. Items eliminated in their entirety by Termination will be paid for as provided in Section 109.2 - Elimination of Items. The Contractor shall make all Work records available to the Authority upon request regarding payment under this Section. Acceptable Materials, obtained by the Contractor for the Work but which have not been incorporated therein, may at the option of the Authority be purchased from the Contractor at Actual Cost Delivered to a prescribed location or otherwise disposed of as mutually agreed.

After Receipt of Notice of Termination for Convenience from the Authority, the Contractor may also submit a claim for additional damages or costs not covered above or elsewhere in this Contract to the Project Manager within 60 Days of the effective Termination date. Such claim may include such cost items as idle Equipment time, Bidding and Project investigative costs, overhead expenses attributable to the Project terminated, legal and accounting charges involved in claim preparation, Subcontractor costs not otherwise paid for, idle labor cost if Work is stopped in advance of termination date, guaranteed payments for private land usage as part of the original Contract, and any other cost or damage item for which the Contractor reasonably believes reimbursement should be made. In no event, however, will loss of anticipated profits be considered as part of any settlement.

The Contractor agrees to make the Bid Escrow, Documentation, if any, and its cost records available to the extent necessary to determine the validity and amount of each item claimed.

The Authority will respond in writing to such claim within 60 Days of Receipt. If the Contractor wants additional consideration, the Contractor must Deliver a written "Notice of Unresolved Dispute" to the Director as provided in Section 111.3.1 - Notice of Unresolved Dispute and comply with all other applicable Dispute resolution provisions of Section 111 - Resolution of Disputes.

Contract 2016.05

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II – SPECIAL PROVISIONS

PART II - SPECIAL PROVISIONS

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520.	EXPANSION DEVICES – NON MODULAR (Expansion Device Pourable Seal)	SP-44
520.	EXPANSION DEVICES – NON MODULAR (Expansion Device Modification)	SP-46
523.	BEARINGS (Bearing Installation)	SP-48
524.	TEMPORARY STRUCTURAL SUPPORTS (Protective Shielding - Steel Girders)	SP-50
603.	PIPE CULVERTS AND STORM DRAINS (Pressure Treated Wood Drain Trough)	SP-52
607.	FENCES (Snow Fence)	SP-54
619.	MULCH	SP-55
631.	EQUIPMENT RENTAL (Welding Machine – Including Operators)	SP-57
645.	HIGHWAY SIGNING (Special Work No.: Route 236 Underpass) (Special Work No.: Ramp H Underpass) (Special Work No.: Gorham Road Underpass) (Special Work No.: Cummings Road Underpass)	SP-58
652.	MAINTENANCE OF TRAFFIC (General)	SP-59

652.	MAINTENANCE OF TRAFFIC (Specific Project Maintenance of Traffic Requirements)	SP-70
652.	MAINTENANCE OF TRAFFIC (Truck Mounted Attenuator)	SP-78
656.	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	SP-80

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II - SPECIAL PROVISIONS

All work shall be governed by the Maine Department of Transportation 2014 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 Supplemental Specifications and the following modifications, additions and deletions.

General Description of Work

The work consists of repairs to four bridge structures for the Maine Turnpike Authority. The work includes bridge expansion joint seal replacements, drainage trough installation and snow fence installation at Ramp J Underpass, parapet repairs and granite curb repointing at Two Rod Road Underpass, deck repairs and snow fence installation at Cummings Road Underpass, joint seal installation at Exit 45 Underpass, rocker bearing replacements and substructure repairs at Forest Avenue, snow fence installations at various locations, bridge mounted sign clip installation at various locations, 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 – Contract 2016.05 – Bridge Repairs". 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 2016 (Fourth of July)	12:01 p.m. preceding Friday to 6:00 a.m. the following Tuesday.

103.4 Notice of Award

The following sentence is added:

The Maine Turnpike Authority Board is scheduled to consider the Contract Award on April 28, 2016.

104.3.8 Wage Rates and Labor Laws

Section 104.3.8 Wage Rates and Labor Laws has been amended as follows:

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 --------2016.05 Bridge Repairs-Ramp "J" over Rte.1 SB & Ramp "M"- Mile 1.59; Two Rod Road Underpass-Mile 42.0; Cummings Road Underpass-Mile 44.6; Forest Ave. Overpass-Mile 50.0; and snow fence installation at various locations.

Location of Project --Scarborough & Portland, Cumberland County

2016 Fair Minimum Wage Rates
Heavy and Bridge Cumberland County

Occupation Title	Minimum Wage	Minimum Benefit	Total	Occupation Title	Minimum Wage	Minimum Benefit	Total
Backhoe Loader Operator	$21.17	$2.92	$24.09	Flagger	$9.00	$0.00	$9.00
Blaster Ordinance Handling & Explosives	$21.00	$2.72	$23.72	Grader/Scraper Operator	$17.50	$1.04	$18.54
Boilermaker	$23.30	$1.30	$24.60	Ironworker – Reinforcing	$21.25	$0.00	$21.25
Bricklayer	$22.00	$1.57	$23.57	Ironworker – Structural	$24.31	$8.76	$33.07
Bulldozer Operator	$17.63	$3.24	$20.87	Laborers (Incl. Helpers & Tenders)	$16.00	$2.11	$18.11
Carpenter	$21.00	$5.76	$26.76	Laborer – Skilled	$20.00	$4.35	$24.35
Carpenter – Rough	$19.75	$4.82	$24.57	Line Erector – Power/Cable Splicer	$32.00	$6.96	$38.96
Cement Mason/Finisher	$19.71	$4.89	$24.60	Loader Operator – Front End	$17.61	$2.66	$20.27
Communication Equipment Installer	$13.99	$0.36	$14.35	Mechanic – Maintenance	$20.25	$5.61	$25.86
Comm. Transmission Erector-Microwave/ Cell	$21.00	$4.23	$25.23	Mechanic – Refrigeration	$22.00	$3.54	$25.54
Concrete Pump Operator	$21.00	$8.40	$29.40	Millwright	$24.38	$4.57	$28.95
Crane Operator =>15 Tons	$24.43	$6.15	$30.58	Painter	$17.63	$0.00	$17.63
Crusher Plant Operator	$15.80	$3.76	$19.56	Pile Driver Operator	$24.31	$7.32	$31.63
Diver	$20.00	$0.00	$20.00	Pipe/Steam/Sprinkler Fitter	$22.50	$5.73	$28.23
Driller – Rock	$20.50	$3.27	$23.77	Pipe Layer	$26.00	$11.67	$37.67
Dry-Wall Taper & Finisher	$21.00	$1.46	$22.46	Pump Installer	$25.00	$4.67	$29.67
Earth Auger Operator	$23.16	$5.33	$28.49	Truck Driver – Light	$15.00	$0.99	$15.99
Electrician – Licensed	$27.00	$15.49	$42.49	Truck Driver – Medium	$15.00	$0.10	$15.10
Electrician – Helper/Cable Puller Licensed	$16.50	$3.47	$19.97	Truck Driver – Heavy	$17.63	$2.92	$20.55
Excavator Operator	$19.06	$3.94	$23.00	Truck Driver – Tractor Trailer	$20.88	$5.71	$26.59
Fence Setter	$15.25	$1.32	$16.57				

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-017-2016
Filing Date: February 24, 2016

Expiration Date: 12-31-2016

A true copy
Attest: Pamela Megathlin
Pamela Megathlin
Director
Bureau of Labor Standards

BLS 424B2 (R2016)(Heavy-Bridge Cumberland)

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 --------2016.05 Bridge Repairs-Ramp "J" over Rte.1 SB & Ramp "M"- Mile 1.59; Two Rod Road Underpass-Mile 42.0; Cummings Road Underpass-Mile 44.6; Forest Ave. Overpass-Mile 50.0; and snow fence installation at various locations.

Location of Project --Kittery & Saco, York County.

2016 Fair Minimum Wage Rates
Heavy and Bridge York County

Occupation Title	Minimum Wage	Minimum Benefit	Total	Occupation Title	Minimum Wage	Minimum Benefit	Total
Backhoe Loader Operator	$21.17	$2.92	$24.09	Flagger	$9.00	$0.00	$9.00
Blaster Ordinance Handling & Explosives	$21.00	$2.72	$23.72	Grader/Scraper Operator	$17.50	$1.04	$18.54
Boilermaker	$23.30	$1.30	$24.60	Ironworker – Reinforcing	$20.50	$0.00	$20.50
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Cement Mason/Finisher	$19.71	$4.89	$24.60	Loader Operator – Front End	$17.61	$2.66	$20.77
Communication Equipment Installer	$13.99	$0.36	$14.35	Mechanic – Maintenance	$20.00	$4.69	$24.69
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Crane Operator =>15 Tons	$24.00	$5.97	$29.97	Painter	$17.63	$0.00	$17.63
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Driller – Rock	$20.63	$30.20	$23.83	Pipe Layer	$26.00	$11.67	$37.67
Dry-Wall Taper & Finisher	$21.00	$1.46	$22.46	Pump Installer	$25.00	$4.67	$29.67
Earth Auger Operator	$23.16	$5.33	$28.49	Truck Driver – Light	$15.00	$0.99	$15.99
Electrician – Licensed	$27.00	$15.49	$42.49	Truck Driver – Medium	$15.00	$0.10	$15.10
Electrician – Helper/Cable Puller Licensed	$16.50	$3.47	$19.97	Truck Driver – Heavy	$17.63	$2.92	$20.55
Excavator Operator	$19.06	$3.94	$23.00	Truck Driver – Tractor Trailer	$20.37	$5.57	$25.94
Fence Setter	$15.25	$1.32	$16.57				

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-016-2016
Filing Date: February 24, 2016

Expiration Date: 12-31-2016

A true copy
Attest: Pamela Megathlin
Pamela Megathlin
Director
Bureau of Labor Standards

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.

There is no utility relocation work in this contract.

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.

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:

- Town of Scarborough and City of South Portland paving contracts.
- MTA Contract 2015.03 Bridge Repairs will be under construction during 2016 at Exit 45.
- MTA Contract 2015.12 Toll Systems Upgrades will be under construction during 2016 at Interchanges 32, 36, and 46 Northbound.

105.2.4.2 Lead Paint

The Contractor shall treat all paint on steel surfaces at Forest Avenue and Ramp J as lead based paint. The structure has not undergone RCRA 7 or lead determination testing; however the last time the bridge was repainted was prior to 1991. 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 Lead Based Paint

The Contractor may drill lead based painted steel, without lead based paint removal, provided the Contractor collects and recycles the drill cuttings 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 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.

105.8.2 Permit Requirements

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

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. **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 LOD for this Contract has been estimated to be 0.4 acres.

At any time during the Contract, if the Limit of Disturbance needs to be adjusted to accommodate construction activities, the Contractor shall resubmit a revised 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 exceeds the estimated LOD noted above, by less than one acre, the Resident shall have a minimum of five (5) working days to approve the revised LOD plan.
- If the cumulative area of disturbance exceeds the estimated LOD noted above, by over one acre, the Resident shall first approve of the plan and then submit the NOI for MaineDEP approval of coverage under the Maine Construction General Permit. 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.

107.1 Contract Time and Contract Completion Date

This Subsection is amended by the addition of the following:

All work shall be completed on or before November 15, 2016.

107.4.6 Prosecution of Work

The following activities shall not begin until the date specified:

- Cummings Road deck repair and associated work shall occur when the adjacent roadway project by the City of South Portland/Town of Scarborough has a two-week 24 hour per day roadway closure in place. This closure is anticipated to occur in September or October 2016. The roadway contractor will provide three weeks' notice to the start of road closure. No work will be permitted outside of this two week work window.

The Contractor shall submit to the Authority a construction schedule which shall document that the Contractor has the necessary labor and equipment to work immediately and continuously at the project site once the bridge is closed or shoulder or lane closures are set up. The intent of this specification is to minimize the amount of time for bridge closure, while providing the Contractor sufficient time to complete the work in a diligent manner with in the two week road closure.

SPECIAL PROVISION

SECTION 202

REMOVING STRUCTURES AND OBSTRUCTIONS

(Removing Existing Drain Troughs)

202.01 Description

The following paragraph is added:

The work shall consist of removing and disposing of the exposed portions of the existing drain troughs attached to, or in front of, the abutment bridge structures.

The work shall also consist of removing and disposing of the exposed portions of the existing drain trough downspouts, and plugging or sealing inlets of the downspout pipes buried in the embankments.

The filling and shaping of the void left by the removal of the existing drain troughs will be paid under Item 603.91Pressure Treated Wood Drain Trough.

The following Subsections are added:

202.011 Materials

Plug material shall be Class A structural concrete, or a packaged structural concrete material from the MaineDOT's Qualified Products List.

Seal material shall be sheet metal, minimum 12 gauge.

202.025 General

All drain trough components removed shall be disposed of by the Contractor off of the turnpike right-of-way in accordance with the Maine Department of Environmental Protection Solid Waste Management Requirements.

Concrete plugs shall be a minimum of 24 inches long by the pipe diameter.

Seals shall be mechanically attached or welded to the pipe ends, and shall be caulked to prevent infiltration of water.

202.07 Method of Measurement

The following paragraph is added:

Removing Existing Drain Troughs shall be measured by the lump sum.

202.08 Basis of Payment

The following sentences are added:

Removing Existing Drain Troughs shall be paid for at the Contract lump sum price which includes all removals, disposal, plugs, seals and caulking, equipment and labor necessary to satisfactorily complete the work.

Payment will be made under:

Pay Item		Pay Unit
202.191	Removing Existing Drain Troughs	Lump Sum

SPECIAL PROVISION

SECTION 202

REMOVING STRUCTURES AND OBSTRUCTIONS

(Removing Pavement Surface-Bridge Deck)

202.01 Description

The following sentences are added:

Removal of the pavement and membrane surface from the bridge deck shall be completed by scraping or other methods that will not damage the existing concrete deck surface. Milling of bridge deck pavement shall not be allowed.

The following subsection is added:

202.032 Removing Bridge Pavement Surface and Membrane

All bridge deck pavement, membrane and scrapings shall be disposed of by the Contractor off of the turnpike right-of-way in accordance with the Maine Department of Environmental Protection Solid Waste Management Requirements.

The following paragraph is added:

Extreme care shall be taken to avoid damaging the existing bituminous pavement intended to remain. All existing bituminous pavement and bridge deck concrete, intended to remain, damaged by the Contractor's removal operations shall be repaired by the Contractor as approved by the Resident at no additional cost to the Authority.

202.07 Method of Measurement

The removal of existing bituminous concrete pavement – bridge deck will be measured by the square yard of material removed to the required depth.

Payment will be made under:

Pay Item		Pay Unit
202.202	Removing Pavement Surface	Square Yard
202.2021	Removing Pavement Surface – Bridge Deck	Square Yard

SPECIAL PROVISION

SECTION 401

HOT MIX ASPHALT PAVEMENTS

401.03 Composition of Mixture

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

The Contractor shall submit a current MaineDOT approved job mix formula to the Resident at least 30 days prior to the placement of bituminous pavement. Submission shall include a description of where the submitted mix is currently in use on a MaineDOT Project. Bituminous pavement shall not be placed until after the job mix formula is approved by the Resident.

401.6 Weather and Seasonal Limitations

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

The Contractor shall not place any hot mix asphalt on a wet or frozen surface. The air temperature shall be 40ºF or higher when placing non-surface mix, 45ºF or higher when placing shim or surface mix and 50ºF or higher when placing the bridge deck mix.

401.17 Joints

All cold joints with temperatures less than 120°F shall be sealed as specified herein.

The fourth paragraph is amended as follows:

The words “emulsified asphalt” are deleted and replaced with “joint sealant, conforming to Federal Specification SS-S-1401C”.

The following sentence is added after the last paragraph:

The Contractor shall submit to the Resident a manufacturer’s certification for the joint sealant (SS-S-1401C).

401.205 Opening to Traffic

No vehicular traffic or loads shall be permitted on newly completed pavement until adequate stability has been attained and the material has cooled sufficiently to prevent distortion or loss of fines. The newly paved area may be opened to traffic after the internal temperature of the pavement has cooled to 120°F. The Resident will test the internal temperature of the pavement and shall be the sole judge as to the opening to traffic. The period of time before

opening to traffic may be extended at the discretion of the Resident. The lane closure may not be removed until the internal temperature has cooled to 120°F.

401.206 Additional Lifts of Pavements

No additional lifts of pavement shall be permitted on a newly completed pavement layer until the material has cooled sufficiently and adequate stability has been attained to prevent mat distortion or loss of fines. No subsequent lift of pavement shall be placed until the internal temperature of the previously placed pavement layer has cooled to 120°F. The Resident will test the internal temperature of the previously placed pavement layer and shall be the sole judge as to whether a subsequent lift of pavement can be placed. No equipment or traffic will be permitted on the compacted pavement layer until the internal temperature has cooled to 120°F.

SPECIAL PROVISION

SECTION 403

HOT MIX ASPHALT PAVEMENTS

Desc. of Course	Grad. Design	Item Number	Bit Cont. % of Mix	Total Thick	No. Of Layers	Comp. Notes
			Cummings Road Bridge			
Wearing	9.5 mm	403.210	N/A	1.5 in.	1	A, D, F, H, L, O

COMPLEMENTARY NOTES

A. The bituminous binder material for this mixture shall be PG 64-28.
B. The contractor shall furnish a quality control technician with a thin lift nuclear density gauge to ensure density requirements are met.
C. Bridge decks. No RAP is allowed in the bridge mix design. The use of an oscillating steel roller shall be used to compact all hot mix asphalts placed on bridge decks.
D. The aggregate qualities shall meet the design traffic level of 3 to <10 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design)
E. Acceptance and payment shall be Section 401.18 Quality Control Method A, B & C; 401.20 Acceptance Method A, B & C and 402.201 Method A, 401.21 Method of Measurement, 401.22 Basis of Payment, 401.221 Pay Adjustment and 401.222 Pay Factor (PF) (MaineDOT Standard Specification- November 2014).
F. Acceptance and payment shall be per Section 401.19 Quality Control Method D, Section 401.24 Method D, 401.21 Method of Measurement, 401.22 Basis of Payment and 401.221 Pay Adjustment (MaineDOT Standard Specification- November 2014).
G. A **"FINE"** 9.5 mm mix with a gradation above or through the restricted zone shall be used for this item.
H. A mixture meeting the gradation of 12.5 mm hot mix asphalt may be used at the option of the Contractor.
I. A mixture meeting the gradation of 9.5 mm hot mix asphalt may be used at the option of the Contractor.
J. A mixture meeting the requirements of Subsection 703.09, Grading 'D', with a minimum PGAB content of six percent, and the limits of Special Provision 401, Table 9 (Drives and Sidewalks) for PGAB content and gradation may be substituted for this item. A job mix formula shall be submitted to the Resident for approval.
K. Any base or binder mix left exposed to traffic over the winter shall have a layer of 12.5 mm mix substituted for the 19 mm mix. If this substitution is made, the specified layers may need to be modified, as approved by the Resident.
L. Joints shall conform to Subsection 401.17 above.

M. Match existing pavement thickness.

N. A maximum of 15 percent RAP may be used in non-deck Hot Mix Asphalt mixes. The RAP shall come from a Class I or Class II stockpile.

O. Tack coat shall be applied to all milled pavement and between all lifts of pavement at minimum rate of 0.03 G/SY prior to placing the subsequent layer or surface course unless otherwise directed by the Resident.

SPECIAL PROVISION

SECTION 419

SAWING AND SEALING JOINTS IN BITUMINOUS PAVEMENT

(Sawing Bituminous Pavement)

419.01 Description

This work consists of sawing bituminous concrete pavement as shown on the Plans, as specified herein or as approved by the Resident.

419.02 General

The bituminous concrete pavement to be sawed shall be accurately marked before cutting. The marking shall be in accordance with the locations as shown on the Plans or as approved by the Resident. Cutting shall be with an approved power driven saw with an abrasive blade.

Unless otherwise noted or directed, the sawcut shall be vertical, a minimum of 3/8 inch wide, and extend to the depth as shown on the Plans.

Residue or debris from the sawing operation shall be removed immediately and legally disposed of by the Contractor.

419.03 Method of Measurement

Sawing Bituminous Pavement will be measured by the linear foot of pavement actually cut and accepted. No additional payment will be made for variations in the pavement thickness.

419.04 Basis of Payment

Sawing Bituminous Pavement will be paid for at the Contract unit price per linear foot which shall be full compensation for all materials, tools, equipment labor, and all incidentals necessary for the completion of the work to the satisfaction of the Resident. The disposal of sawcut residue shall be incidental to this item.

Payment will be made under:

Pay Item		Pay Unit
419.30	Sawing Bituminous Pavement	Linear Foot
419.301	Sawing and Sealing Bituminous Pavement	Linear Foot

SPECIAL PROVISION

SECTION 502

STRUCTURAL CONCRETE

502.01 Description

The second and third sentences in the paragraph are deleted and not replaced.

502.041 Testing Equipment

The following sentence is added to the end of the section:

H. 10 foot straightedge as required by Resident.

502.05 Composition and Proportioning

The first paragraph, Table 1, and the Table 1 Notes of Section 502.05 Composition and Proportioning are deleted and replaced with the following:

Concrete shall be composed of a homogenous mixture Portland Cement, fly ash, or ground granulated blast furnace slag, fine aggregate, coarse aggregate, water and admixtures proportioned according to these Specifications and shall conform to the requirements of Table 1.

At least 45 days prior to placement of any concrete to be incorporated in the bridge or other concrete structure, the Contractor shall submit mix designs that meet the requirements of Table 1 along with the proposed sources of aggregates, cement, water and admixtures for each class of cement concrete specified. Sufficient material shall be obtained by the Authority's designated testing personnel at the proposed sources for verification of acceptability by test and for mix design. Materials failing to meet the specified requirements shall be rejected and new materials shall be resubmitted to the laboratory. The Authority's testing laboratory will determine the proportions of cement, aggregate, water, air entraining agents, and other admixtures of all specified and proposed concrete mixtures by means of trial design batches and tests using the consistencies, air content and other properties suitable for the work and in accordance with the latest applicable AASHTO or ASTM Standards and designations.

TABLE 1
MASTER LIMITS TABLE

Class of Concrete	Minimum Compressive Strength at 28 Days	Minimum Cementitious Content	Water Cement Ratio	Slump	Air Content	Maximum Coarse Aggregate Size (703.02)	Notes
	PSI	LB/CY		INCHES	%	INCHES	
A	4000	611	0.38±0.02	6 ± 2	6 ± 1	1	3, 4
AA	4000	658	0.38±0.02	3.5	5 to 7	3/4	1, 3
AAA	4500	658	0.38±0.02	6 ± 2	6 ± 1	3/4	3, 4
AAA – Deck	4500	658	0.42±0.02	6 ± 2	7.5 ± 1.5	3/4	3,4,6
AAA - Modified	4500	752	0.38±0.02	6 ± 2	6 ± 1.5	3/8	3,4
B	3000	517	0.40±0.02	6 ± 2	5 ± 1	1-1/2	1, 3
S	3500	635	0.38±0.02	6 ± 2	6 ± 1	1-1/2	1, 3
P	SEE PLANS	658	0.38±0.02	6 ± 2	5 ± 1	3/4	3, 4, 5
IS	3000	470	0.58	5 ± 1	3.0% Max	1-1/2	2, 3

NOTES:

1. All concrete shall contain either a normal water reducing admixture (Type A) or a high range water reducing admixture (HRWR) meeting the requirements of Subsection 701.0401. When a HRWR is used, a maximum of an 8.0” slump is allowed.

2. All concrete shall contain a non-chloride based, mid-range water reducing admixture (MRWR) meeting the requirements of ASTM C494.

3. All concrete shall contain a Portland Cement replacement. Portland Cement pre-blended with either fly ash or ground granulated blast-furnace slag may be used when accepted by the Resident.

   Due to the lower heat of hydration effect of high cement replacements, the Contractor is responsible for selecting a replacement level which is appropriate for the time of year if cold weather conditions are anticipated.

4. All concrete shall contain a high range water reducing admixture (HRWR) meeting the requirements of Subsection 701.0401. A minimum of one-half the design dosage of the HRWR should be added at the plant to insure thorough mixing. The HRWR should be added in strict accordance with the manufacturer’s guidelines and limitations. The HRWR Guidelines need to be submitted to the Resident for review and approval. The concrete will not be slump tested by the Authority prior to the addition of the HRWR.

The supplier shall provide the aggregate moisture adjustment and plant-added water on the delivery tickets. If additional slump is required in the field, it will be achieved with additional HRWR (in accordance with the manufacturer's recommendations and limitations).

5. A calcium nitrate corrosion inhibitor meeting the requirements of ASTM 494 Type C shall be added at a rate of not less than three gallons per cubic yard.

6. Deck concrete (Class AAA – Deck) is a new mix design and trial batching will be required per specifications. The mix design may gain strength slower than other MTA mix designs, and the contractor shall plan construction operation accordingly.

The following item is deleted from the information to be submitted by the Contractor and not replaced):

Item J - Target Coulomb Value/ Target KOhm-cm Value

The following sentence is added to the sixth paragraph:

Deck concrete mix designs shall have a maximum of 30% slag cement replacement by weight.

The first sentence of the tenth paragraph is revised to read:

Self-consolidating concrete (SCC) may be used for Class A, AA, AAA, AAA-Modified or P mixes when approved by the Resident.

The following paragraphs are added before the eleventh paragraph:

If the plant furnishing the concrete does not have a current approved MTA mix design a new mix design may be required. Based on the design parameters, including minimum cement factor and maximum water cement ratio, a curve representing the relation between the water/cement ratio and the average seven day and 28 day compressive, or earlier strength at which the concrete is to receive its full working load, will be established by the Authority's laboratory for a range of values including all of the compressive strengths required. The curves shall be established by at least three points, each point representing average values from at least three test specimens. Amount of water used in the concrete, as determined from the curve, shall correspond to the required average strength called for in the Specifications in accordance with the ACI 301-89, Table for Laboratory Mix Design Data – Required Average Compressive Strength below. When required, the consistency of the basic mix selected shall be adjusted by the use of high range water reducers.

LABORATORY MIX DESIGN DATA
REQUIRED AVERAGE COMPRESSIVE STRENGTH

SPECIFIED f'_c	REQUIRED f'_{cr}
LESS THAN 3000 PSI	f'_c + 1,000 PSI
3000 PSI TO 5000 PSI	f'_c + 1,200 PSI
OVER 5000 PSI	f'_c + 1,400 PSI
The curves shall be established by at least three (3) points, each point representing the average values from at least three (3) test specimens for each age of seven (7) and twenty-eight (28) days. Laboratory tests are valid for ninety (90) days.	

The laboratory adjusted mix design will then be forwarded to the Contractor for his use.

The following sentence is added to the end of the eleventh paragraph:

Additional testing, if required, shall be paid for by the Contractor.

502.06 Batching

The following paragraphs are added after the first paragraph:

The Contactor shall control the quality of the concrete through testing, inspection and quality control practices which shall be sufficient to assure a product meeting the Contract requirements.

Concrete sampling for QC shall be taken at the discharge point with pumped concrete sampling taken at the discharge end of the pump line.

The follow sentence is added at the end of the Certificate of Compliance requirements:

> The Certificate of Compliance shall clearly identify the available water that may be added to the load at the site. The Certificate shall show the total permitted water for the load; the water provided by the free moisture in the aggregates; the batch water added at the plant; and the water that can be added at the discharge site.

The following sections are added after 502.6 Batching:

502.061 Quality Assurance

The Authority will determine the acceptability of the concrete through a quality assurance program and field measurement of surface tolerance, alignment and trueness, plumb and batter, and finish.

The Authority will take verification tests at times deemed appropriate by the Resident. Verification tests will include compressive strength, air content and permeability.

Concrete sampling for verification tests will be taken at the discharge point, with pumped concrete sampling taken at the discharge end of the pump line.

Compressive strength test will be completed by the Authority in accordance with AASHTO T22 at 28 days except that no slump will be taken. The average of two cylinders will be used to determine compressive strength.

Testing for entrained air in concrete, at the rate of one test per load, shall be in accordance with AASHTO T152.

Determination of the concrete cover over reinforcing steel for structural concrete shall be made prior to concrete being placed in the forms. Bar supports, chairs, slab bolsters, and side form spacers shall meet the requirements of CRSI Chapter 3, Section 2.5 Class 1, Section 2.6 Class 1A or Section 4. All supports shall meet the requirements for type and spacing as stated in the Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice, Chapter 3. Concrete will not be placed until the placing of the reinforcing steel and supports have been approved by the Resident. If the Contractor fails to secure Authority approval prior to placement, the Contractor's failure shall be cause for removal and replacement at the Contractor's expense. The Contractor shall notify the Resident, at least 48-hours prior to the placement, when the reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

Rejection by Resident - For material not meeting Project Specifications, the Authority at its sole discretion will:

A. Require the Contractor to remove and replace the entire affected placement with concrete meeting the Contract requirements at no additional expense to the Authority; or,

B. Accept the material at a reduced payment as determined by the Authority.

Surface Tolerance, Alignment and Trueness, Plumb and Batter, and Finish - The Resident will measure each of these properties as follows:

A. Surface Tolerance - Exposed horizontal and sloping portions of the substructure, superstructure slabs, wearing surface, sidewalks, parapets, barriers, and wingwalls will be measured at randomly generated locations with a 10 foot straightedge once per 100 ft^2. Measurements beyond tolerances given in Table 3 Subsection 502.13 E. will be cause for removal or pay adjustment and potential corrective action as determined by the Resident. The Contractor shall furnish the 10 foot straightedge. At the Resident's discretion, measurements may be taken with a lightweight profiler. When the Resident uses the lightweight profiler to measure tolerance, and the International Ride Index (IRI) is between 250 and 300 in./mile for

any one placement, a pay adjustment will be made. When tolerances exceed 300 in./mile, there will be cause for removal or a pay adjustment and potential corrective action.

B. Alignment and Trueness - Alignment and trueness may be measured by the Resident longitudinally along any vertical surface of any portion of the structure and shall not exceed a deviation of 1/4 inch in three feet for structures up to 30 feet in length. Structures in excess of 30 feet in length will be subject to a maximum tolerance of two inches. Measurements exceeding these tolerances will be cause for removal or pay adjustment and potential corrective action as determined by the Resident.

C. Plumb and Batter - The Resident will measure all columns and other vertical surfaces that will remain exposed to determine actual plumbness and batter. Measurements will be taken subsequent to every placement. Vertical faces of columns will be measured at a minimum of two faces at right angles to each other. Other vertical surfaces will be measured once every 15 feet along the face of longitudinal wall. All measurements will be made on a per placement basis and will be subject to a tolerance of 1/4 inch in 10 feet. Measurements between 1/4 inch and 1/2 inch in 10 feet will result in pay adjustments. Measurements beyond 1/2 inch in 10 feet will be cause for removal or pay adjustment and potential corrective action as determined by the Resident.

D. Finish - The Resident will measure and determine the areas to be repaired in accordance with Subsections 502.9 D, 502.12, and 502.13 E for each placement. Areas to be repaired will be measured as a percentage of the total surface area of the placement. Those areas to be repaired that are between zero and five percent of the total surface area of the placement will result in no pay adjustments. Areas to be repaired that are between five percent and 10 percent will result in pay adjustments. Areas greater than 10 percent of the total surface area of the placement will be cause for removal or pay adjustment and corrective action as determined by the Resident.

502.062 Resolution of Disputed Acceptance Test Results

The Contractor shall work cooperatively with the Resident in maintaining Control Charts in order to identify potential issues with any test results and take appropriate actions to address these issues before they become disputed issues. Circumstances may arise where the Authority's test results indicate that a material is unacceptable and removal is warranted. If the material is marginally acceptable, it may remain in place and be paid for at a reduced rate determined by the Authority. This Subsection provides recourse for the Contractor to contest the Authority's QA test results as follows, at no additional cost to the Authority:

A. Compressive Strength - The Contractor shall take appropriate corrective measures when the Resident advises the Contractor that the average of three consecutive compressive strength test results fall to less than 150 psi above the specified strength, or any single test falls more than 200 psi below the specified strength. The Contractor shall make corrective changes in materials, mix proportions, or in the concrete manufacturing procedure before additional concrete of the same class is placed.

There may be situations where there is the possibility that an underlying structural element could be built-upon before test results for the underlying element have been reported, based upon the normal frequency of testing. In these instances, it is in the Contractor's best interest to perform additional testing that will provide indications that the concrete will meet the requirements of the applicable Specifications, prior to continuing to build upon this underlying element. In the extreme case where an underlying structural element has been built-upon before test results for the underlying element have been reported, the above mentioned safeguards of tracking and additional testing have failed and the final test results for the concrete of the underlying element indicate that removal is warranted and the Contractor's QC results do not confirm the Authority's test results, the following procedure concerning compressive strength may be undertaken by the Contractor and witnessed by the Authority, within 36 days of the placement date:

1. Drilled core specimens shall be retrieved from the concrete in question in accordance with the requirements of ASTM C42/C42M, Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete. The core strength acceptance and evaluation criteria included in ACI 318 shall not apply.

2. Three drilled core specimens shall be taken from each sublot in question, from randomly selected locations to be representative to the entire volume of the sublot. The Resident and the Contractor's representative shall agree on the sample locations prior to drilling. The specimens shall have a minimum diameter of four inches and a minimum length of eight inches.

3. The concrete cores shall be taken directly from the Project to the Authority's designated independent testing laboratory where they will be tested. The cores shall be protected from drying and damage during transport. The Contractor shall make arrangements with the Authority's designated independent testing laboratory for testing prior to beginning the coring process.

4. Core test results will be evaluated by the Authority with the understanding that the strength of drilled cores is, in general, 85 percent of that of corresponding standard-cured molded cylinders. Therefore, the test results of the three cored cylinders shall be averaged, and then divided by a factor of 0.85. The resulting compressive strength shall be used by the Authority in the final determination of the acceptability of the material in question and shall replace the contested test result in computing pay adjustments for the sublot in question. If coring is not done with the 36 day time limit, the Authority will not allow dispute testing of the sublot.

5. If the Authority concludes that the strength of the structural element in question is adequate as a result of the above procedure, then the concrete shall remain in place and will be paid for at a reduced rate, as determined by the Authority. If the Authority concludes that the strength of the structural element in question is unsatisfactory as a result of the above procedure, then the Authority will direct the Contractor to take appropriate actions, as determined by the Authority, and at no additional cost to the Authority.

C. Entrained Air – In order to dispute the Authority's test results, the Contractor must test material from the same sample as the Authority. If the difference between the Authority's and the Contractor's air tests is equal to or greater than 0.8 percent, then the material shall be retested by both parties. If the difference between the retests is equal to or greater than 0.8 percent, the concrete placement will be suspended immediately, and 1) both air meters shall be calibrated immediately, or 2) the Contractor shall immediately replace both air meters. Once it is demonstrated the QC and Acceptance air meters are in agreement with 0.8 percent, the concrete placement may resume.

502.07 Mixing and Delivery

The following requirement is added to end of the section:

D. All concrete trucks must have working revolution counters, and be set to zero at the start of mixing. Any truck without a counter will be rejected from the job unless the Contractor can assure the Resident that adequate mixing has been achieved.

502.08 Cold Weather Concrete

The first sentence of the final paragraph is amended to read:

Permission given to place concrete under the conditions mentioned above shall not relieve the Contractor of its responsibility for obtaining satisfactory results.

502.10 Placing Concrete

The ninth sentence in the fifth paragraph under G. Bonding of Cast-In-Place Concrete Slabs is amended to read:

The grout mix design shall be submitted for approval.

The second sentence in the paragraph under H. Concrete Slab Surface Evaporation Limits is amended to read:

If the surface moisture evaporation rate rises to 0.15 lb/ft²/hr of exposed surface, the Contractor shall immediately implement the remedial actions to reduce the surface moisture evaporation rate.

502.13 Finishing Concrete Surfaces

The following paragraph is added after the fourth paragraph in D.2. Rubbed Finish:

Rubbing of the concrete shall occur within seven (7) days of the concrete placement. If rubbing of the concrete is not complete within seven days, the Contractor must apply a latex bonding agent to the concrete as submitted and approved by the Resident.

The following item is added to the fifth paragraph in D.2. Rubbed Finish:

(c) Parapets and end posts – all horizontal and face surfaces, excluding overhead surfaces, to 12 inches below the finish ground.

502.14 Curing Concrete Surfaces

The following sections are deleted in their entirety and not replaced:

502.1701 Quality Control, Method A and B
502.1702 Quality Control, Method C
502.1703 Acceptance Method A and B
502.1704 Acceptance Method A
502.1705 Acceptance Method B
502.1706 Acceptance Method C
502.1707 Resolution of Disputed Acceptance Test Results

502.18 Method of Measurement

The following item is added to paragraph B:

10. Structural Concrete Parapets The limit will be the entire concrete portion of the parapets and bridge transition barriers measured longitudinally, from end to end on both sides of the structure, as shown on the Plans.

Paragraph E is deleted in its entirety and not replaced.

502.19 Basis of Payment

The sixth paragraph of this section is deleted and not replaced.

The following paragraph is inserted after the (deleted) sixth paragraph:

All work required to construct and remove the bulkheads will not be measured separately for payment, but shall be incidental to the related contract items.

The eight paragraph, starting with “Pay adjustments….”, is deleted in its entirety and not replaced.

The following sections are deleted in their entirety and not replaced:

502.191 Pay Adjustment for Compressive Strength, Method A and B
502.192 Pay Adjustment for Permeability, Method A and B
502.193 Pay Adjustment for Air Content, Method A and B
502.194 Pay Adjustments for Compressive Strength, Permeability and Air Content, Method A and B
502.195 Pay Adjustment Method C

SPECIAL PROVISION

SECTION 507

RAILINGS

(Aluminum Bridge Railing – Splice Modification)

507.01 Description

The following sentence is added:

This work consists of re-centering the existing 3'-0" cast aluminum splice bar in the center of the bridge rail splice joint and mechanically fastening the splice bar to the aluminum bridge rail on one side of the bridge rail splice joint per the details on the Plans.

Replacement sections of splice bars, if required, will be furnished by the Authority. The Contractor shall pick up any required splice bars at the Crosby Maintenance Yard in Portland, Maine, and shall make all necessary modifications to them to complete the work. Any unused sections of splice bars shall be returned, and properly stored, to the Crosby Maintenance Yard.

507.08 Method of Measurement

Aluminum Bridge Railing – Splice Modification will be measured for payment by each, satisfactorily modified and accepted.

507.09 Basis of Payment

Aluminum Bridge Railing – Splice Modification will be paid at the Contract unit price per each which price shall be full compensation for all labor, materials, equipment and incidentals required for re-centering and mechanically fastening the splice bar as shown on the Plans, in accordance with these Specifications or as approved by the Resident.

Payment will be made under:

Pay Item		Pay Unit
507.095	Aluminum Bridge Railing – Splice Modification	Each

SPECIAL PROVISION

SECTION 515

PROTECTIVE COATING FOR CONCRETE SURFACES

(Pigmented Concrete Protective Coating)

515.01 Description

The work shall include the surface preparation and application of a pigmented concrete protective coating system to protect new and existing concrete and masonry structures. The coating system shall be applied to piers, wingwalls, abutments, curbs and fascia in accordance with the Plans, Specifications and the manufacturer's published recommendations.

515.02 Materials

The pigmented penetrating sealer system shall be a two coat system consisting of Certi-Vex Guard Clear and Certi-Vex HBC Smooth , as manufactured by Vexcon Chemicals, Inc., or an approved equal, consisting of the following two parts:

- The primer shall be a vinyl toulene acrylic silane polymer blend or an approved equal. This primer shall provide the main protection against the ingress of water borne chlorides and sulfates.

- The top coat shall be solvent borne modified acrylic resins with selected pigments and fillers.

The product shall comply with regulations limiting the Volatile Organic Compound (VOC) content of architectural and industrial maintenance coatings.

The Contractor shall submit the Vexcon Chemical's product data sheets, material safety data sheets and recommended instructions for application of the Certi-Vex Guard Clear and Certi-Vex HBC Smooth.

The pigmented penetrating sealer color shall be Concrete Gray.

Materials shall be delivered to the site in original packages or containers bearing the manufacturer's labels and identification.

515.021 Substitute Materials

The Contractor shall submit a written request for approval of proposed substitute material naming the proposed manufacturer and product. This request shall be accompanied by:

1. Test data from an independent testing laboratory stating that the proposed substitute meets or exceeds the specified requirements as listed and has been tested in accordance with the specified test standards.

2. Documentation that the proposed material has a proven record of performance when used in the intended application as confirmed by actual field tests and successful installations in place on at least five similar projects.

3. Certification that if two or more types of products are intended to be used as part of a system they will be supplied by the same manufacturer to ensure compatibility of materials, and to maintain single source manufacturer responsibility.

The Resident reserves the right to require additional testing to evaluate any proposed substitute product at no additional cost to the Authority. The Resident's decision as to the acceptability or non-acceptability of the proposed product shall be final.

515.03 Surface Preparation

All caulking, patching, and joint sealant shall be installed prior to application of the sealer. The surface shall be prepared in strict accordance with the instructions of the approved manufacturer. Surface shall be fully cured, dry, and free from contamination such as asphalt coatings, oil, grease, loose particles, decaying matter, moss, algae growth, and curing compounds. For maximum penetration of the primer, the Contractor shall lightly sandblast the surface.

Existing form tie hole plugs which are loose or deteriorated shall be completely removed. The holes shall be reamed to sound concrete. All open form tie holes, new and existing shall be filled with an approved non-shrinking mortar, and after setting, rubbed level to the adjacent surface. Filled holes shall be cured for at least two (2) days prior to the application of the concrete protective coating.

The Contractor may use, when required, appropriate cleaning materials recommended by the sealer manufacturer in conjunction with high pressure water for cleaning the concrete or masonry.

Grass and vegetation adjacent to surfaces to be coated shall be removed or trimmed closely to permit proper preparation and application of the coating.

515.04 Application

The materials shall be mixed and applied in strict accordance with the instructions of the approved manufacturer. Spray or roll the primer at the recommended application rate. If the surface is very absorbent, the primer should be applied until surface is saturated per the manufacturer’s written instructions. All areas not to receive coating shall be marked with straight, even lines as the limit lines.

The Contractor shall, in the presence of the Resident, apply the materials on a sample area which is representative of a jobsite application. When color and application methods are approved, the sample area shall serve as a standard of acceptance for all further work.

The primer shall not be applied in direct sunlight when the air or surface temperature is greater than 90°F, or when air or surface temperature is below 35°F. The top coat shall not be applied when air or surface temperature is below 45°F or as approved by the Resident.

The primer shall be allowed to dry for a minimum of two-hours before applying pigmented top coat. Under poor drying conditions this time shall be extended. The primer shall not be coated with top coat until the surface is dry. The top coat should be applied by brush, roller or suitable airless spray.

Top coat material shall be applied per the manufacturer's recommended application rate and in strict accordance with the manufacturer's written instructions. The top coat shall provide consistent color without light spots or shadows. The Resident reserves the right to have the Contractor recoat the top coat if the dried top coat(s) lack consistent color or show light spots or shadows.

Protect plants, grass, sealant, asphalt, traffic, etc. during application from spray.

515.05 Method of Measurement

Pigmented Concrete Protective Coating will be measured for payment by the square yard, satisfactorily applied and accepted.

515.06 Basis of Payment

Pigmented Concrete Protective Coating will be paid at the Contract unit price per square yard which price shall be full compensation for all labor, materials, equipment and incidentals required for furnishing and applying the pigmented concrete protective coating as shown on the Plans, in accordance with these Specifications or as approved by the Resident.

Surface preparation, vegetation removal, and protection of surfaces not designated for treatment will not be paid for separately, but shall be incidental to the Pigmented Concrete Protective Coating item.

Payment will be made under:

Pay Item		Pay Unit
515.201	Pigmented Protective Coating for Concrete Surfaces	Square Yard

SPECIAL PROVISION

SECTION 515

PROTECTIVE COATING FOR CONCRETE SURFACES

(Clear Concrete Protective Coating)

515.01 Description

The work shall include the surface preparation and application of a clear protective coating on concrete surfaces to protect new cast-in-place concrete, precast concrete and masonry structures. The coating system shall be applied to parapets and fascia in accordance with the Plans, Specifications and the manufacturer's published recommendations.

515.02 Materials

The penetrating sealer shall be StandOff® SLX100 Water & Oil Repellent, as manufactured by ProSoCo, Inc., or an approved equal. The sealer shall have the following properties:

Active Substance:	modified alkyl alkoxy silane
Active Content:	> 90%
Form:	clear liquid
VOC:	< 3.5 pounds per gallon

The product shall comply with regulations limiting the Volatile Organic Compound (VOC) content of architectural and industrial maintenance coatings.

The Contractor shall submit the ProSoCo's product data sheets, material safety data sheets and recommended instructions for application of the StandOff® SLX100.

Materials shall be delivered to the site in original packages or containers bearing the manufacturer's labels and identification.

515.021 Substitute Materials

The Contractor shall submit a written request for approval of proposed substitute material naming the proposed manufacturer and product. This request shall be accompanied by:

1. Test data from an independent testing laboratory stating that the proposed substitute meets or exceeds the specified requirements as listed and has been tested in accordance with the specified test standards.

2. Documentation that the proposed material has a proven record of performance when used in the intended application as confirmed by actual field tests and successful installations in place on at least five similar projects.

3. Certification that if two or more types of products are intended to be used as part of a system, they will be supplied by the same manufacturer to ensure compatibility of materials, and to maintain single source manufacturer responsibility.

The Resident reserves the right to require additional testing to evaluate any proposed substitute product at no additional cost to the Authority. The Resident's decision as to the acceptability or non-acceptability of the proposed product shall be final.

515.03 Surface Preparation

All caulking, patching, and joint sealant shall be installed prior to application of the sealer. On new surfaces to be treated, all voids shall be dressed by dry rubbing to remove form marks and blemishes to present a neat appearance. Concrete and masonry surfaces shall be cleaned free of dust, surface dirt, oil, efflorescence and contaminants to ensure penetration of the sealer. The surface may be slightly damp at the time of treatment.

The Contractor may use, when required, appropriate cleaning materials recommended by the sealer manufacturer in conjunction with high pressure water for cleaning the concrete or masonry.

515.04 Application

The Contractor shall apply the clear concrete protective coating in strict accordance with the manufacturer’s published recommendations.

The application shall not be conducted when surface and air temperatures are below 40°F or above 90°F. The work shall not be conducted when there is a chance of the surface temperature falling below 40°F in the 24-hours following application; nor should it be applied on hot, windy days.

The treatment shall not be applied during rain to wet surfaces or when there is a chance of rain within 24-hours after application. After treatment, surfaces should be protected from rain for not less than 48-hours. It shall not be applied when winds are sufficient to carry airborne chemicals to unprotected surfaces.

Prior to applying the sealer, the Contractor shall protect all surrounding non-masonry/non-concrete surfaces, landscape and lawn areas, and surfaces not designated for treatment, from contact with the penetrating sealer, and prevent overspray of the penetrating sealer caused by wind drift.

The Contractor shall ensure that all safety equipment, facilities and precautions recommended by the product manufacturer are furnished and/or strictly adhered to.

The sealer material shall be applied in the manner and with the equipment recommended by the product manufacturer. Coverage will vary depending on condition, texture and porosity of the surfaces. Pre-testing is required.

Sealer shall be applied as packaged without dilution or alteration. The sealer shall be applied with low pressure (20 psi) airless spray equipment or with a heavily saturated brush or roller unless otherwise permitted by the Resident. Sufficient material shall be applied to thoroughly saturate the surface making sure to brush out excess material that does not penetrate.

When the sealer is applied to horizontal surfaces, it shall be applied in a single saturating application with sufficient material and applied so the surface remains wet for one to two minutes before penetration into the concrete. Surface residues, pools and puddles shall be broomed-out thoroughly until they completely penetrate into the surface.

When the sealer is applied to vertical and sloped surfaces, it shall be applied in a "wet-on-wet" application for best results on most porous materials. In the case of extremely dense concrete, it may be necessary to restrict the amount of material applied to one saturating application in order to prevent surface darkening. Apply from the bottom up with sufficient material to thoroughly coat the surface and create a slight rundown below the spray pattern. Allow the first application to penetrate the concrete surface, and within a few minutes after the first coat appears dry, reapply in the same saturating manner.

When the sealer is applied to vertical and sloped surfaces, it shall be applied in two applications, 10 minutes apart, with a low pressure (20 psi) airless sprayer.

515.05 Method of Measurement

Clear Protective Coating for Concrete Surfaces will be measured for payment by the square yard, satisfactorily applied and accepted.

515.06 Basis of Payment

Clear Protective Coating for Concrete Surfaces will be paid at the Contract unit price per square yard which price shall be full compensation for all labor, materials, equipment and incidentals required for furnishing and applying the clear concrete protective coating as shown on the Plans, in accordance with these Specifications or as approved by the Resident.

Surface preparation, vegetation removal, and protection of surfaces not designated for treatment will not be measured separately for payment, but shall be incidental to the Clear Concrete Protective Coating item.

Payment will be made under:

Pay Item		Pay Unit
515.202	Clear Protective Coating for Concrete Surfaces	Square Yard

SPECIAL PROVISION

SECTION 518

STRUCTURAL CONCRETE REPAIR

(Concrete Patching Materials)
(Epoxy Injection Crack Repair)
(Partial Depth Concrete Deck Repair)
(Full Depth Concrete Deck Repair)
(Parapet Replacement)

518.01 Description

The following paragraphs are added:

The work includes epoxy injection crack repair as described below.

- Epoxy Injection Crack Repair includes all concrete crack widths equal to or greater than 0.06 inches as shown on the Plans or identified by the Resident.

- Parapet Replacement includes removal and replacement of parapet as shown on the Plans, or as identified by the Resident.

- Partial depth concrete deck repairs are repairs on all deteriorated upward facing surfaces, below reinforcing with depth less than 4.9" as shown on the Plans or identified by the Resident.

- Full depth concrete deck repairs are repairs on deteriorated deck surfaces full depth as shown on the Plans or identified by the Resident. Full depth concrete deck repairs shall be scheduled and coordinated with the Authority.

The work shall also include the removal of all tectyl (bituminous) coating on the backwalls, bridge seats and breastwalls of the existing bridge structures. This work shall occur prior to the start of the abutment concrete repairs so the Resident may identify additional areas requiring repair.

The work shall also include providing the Resident safe access to the bridge pier shafts and hammerheads for sounding of the existing concrete; and providing safe access to the bridge fascia for sounding of the existing concrete. This work shall occur prior to the start of pier and parapet concrete repairs so the Resident may identify additional areas requiring repair.

518.02 Repair Materials

Paragraphs 1-3 and the Coarse Aggregate Gradation Designation/ Thickness of Placement Table of Section 518.03 Repair Materials are deleted and replaced with the following:

A patching material from the appropriate list provided below may be used instead of

concrete for concrete patching at the Contractor's option, provided the manufacturer's published recommendations are met (Note: Not all products are suitable for all depth of placements.). All materials used for repair of concrete or reinforcing steel shall meet the applicable requirements of Division 700 as specified in the Standard Specification Sections 502 and 503 respectively. When concrete is used as the repair material, it shall conform to the requirements of Table 1 of Subsection 502.05 for Class AAA Concrete except that the minimum cement factor shall be 750 pounds per cubic yard. Concrete mix shall be selected at 1,200 psi above design strength of 4,500 psi. The coarse aggregate size shall conform to ASTM C33 Grading 7.

Materials for non-emergency formed vertical and overhead repairs, shall be one of the following:

MTA - AAA modified concrete – transit mixed or mixed on site,
Sikacrete 211, as manufactured by Sika Corporation, 201 Polito Avenue, Lakehurst, NJ 07011
SikaRepair 222 extended with aggregate, as manufactured by Sika Corporation, 201 Polito Avenue, Lakehurst, NJ 07011
BASF LA40 Repair Mortar, as manufactured by BASF Corporation, 889 Valley Park Drive, Shakopee, MN 55379
Civil Structural FPX, as manufactured by Dayton Superior Corporation, 1125 Byers Road, Miamisburg, OH 45342

or an approved proprietary, non-fast setting, shrinkage compensated patching material, manufactured or extended with stone, with the following published properties:

Compressive strength @ 24 hours – less than 3500 psi
Compressive strength @ 28 days – less than 7500 psi
Minimum bond strength @ 28 days – 1500 psi

Note: Rapid-setting high early strength materials are not permitted.

Materials for non-emergency, un-formed vertical repairs shall be one of the following:

SikaTop 123 Plus as manufactured by Sika Corporation, 201 Polito Avenue, Lakehurst, NJ 07011.
SikaRepair 223, as manufactured by Sika Corporation, 201 Polito Avenue, Lakehurst, NJ 07011
Zero-C Vertical Overhead Mortar, as manufactured by BASF Corporation Systems, 889 Valley Park Drive, Shakopee, MN, 55379.
Verticoat Supreme as manufactured by The Euclid Chemical Company, 19218 Redwood Rd., Cleveland, OH, 44110

Epoxy injection crack repairs shall be completed using a high strength, low viscosity moisture tolerant epoxy resin as recommended by the manufacturer and approved by the Resident. The proposed repair materials shall be submitted to the Resident for approval.

The structural properties of all crack repair materials shall meet or exceed the following requirements:

Tensile Strength (@ 7 days)	5,000 psi	ASTM D638
Bond Strength (@ 14 days)	1,000 psi	ASTM C882
Compressive Strength (@ 3 days, 73 °F)	5,000 psi	ASTM D695
Compressive Modulus (@ 7 days)	250 ksi	ASTM D695
Flexural Strength (@14 days)	8,000 psi	ASTM D790

Wide cracks (1/2" +/- and greater) may be repaired with a non-shrink cementitious grout as recommended by the manufacturer. The following product shall be used:

- CONSPEC UW300 as manufactured by Dayton Superior, 7777 Washington Village Drive, Suite 130, Dayton OH, 45459

The second sentence in the 4th paragraph of subsection 518.02 is revised to read:

"The bonding material shall consist of the following, except that, in the case where an approved proprietary material is used in the repair areas, the manufacturer's published recommendations regarding application and use of bonding materials shall take precedence:"

518.03 Removal of Unsound Concrete

Paragraph 4 item b) is revised to read:
"b) To the minimum depth required per the manufacturer's recommendation, but not less than 1 inch behind the top mat of reinforcing steel, when an approved proprietary material is used."

Paragraph 4 item c) is deleted and not replaced.

Paragraph 4 item d) is revised to read:
"d) To a minimum depth of 1 inch behind the top mat of reinforcing steel."

The following paragraphs are added:

The Contractor shall use great care to avoid damaging the existing reinforcing steel during the demolition process. Existing reinforcing steel damaged during the demolition process shall be repaired or replaced by a method approved by the Resident, at no additional cost to the Authority.

All unsound concrete and other material removed shall be disposed of outside the limits of the turnpike right-of-way. The Contractor shall provide the Resident with an affidavit stating the final location of all disposed material and that the material was disposed of in accordance with Chapter 404 of the Maine Department of Environmental Protection Solid Waste Regulations.

The following Subsection is added:

518.031 Bearing Areas for Superstructure Metal

The Contractor's attention is directed to the fact that the removal of unsound concrete may be immediately adjacent to the structural bearing parts of the steel stringers and may involve removal of unsound concrete under the existing masonry plate.

The Contractor shall submit, a minimum of two (2) weeks prior to the start of work, his proposed method of temporary support which will list the type and size of the proposed members, details of construction, load capacity calculations, and a sequence of operations, all to be made and stamped by a Professional Engineer registered in the State of Maine. Temporary structural supports may bear on the adjacent bridge seat area, backwall or ground.

518.04 Reinforcing Steel

The first paragraph is deleted in its entirety and replaced with the following:

All existing reinforcing steel exposed by concrete removal which is to remain in the structure, shall be thoroughly cleaned by sandblasting to an SSPC-SP-6, supplemented by chipping hammers or other means as necessary so that the surfaces are free of rust, scale, mortar and other foreign material, and reasonably free of shadows. The sandblast shall be applied at an angle to the bars so that the embedded steel shall be free of rust and other foreign material to 100 percent of its circumferences. Once the existing reinforcement is cleaned, and prior to casting the repair, all new and existing reinforcing steel shall be coated with an approved epoxy bonding agent. The elapsed time between sandblasting application of the approved epoxy bonding agent shall be a reasonable minimum. When reinforcing steel is to remain the structure, care shall be taken to prevent damage to the reinforcing steel or its bond to surrounding concrete.

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

Where approved by the Resident, exposed reinforcement shall be depressed to provide 1-1/2 inch clear cover of concrete over the top bars. Minimum clear distance under the bottom of reinforcement bars for horizontal repairs, behind reinforcement bars on vertical repairs, and over the top of reinforcement bars on overhead surfaces shall meet the requirements of Subsection 518.03. Epoxy coated reinforcing support chairs shall be provided by the Contractor to support the bars in their specified location. Bars protruding from sound concrete adjacent to a repair area shall be bent up or down within the repair area to obtain the required minimum clear cover.

518.07 Placing Repair Materials

The following paragraphs are added to the end of this Subsection:

All vertical and overhead repair areas shall be formed over the entire surface with quick erecting forms approved by the Resident. The forms shall be held securely in place and be able to withstand the hydrostatic pressure of the fluid concrete of the height to which it is to be placed. Forms shall be built such that the resulting repair will duplicate the original lines of the concrete removed. Form faces shall be of new finished plywood or steel, or other smooth surface as approved by the Resident prior to use. Forms will be provided with a top chute, at a maximum

spacing of four feet, for providing a compression head of concrete in the form. The overfilled area shall be struck-off flush when forms are removed. Forms shall be placed snugly against the surface of the old concrete at the edges of the patch and shall extend beyond the edges at least three inches. They shall not deflect under the placement of the fresh concrete. Vertical surface repair forms shall remain in place a minimum of 48-hours.

All proposed bearing pads and bearing pad repairs shall be cast monolithically with the abutment repair and pier repair concrete.

Modified Class AAA Concrete may be transit mixed or mixed on-site. The concrete shall be placed in accordance with the provisions of Section 502 except that the pre-plasticized slump shall not exceed three inches. Materials shall be batched by weight. The concrete shall be pumped or hand shoveled into the forms. Internal mechanical vibrators shall be of an approved design and of a size suitable to the work at hand. External vibrators attached to the forms will be permitted if requested, subject to the results obtained. The amount of vibration shall be guided by results obtained from previous placements.

If the concrete cannot be placed satisfactorily, as determined by the Resident, superplasticizers shall be added to the mix as approved by the Resident and at no additional cost to the Authority. After removal of the forms, the concrete shall be smooth rubbed and wet cured and given a smooth rubbed finish.

The following Subsection is added:

518.071 Placing Epoxy Injection Materials

a) Mix epoxy components per manufacturer's instructions. Review pot life characteristics of combined materials and prepare quantities accordingly;
b) Open all injection ports along the crack and ensure that all injection ports are securely fastened to the concrete substrate;
c) Attach injection device to the lowest port on vertical cracks, or the first port in the series on horizontal cracks;
d) Slowly and under constant pressure, inject the epoxy material into the first port until the epoxy flows out of the next port in the series. While maintaining constant pressure and flow at the first port, close the adjacent port and continue injection process until epoxy flows from the subsequent port in the series, or until no additional epoxy can be injected into the first port.
e) Repeat the above procedure until all ports have been injected.

518.10 Method of Measurement

The fourth paragraph is deleted and replaced with the following:

Fabrication and placement of reinforcing steel for concrete repairs will not be measured for payment separately, but shall be considered incidental to the related contract items.

The sixth paragraph is deleted and replaced with the following:

Temporary supports for supporting steel girders for concrete repairs will not be paid separately, but shall be incidental to the Repair item.

The following paragraphs are added:

The quantity of Epoxy Injection Crack Repair will be measured by the linear foot.

The quantity of Partial Depth Concrete Deck Repairs and Full Depth Concrete Deck Repairs will be measured by the square foot and shall be computed as the sum of the products of the average length and width of each area repaired.

The quantity of Parapet Replacement shall be measured by the lump sum complete and in place.

Removal of all tectyl (bituminous) coating from existing abutments will not be measured separately for payment, but shall be incidental to the Repair items.

Providing safe access for the Resident to sound existing parapet, pier shaft and hammerhead concrete will not be measured separately for payment, but shall be incidental to the Repair items.

Earth excavation and backfill required to expose repair areas will not be measured separately for payment, but shall be incidental to the Repair items.

Full Depth Concrete Repairs on the concrete bridge decks will be measured for payment by the square foot of deck surface repaired, regardless of whether the average depth of repair is less than or greater than 8 inches. Such full depth concrete deck repair shall be paid for under Item 518.512 Full Depth Concrete Repair.

518.11 Basis of Payment

The following paragraphs are added:

Epoxy Injection Crack Repair will be paid at the Contract unit bid price per linear foot for each repair; which price shall include, but not necessarily be limited to, removal and disposal of materials, cleaning existing concrete, placing, curing and finishing epoxy and all materials, labor, equipment, tools and incidentals necessary to complete the work.

Partial Depth Concrete Deck Repairs, and Full Depth Concrete Deck Repairs will be paid for at the Contract unit bid price per square foot for each type of repair; which price shall include, but not necessarily be limited to, removal and disposal of materials; cleaning existing concrete and reinforcing steel; furnishing and placing new reinforcing steel where required; furnishing, placing and removal of forms, staging, temporary supports where required; placing, curing and finishing new concrete; and, all materials, labor, equipment, tools and incidentals necessary to complete the work.

Parapet Replacement will be paid for at the Contract unit bid price per lump sum for each type of repair; which price shall include, but not necessarily be limited to, removal and disposal of materials; cleaning existing concrete and reinforcing steel; furnishing and placing new reinforcing steel where required; furnishing, placing and removal of forms, staging, temporary supports where required; placing, curing and finishing new concrete; installation and removal of thrie rail over repair area; and, all materials, labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

Pay Item		Pay Unit
518.40	Epoxy Injection Crack Repair	Linear Foot
518.511	Partial Depth Concrete Deck Repair	Square Foot
518.512	Full Depth Concrete Deck Repair	Square Foot
518.611	Parapet Replacement	Lump Sum

SPECIAL PROVISION

SECTION 518

STRUCTURAL CONCRETE REPAIR

(Granite Curb Joint Mortar and Bedding Mortar Repair)

518.01 Description

The following sentence is added:

This work shall consist of the removal and replacement of existing deteriorated granite curb joint mortar and granite curb bedding mortar as shown on the plans and as approved by the Resident.

Areas of existing deteriorated granite curb bedding mortar less than ½ inch in depth, will not be repaired under this pay item but shall be repaired as requested by the Resident using hand tools and equipment unit prices. Materials required shall be receipted costs plus 15%. Small tools, defined as those costing less than $600, shall be incidental to the hand labor item.

518.02 Repair Materials

The following sentence is added:

Mortar shall be an approved epoxy resin mortar or an approved polymer modified cementitious repair mortar.

The following Subsection is added:

518.032 Construction Requirements

The Resident will designate areas where the existing granite curb joint mortar and the existing granite curb bedding mortar is to be repaired.

In areas designated for Granite Curb Joint Mortar Repair, the existing granite curb joint mortar shall be removed between curb sections to a minimum depth of 1 in. from the face of curb. Any loose mortar shall also be removed. The repair area shall be repointed with new mortar and tooled concave at the face of curb. The mortar shall be proportioned, mixed, and applied in accordance with the Manufacturer's recommendations.

In areas designated for Granite Curb Bedding Mortar Repair, the existing granite bedding mortar shall be removed under the curb to a minimum depth of 1 in. from the face of curb. Any loose or deteriorated mortar shall also be removed. The mortar shall be replaced with new mortar and finished with a 45° bevel at the face of curb. The mortar shall be proportioned, mixed, and applied in accordance with the Manufacturer's recommendations.

518.10 Method of Measurement

The following sentence is added:

Granite Curb Joint Mortar and Bedding Mortar Repair will be measured for payment by the linear foot along the face of the curb, horizontally and vertically, complete and accepted.

518.11 Basis of Payment

The following sentence is added:

Granite Curb Joint Mortar and Bedding Mortar Repair will be paid for at the contract unit price per linear foot, which includes all materials, labor, equipment, and incidentals necessary to complete the work including removal of existing mortar.

Payment will be made under:

Pay Item		Pay Unit
518.39	Granite Curb Joint Mortar and Bedding Mortar Repair	Linear Foot

SPECIAL PROVISION

SECTION 518

STRUCTURAL CONCRETE REPAIR

(Parapet Joint Repair)

518.01 Description

The following sentence is added:

This work shall consist of the removal and replacement of existing deteriorated parapet joint sealant as approved by the Resident. The Contractor shall provide the Resident safe access to all the parapet joints for inspection before this work begins, including access to the fascia parapet joints.

518.032 Construction Requirements

After the Resident has identified the joint repair locations, the Contractor shall remove the existing joint sealant to a minimum 1 3/8 inch depth, clean and prepare the concrete surfaces per sealant manufacturer recommendations, and replace the sealant to the edge of concrete with an approved polyurethane-based sealant such as Sikaflex-1a or other product on the MaineDOT approved products list as directed by the Resident.

518.10 Method of Measurement

The following sentence is added:

The quantity of Parapet Joint Repair will be measured by the linear foot where the repair occurs.

518.11 Basis of Payment

The following sentence is added:

Parapet Joint Repair will be paid for at the Contract unit price per linear, which includes all materials, labor, equipment, and incidentals necessary to complete the work including removal of existing joint sealant.

Pay Item		Pay Unit
518.43	Parapet Joint Repair	Linear Foot

SPECIAL PROVISION

SECTION 520

EXPANSION DEVICES – NON-MODULAR

(Expansion Joint Pourable Seal)

520.01 Description

The following paragraphs are added:

The work shall also include modifying the existing expansion joint seals at Exit 45 Interchange, prepping the joints for the pourable sealant materials, and installing the pourable sealant materials per the manufacturer's published installation guidelines, or as approved by the Resident.

520.02 Materials

The following paragraphs are added:

Pourable Sealant and Ancillary Materials

Joint sealant shall be DS Brown Delastic-LS Pourable Seal.

Backer rod shall be soft, open cell rod per sealant manufacturer's guidelines.

Primer shall be DS Brown Delastic-LS Primer.

520.06 Installation

The following paragraphs are added:

The joint sealant shall be installed in strict accordance with manufacturer's specifications and installation procedure. Prior to installing backer rod and pourable sealant the existing steel extrusions shall be sandblasted and coated with Delastic-LS primer following the manufacturer's instructions and recommendations.

520.07 Method of Measurement

The following paragraphs are added:

Expansion Joint Pourable Seal will be paid at the Contract lump sum price. The lump sum price includes modifications to the expansion joint at the east end of the Exit 45 Interchange bridge deck.

520.08 Basis of Payment

Expansion Joint Pourable Seal will be paid for at the Contract lump sum unit price, which price shall be full compensation for sandblasting, priming and prepping the joints for the backer rod and sealant, and installing the backer rod and sealant, including all materials, labor, tools, equipment and incidentals necessary for furnishing and installing the expansion joint materials in accordance with the manufacturer's written instructions, the Plans and Specifications.

Payment will be made under:

Pay Item		Pay Unit
520.211	Expansion Joint Pourable Seal	Lump Sum

SPECIAL PROVISION

SECTION 520

EXPANSION DEVICES – NON MODULAR

(Expansion Device Modification)

520.01 Description

The following sentence is added:

This work consists of removing the existing joint seals, modifying and cleaning the existing steel joint armor, and installing new replacement non-locking compression seal joint at the Ramp J over Route 1 Southbound and Ramp M Bridge in accordance with the Plans and this Specification.

Seal for compression seal expansion device shall be Watson Bowman Acme "WA" Series or approved equal.

520.02 Materials

The following sentence is added:

Materials for compression seal shall meet the material requirements of Expansion Device - Compression Seal specified in this Subsection except the joint shall be a Watson Bowman Acme "WA" Series Compression Seal.

520.06 Installation

The following is added after the first paragraph:

The removal and replacement of the existing bridge joint seals and modification of bridge joint armor shall be done in a manner that accommodates the maintenance of traffic requirements.

On phased construction projects, compression seals shall be installed in one piece after the joint edge beams are repaired and cleaned for all construction phases.

Once the compression seal is permanently installed, the Contractor shall thoroughly clean the abutment concrete, bearings, and girder ends by pressure washing to remove any debris, salt, or other foreign contaminants.

520.08 Basis of Payment

The following sentence is added:

Repairing existing joint armor required to install the new compression seal shall be incidental to the Expansion Device Modification pay item. Payment for pressure washing the abutment seats after seal installation will not be made directly, but shall be incidental to the Expansion Device Modification pay item.

Payment will be made under:

Pay Item		Pay Unit
520.221	Expansion Device Modification	Each

SPECIAL PROVISION

SECTION 523

BEARINGS

(Bearing Installation)

523.01 Description

The following paragraphs are added:

This work shall also consists of removing, transporting and stacking on pallets, up to the 24 existing steel rocker bearings from the abutments (bearings, sole plates and masonry plates) at the Authority's Crosby Maintenance Facility at Mile 45.8 NB. Prior to stacking and transporting, the salvageable bearings shall be determined by the Resident; all other bearings shall become the property of the contractor.

This work shall also consist of removing all lead based paint that will be disturbed by the removal of the existing steel rocker bearings.

523.09 Installation of Bearings

The following paragraphs are added:

Removal of lead based paint shall be in accordance with Subsection 105.2.4.2, Lead Paint. The Contractor shall submit a lead based paint removal plan to the Resident for approval prior to the start of the work.

All surfaces of the existing steel girders, where paint is removed for welding and bearing installation, shall be repaired with two coats of cold-galvanizing, upon completion of the work.

The following subsection is added:

523.0901 Jacking and Temporary Structural Support

The Contractor shall provide a jacking system and a temporary support system with the capacity to lift and support the dead and live load below for each girder at the abutment. Jacking shall be kept to the minimum needed to remove the rocker for inspection and rehabilitation, about 1/8 inch if only jacking one girder, or 1/4 inch if all girders jacked simultaneously.

Forest Avenue Bridge

Abutment Interior Girders:	14.0 kips Dead Load, per bearing
	66.6 kips Live Load & IM, per bearing
Abutment Exterior Girders:	12.8 kips Dead Load, per bearing
	55.2 kips Live Load & IM, per bearing

The Contractor shall provide a jacking system and a temporary support system with the capacity of at least 150% of the loads stated.

The Contractor shall make provisions to prevent longitudinal and transverse movement of the superstructure and twisting of the stringers during the jacking operations and while the deck is temporarily supported. These provisions shall be submitted to the Resident for approval.

The Contractor may support the jacking systems and temporary structural support systems off of the top of abutment seats, abutment footings, or Contractor-furnished blocking systems. The proposed jacking system shall not be supported primarily from the face of abutment. Bracing shall be provided to maintain the superstructure in a stable condition during the jacking operations.

Drawings showing the method the Contractor chooses to raise, temporarily support, and brace the superstructures shall be stamped by a Professional Engineer registered in the State of Maine, and shall be submitted to the Resident for approval.

523.50 Method of Measurement

This subsection is amended by the addition of the following:

Bearings removed but not salvaged shall become the property of the Contractor and will not be measured for payment directly, but shall be incidental to the related Contract Items.

523.51 Basis of Payment

This subsection is amended by the addition of the following:

All materials, equipment, labor and incidentals required for: preparing the steel girders to receive the new bearings; lead paint removal; and field repair of existing paint shall be incidental to the Bearing Installation pay item.

Payment will be made under:

Pay Item		Pay Unit
523.52	Bearing Installation	Each

SPECIAL PROVISION

SECTION 524

TEMPORARY STRUCTURAL SUPPORTS

(Protective Shielding - Steel Girders)

524.01 Description

The following paragraph is added:

This work shall also consist of furnishing all labor, equipment and materials required to provide protection for the public during demolition and construction. This protection shall include, but not necessarily be limited to, protective shielding of existing structures during demolition work, concrete removal, and installation of temporary deck support over roadway lanes and shoulders on all existing and new bridge structures.

After removal of the existing bituminous overlay and membrane the Resident will determine the area(s) of full depth deck repair which will require temporary shielding. The shielding shall be installed 10 feet each side of the full depth deck repair area between the steel girders under the repair areas.

Protective shielding will also be required in areas where fascias and fascia overhangs require repairs.

No protective shielding will be required for the full depth concrete repair area(s) that are outside of the roadway beyond 10 feet of the edge of mainline pavement.

At the Contractor's option, in lieu of protective shielding, he may close the travel lane and shift traffic away from the full depth concrete repair area and demolish concrete inside the enclosed platform of a manlift. The manlift and repair area shall be at least six feet away from an active travel lane.

The following Subsections are added:

524.031 Protective Shielding Design

Prior to the start of work, the Contractor shall submit plans for review and comment indicating the sizes and dimensions of protective shield. The proposed methods of protective shielding, including connections and fasteners, shall be in accordance with the following criteria:

The protective shield shall be designed for safely supporting all construction and dead loads, but not less than 100 pounds per square foot with a load duration of seven (7) days. Protective shield shall be stiff enough to limit deflection to 1/2 inch under maximum loads and to be tightly sealed at all joints. The protective shield shall be placed on the tops of the bottom flanges of the steel girders with edges and laps made tight to protect the turnpike motorists from

dust, debris and falling objects.

524.041 Protective Shielding Erection and Removal

No portion of the protective shield installed over a roadway shall project below a plane connecting the bottoms of the bottom flanges of the steel girders. During demolition operations, the protective shield shall be covered with sheet plastic made tight at edges and laps to prevent water used in the sawcutting operation from falling onto the facilities under the bridge.

The protective shielding on existing structures shall extend horizontally three feet beyond the fascia lines and vertically to a point one foot minimum above the top of parapet.

Shielding shall be approved and installed prior to the start of any demolition work and shall remain in position during all demolition work. Shielding shall also be approved and installed prior to the start of any deck forming and shall remain in position during all deck work. The shielding shall be relocated or removed only as approved by the Resident.

Construction sequences may require protective shielding material to be removed, stored and then reinstalled by the Contractor. Any shielding which is damaged during this removal and reinstallation shall be replaced by the Contractor at no additional cost.

524.28 Method of Measurement

Protective Shielding will not be measured separately for payment, but shall be incidental to the related Contract Item Special Provision 518.

SPECIAL PROVISION

SECTION 603

PIPE CULVERTS AND STORM DRAINS

(Pressure Treated Wood Drain Trough)

603.01 Description

The following paragraphs are added:

This work shall also consist of furnishing and installing pressure treated wood drain trough at the locations shown on the Plans or as directed by the Resident.

603.02 Materials

The following paragraphs are added:

Wood for pressure treated wood drainage trough shall be Yellow Pine, Number 2 or better, .40 CCA, D4 S. The pressure treated wood shall meet AWPA Standard P-5 or Federal Standard TT-W-550. The treating process shall meet Federal Specification TT-W-571, or AWPA Commodity Standards as applicable.

Assembly hardware shall be heavy zinc plated or stainless steel.

Caulking shall be Sikaflex 1a, or an approved equal.

Trough liner material shall be W.R. Grace Ice and Water Shield roofing underlayment, or approved equal.

603.03 General

The following paragraphs are added:

The pressure treated wood drainage trough shall be fabricated and installed in a workmanlike manner. Corners shall be mitered; adjacent boards and sections shall be butt jointed at a wide cleat, or spliced with a full dimensioned piece of pressure treated wood; and fastener holes shall be predrilled to prevent splitting.

The trough liner shall be installed prior to installation of the top cleats, and shall wrap the top edge and 2 inches down the exterior face of the trough sideboard; and shall be held in place with galvanized roofing nails.

The pressure treated wood drain trough shall be backfilled to the top of the side rail with materials available from on-site excavation, supplemented with common borrow, if required.

603.11 Method of Measurement

The following paragraphs are added:

Pressure treated wood drain trough will be measured by the length in linear feet along the centerline of the invert, laid as directed, complete in place and accepted.

Excavation, bedding, common borrow and backfill will not be measured separately but shall be incidental to the Pressure Treated Wood Drain Trough pay item.

603.12 Basis of Payment

The following paragraphs are added:

The accepted quantity of pressure treated wood drainage trough will be paid at the Contract unit price per lineal foot.

Payment will be made under:

Pay Item		Pay Unit
603.91	Pressure Treated Wood Drain Trough	Linear Foot

SPECIAL PROVISION

SECTION 607

FENCES

(Snow Fence)

607.01 Description

The following paragraph is added:

The work shall include the installation of snow fence on the bridge to the limits shown on the plans.

607.02 Materials

The following paragraph is added:

Snow fence material shall consist of galvanized chain link fence at a height shown on the Plans. Posts shall be galvanized metal and spaced as shown on the Plans. The chain link fence and the posts shall be connected to the vertical bridge rail posts via U-bolts as shown on the Plans. All accessories such as tie wires, bars, and tension members shall be galvanized.

607.06 Method of Measurement

The following paragraph is added:

Snow Fence will be measured by the linear foot accepted in place.

607.07 Basis of Payment

The accepted quantities of Snow Fence shall be paid for at the contract unit price per foot of Snow Fence. Payment shall be full compensation for furnishing and installing all materials as shown on the plans including labor tools and incidentals required to complete the installation.

Payment will be made under:

Pay Item		Pay Unit
607.431	Snow Fence	Linear Foot

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".

Add the following sentence at the end of the first paragraph:

Refer to Section 656 Temporary Soil and Water Pollution Control, for more information on Temporary 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 up station and down station 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.

619.06 Method of Measurement

The following sentence is added:

Temporary Mulch will be paid for by the lump sum.

619.07 Basis of Payment

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
619.1201	Mulch – Plan Quantity	Unit
619.1202	Temporary Mulch	Lump Sum
619.1401	Erosion Control Mix – Plan Quantity	Cubic Yard

SPECIAL PROVISION

SECTION 631

EQUIPMENT RENTAL

(Welding Machine – Including Operators)

631.01 Description

This work shall consist of furnishing and operating construction equipment as directed by the Resident. Welding Machine (including operators) shall be used by the Resident for field welding of bridge joint modifications that are not otherwise included in the work of other contract items.

631.02 General

Equipment used for work under this section shall conform to the following minimum sets of requirements:

Equipment

The equipment requirements for the Welding Machine (including operators) are truck or trailer mounted 225 AC/DC 120/240 SMAW/FCAW welding machine with 120/240 V electrical generating capacity (Miller Bobcat 225 AC Welder/Generator or equal), 100 feet of welding leads, 100 feet of 10/3 electrical cord; an oxy-acetylene torch setup with heating and cutting tips; 4 ½ and 7 inch grinders, ½ inch electric drill, and a rotabroach cutter style magnetic drill.

The welding machine operator shall be an AWS D1.5 certified welder in all positions. The welding machine helper shall be a skilled laborer with experience in drilling, cutting, grinding, metal preparation and metal fit-up.

Consumables (welding rod, oxygen, acetylene, grinding wheels, drill bits, rotabroach cutters, etc) will not be paid separately but shall be incidental to the Welding Machine (including operator) pay item.

Steel plate and other steel sections required to complete the work will be reimbursed at cost plus 15%.

Payment will be made under:

Pay Item		Pay Unit
631.40	Welding Machine (including operators)	Hour

SPECIAL PROVISION

SECTION 645

HIGHWAY SIGNING

(Special Work No.: Route 236 Underpass)
(Special Work No.: Ramp H Underpass)
(Special Work No.: Gorham Road Underpass)
(Special Work No.: Cummings Road Underpass)

645.01 Description

The following sentences are added:

This work shall also consist of installing sign clips and hardware to existing guide signs.

The Authority will supply the sign clips and hardware to be installed on the guide signs. The Authority will provide mainline traffic control for Special Work No.: Route 236 Underpass and Special Work No.: Ramp H Underpass; local road traffic control items and maintenance of traffic control for these locations will be the responsibility of the Contractor and shall be incidental to the related pay item. Installation of sign clips shall occur at night for these locations.

645.08 Method of Measurement

The following sentence is added:

Special Work No.: Route 236 Underpass, Special Work No.: Ramp H Underpass, Special Work No.: Gorham Road Underpass, and Special Work No.: Cummings Road Underpass shall be measured by each lump sum unit complete in place.

645.09 Basis of Payment

The following paragraph is added:

The accepted installed sign clips and hardware will be paid for at the Contract unit price for each lump sum unit. Such price shall be full compensation installing sign clips and hardware on the existing guide signs, and all other incidentals necessary to complete the work. Local road traffic control and maintenance of traffic for Special Work No.: Route 236 Underpass and Special Work No.: Ramp H Underpass shall be incidental.

Payment will be made under:

Pay Item		Pay Unit
645.14	Special Work No.: Route 236 Underpass	Lump Sum
645.14	Special Work No.: Ramp H Underpass	Lump Sum
645.14	Special Work No.: Gorham Road Underpass	Lump Sum
645.14	Special Work No.: Cummings Road Underpass	Lump Sum

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(General)

652.1 Description

The following sentence is added to the second paragraph:

Traffic control devices shall also include portable light towers.

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 retroreflective sheeting conforming to ASTM 4956 – Type VII, Type VIII or Type IX (Prismatic). All Construction Series signs that use orange backgrounds shall be fluorescent orange.

652.2.5 Portable Changeable Message Sign

This section is deleted in its entirety 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 & 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 mobilization <u>or</u> 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.

<u>652.3.1 Responsibility of the Department</u>

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.

<u>652.3.2 Responsibility of the Contractor</u>

The following paragraph is added:

The Contractor shall ensure all jobsite personnel shall wear a safety vest labeled as ANSI 107-2004 standard performance for Class 3 risk exposures at all times. This requirement also applies to truck drivers and equipment operators when out of an enclosed cab.

652.3.3 Submittal of Traffic Control Plan

The first paragraph is deleted and replaced with the following;

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 Contractor shall submit, at or before the Preconstruction Meeting, a Traffic Control Plan (TCP) that provides the following information to the Authority:

The information provided to the Authority is modified as stated below:

(a) The following is added: The emergency contact list shall contain a listing of individuals who may be contacted during non-work hours and shall adequately respond to the request.
(b) This section is deleted and replaced by the following: Proposed revisions to the construction phasing or sequencing.
(f) This section is deleted and replaced by the following: A procedure for notifying the Resident of the need to change the traffic control plan or the need to remove a lane restriction.
(l) The following is added “and or section 656”

The last paragraph is amended by the substitution of the word “Department with “Authority”.

652.3.4 General

The third paragraph is deleted and replaced by the following:

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.

The following paragraphs are added:

Maine Turnpike Traffic Control Requirements

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 shoulders) in the two lane portion of the turnpike, and three travel lanes in each direction (each direction being 36 feet wide excluding shoulders) in the three lane 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.

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 as outlined in Section 652 – Specific Project Maintenance of Traffic Requirements.

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 is prohibited unless approved by the Resident

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 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 inches by 60 inches, Black and Orange, and meet construction sign retro reflectivity requirements.

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 or multiple, approved type, revolving, flashing or strobe lights mounted so as to be visible 360 degrees. Auxiliary lighting shall have sufficient intensity to be visible at 500 feet in normal daylight and a flash rate between 1Hz and 4Hz. The vehicle flashing system shall be in continuous operation while the vehicle is on any part of the project and positioned or mounted in such a way to not be obstructed by vehicle mounted or

other equipment. Dump trucks and utility trucks shall have a strobe light mounted on each side of the vehicle.

Failure to correct a maintenance of traffic 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.

Temporary Mainline Lane Closures

A minimum open travel way lane width of 15'-0" is required for all lane closures, unless there is an over limit load restriction in place, or the work is scheduled when over limit loads are restricted from traveling the Turnpike. Any work which does not permit a minimum traffic lane width of 15'-0" shall be undertaken during permitted work hours when over limit loads are not routinely permitted to move. Over limit moves are not routinely permitted 1/2 hour after sunset to 1/2 hour before sunrise, legal holidays and weekends in July and August.

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. Trucks shall be parked at least six (6) feet from the travel lane when being loaded.

The following is a partial list of activities requiring lane closures. Lane closures may be required for other activities as well:

- Removal of trees and chips from the cleared area.
- Construction of stabilized construction entrances prior to the construction of the lane shifts toward the median.
- Installation of stone check dams in existing ditches.
- Full depth sawcut at 37 or 43 feet offset line.
- Paving new travel lane adjacent to active travel lane.
- Loading of trucks within four feet of a travel lane.
- Bridge construction activities adjacent to a travel lane
- Bridge work directly over traffic or within six feet of a travel lane as measured from the painted pavement marking line or traffic control device. This work includes but is not limited to the following::

    1. Installing and removing shielding
    2. Superstructure demolition
    3. Unbolting structural steel
    4. Removing structural steel
    5. Erecting structural steel or concrete beams
    6. Installing and removing deck and diaphragm forms

7. Erecting or moving sign panels on bridges
8. Bolting structural steel
9. Painting structural steel

When approved by the Resident, Items 3, 6 and 8 may be performed over traffic if a temporary floor is provided between the bottom flanges of the beams.

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.

Daytime lane closures shall be a maximum of three (3) miles. Only one daytime lane closure will be permitted per direction per work location. Nighttime lane closures may extend through the entire length of the Project.

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 installation of the construction signs will be considered setting up the lane closure. Removal of the last construction sign will be considered the removal of 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 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 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.

Temporary Mainline Shoulder Closures

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.

The location (limits) of temporary shoulder closures with concrete barrier are shown on the Plans. The barrier must be placed prior to the start of the work requiring concrete barrier and shall remain in place until the work activity is complete.

Work Requiring Complete Stoppages of Traffic

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:

- Blasting of ledge.
- Erection or removal of structural steel or bridge beams.
- Moving of heavy or slow equipment across or on the travel lanes (stoppage less than five minutes).
- Erection or removal of overhead signs or sign bridges.

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

Blasting of Ledge

The maximum time for which traffic may be stopped for blasting at any single time shall be eight (8) 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 cleared of blast debris. If, due to the throw of rock onto the highway or other blasting related activities, traffic is stopped for more than eight minutes, the Contractor shall pay a penalty of $500.00 per minute for every minute traffic is stopped in each roadway (northbound or southbound), in excess of the eight minute limit. Total penalty shall be deducted from the next pay estimate.

The Erection or Removal of Structural Steel

A Traffic shall be stopped and may be held for periods of up to 25 minutes during these operations. Before the roadway is reopened, all materials shall be secured so they will not endanger traffic passing underneath.

The Contractor will reimburse the Authority at the rate of $2,500.00 per five-minute period for each roadway (northbound and southbound), in excess of the 25 minutes limit. Total penalty shall be deducted from the next pay estimate.

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 equipment or materials across the travel lanes shall be considered a violation of the Maintenance of Traffic Requirements and is subject to a minimum fine of $500 per occurrence with an additional $500per minute thereafter.

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.

652.3.5 Installation of Traffic Control Devices

The following paragraph is added after paragraph 2:

The bottom of mainline and ramp traffic control signs intending to remain longer than 3 days, except as provided in 2009 MUTCD Section 6F.03 paragraph 12, shall be mounted 5 feet or greater above the edge of pavement on posts or portable sign supports.

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

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 black on orange "Work Zone" plate. Speed limit signs shall be installed at each mile within the work zone. 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 covered and uncovered on a regular basis are not required to have the supplemental flags.

The reduced speed limit signs shall be used when workers are adjacent to traffic, when indicated on Maintenance of Traffic Control Plans provided or other times as approved by the Resident:

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

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.

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.

652.6.2 Night Work

Paragraph 4 is revised to read as follows:

The Contractor shall submit a lighting plan prior to any night work for review 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.

The final sentence of paragraph 12 is revised to read as follows:

The signs shall be a minimum of 30 inches by 60 inches, Black and Orange, with reflective sheeting meeting the material requirements of this Special Provision.

The following section is added:

652.6.3 Traffic Coordinator and Personnel

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.

652.7 Method of Measurement

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 oversize material or equipment loads to the jobsite, will not be paid separately, but shall be incidental to the various pay items.

652.8 Basis of Payment

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.

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.

The following minimum traffic requirements shall be maintained. These requirements may be adjusted based on the traffic volume when authorized by the Authority.

Ramp J Traffic Control Requirements

One-lane traffic shall be maintained on Ramp J at all times in accordance with the details shown on the Plans. The minimum open travel way lane width shall be 15’-0” with the exception of when the existing non-locking compression seal is being removed and replaced in the center portion of the deck, or when the new drainage trough is being installed under the north abutment and access to the work is required from the deck the center portion of the deck.

Any work which does not permit a minimum open travel way lane width of 15’-0” shall be undertaken during permitted work hours when over limit loads are not routinely permitted to move. Over limit moves are not routinely permitted 1/2 hour after sunset to 1/2 hour before sunrise, legal holidays and weekends in July and August. See Appendix A for permitted Ramp J work hours.

Ramp M Traffic Control Requirements

Two lanes of traffic shall be maintained on Ramp M at all times except when a Lane 2 closure is required to install the new drainage trough under the north abutment in accordance with the details shown on the Plans. The Lane 2 closure shall be in accordance with the details shown on the Plans. The minimum open travel way lane width shall be 15’-0”.

See Appendix A for permitted Ramp M lane 2 closure hours.

Two Rod Road Traffic Control Requirements

One lane of traffic in each direction shall be maintained on Two Rod Road at all times except when a lane closure is required to undertake project work; and one lane of bi-directional traffic, controlled by flaggers, shall be maintained on Two Road at all times. One lane of bi-directional traffic shall be in accordance with the Local Road Single Lane Closure details shown on the Plans.

See Appendix A for permitted Local Road Single Lane Closure hours.

Maine Turnpike Under Two Rod Road Traffic Control Requirements

Three lanes of traffic in each direction shall be maintained on the Maine Turnpike under Two Rod Road except when lane closure(s) are required to undertake project work. Single lane closures and double lane closures shall be in accordance with the Single Lane Closure and Double Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure and Double Lane Closure hours on the Turnpike at Two Rod Road.

Cummings Road Traffic Control Requirements

One lane of traffic in each direction shall be maintained on Cummings Road at all times except when the adjacent roadway project by the City of South Portland/Town of Scarborough has its two-week 24 hour per day complete roadway closure in place. It should be assumed that access to the bridge will be from Payne Road side and that the bridge will be closed to all traffic during the two-week closure. Contractor shall be responsible for securing/protecting the bridge deck during the completion of the bridge repairs, this work shall be considered incidental to the contract. The roadway contractor will provide three weeks' notice prior to the start of the road closure. The contractor shall be responsible for coordinating with the adjacent roadway contractor.

Maine Turnpike Under Cummings Road Traffic Control Requirements

Two lanes of traffic in each direction shall be maintained on the Maine Turnpike under Cummings Road except when lane closure(s) are required to undertake project work. Single lane closures shall be in accordance with the Single Lane Closure details shown on the Plans, and shall incorporate advance signing and maintenance of traffic devices for Interchange ramp access and egress.

See for Appendix A permitted Maine Turnpike Single Lane Closure hours on the Turnpike at Cummings Road.

Forest Avenue Traffic Control Requirements

One lane of traffic in each direction shall be maintained on Forest Avenue at all times with bi-directional lane shifts. The Lane Shift shall be in accordance with the details shown on the Plans. The minimum open travel way lane width shall be 12'-0". Sidewalk closures are also required adjacent to the contractor's staging area and will require temporary closure with signage.

See for Appendix A permitted Forest Avenue traffic shift hours.

Maine Turnpike Over Forest Avenue Traffic Control Requirements

Two lanes of traffic in each direction shall be maintained on the Maine Turnpike over Forest Avenue at all times. No Maine Turnpike traffic control, northbound or southbound, is required under this contract.

Exit 36 - Saco Interchange Ramps Traffic Control Requirements

One lane of traffic in each direction shall be maintained on the Saco Interchange Bridges at all times in the existing location except when a lane shift is required to undertake project work. The one lane of traffic shall be in accordance with the traffic control details shown on the Plans.

The detailed lane shift is permitted when Maine Turnpike Single Lane Closures and Double Lane Closures are permitted on the Maine Turnpike under Exit 36.

Maine Turnpike Under Exit 36 - Saco Interchange Ramps Traffic Control Requirements

Three lanes of traffic in each direction shall be maintained on the Maine Turnpike under Exit 36 except when lane closure(s) are required to undertake project work. Single lane closures and double lane closures shall be in accordance with the Single Lane Closure and Double Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure and Double Lane Closure hours on the Turnpike at Exit 36.

Exit 42 - Scarborough Interchange Ramps Traffic Control Requirements

One lane of traffic in each direction shall be maintained on the Scarborough Interchange ramps at all times. A right shoulder closure, lane shift and narrow lane are permitted when required to undertake project work. The one lane of traffic shall be in accordance with the traffic control details shown on the Plans.

The detailed lane shift is permitted when Maine Turnpike Single Lane Closures and Double Lane Closures are permitted on the Maine Turnpike under Exit 42, and when over limit loads are not permitted to move on the Turnpike.

Maine Turnpike Under Exit 42 - Scarborough Interchange Ramps Traffic Control Requirements

Three lanes of traffic in each direction shall be maintained on the Maine Turnpike under the Scarborough Interchange ramps except when lane closure(s) are required to undertake project work. Single lane closures and double lane closures shall be in accordance with the Single Lane Closure and Double Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure and Double Lane Closure hours on the Turnpike at Exit 42.

Gorham Road Traffic Control Requirements

One lane of traffic in each direction shall be maintained on the Gorham Road bridges at all times in their existing location except when a narrow lane with minor lane shift is required to undertake project work. The narrow lane with minor lane shift shall be in accordance with the traffic control details shown on the Plans.

The detailed narrow lane with minor lane shift is permitted when Maine Turnpike Single Lane Closures and Double Lane Closures are permitted on the Maine Turnpike under Gorham Road or I-295 SB under Gorham Road.

Maine Turnpike Under Gorham Road Traffic Control Requirements

Three lanes of traffic northbound and two lanes of traffic southbound shall be maintained on the Maine Turnpike under Gorham Road at all times except when lane closure(s) are required to undertake project work. Single lane closures and double lane closures shall be in accordance with the Single Lane Closure and Double Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure and Double Lane Closure hours on the Turnpike at Gorham Road.

Exit 44 - I-295 Southbound On Ramp Under Gorham Road Traffic Control Requirements

Two lanes of traffic in the southbound direction shall be maintained on the I-295 Southbound On ramp under Gorham Road at all times except when lane closure(s) are required to undertake project work. Single lane closures shall be in accordance with the Single Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure hours on the I-295 Southbound On ramp.

Exit 44 - I-295 Southbound Interchange Ramp Over I-95Traffic Control Requirements

Two lanes of traffic in the southbound direction shall be maintained on I-295 Southbound Interchange Ramp at all times except when a lane closure, shoulder closure and lane shift is required to undertake project work. The lane and shoulder closures with minor lane shift shall be in accordance with the traffic control details shown on the Plans.

The detailed lane and shoulder closures with the minor lane shift is permitted when Maine Turnpike Single Lane Closures and Double Lane Closures are permitted on the Maine Turnpike under the I-295 Southbound Interchange ramps.

Maine Turnpike Under Exit 44 - I-295 Southbound Interchange Ramps Traffic Control Requirements

Two lanes of traffic in each direction shall be maintained on the Maine Turnpike under the I-295 Southbound Interchange ramps at all times except when lane closure(s) are required to

undertake project work. Single lane closures shall be in accordance with the Single Lane Closure details shown on the Plans.

See Appendix A for permitted Maine Turnpike Single Lane Closure and Double Lane Closure hours at on the Turnpike under the Exit 44 - I-295 Southbound Interchange ramps.

Exit 45 - Interchange Ramp Traffic Control Requirements

One lane of traffic in each direction shall be maintained on the Exit 45 Interchange Bridge except when Appendix A permits the Turnpike ramp to be closed.

652.7 Method of Measurement

The first paragraph is revised to read as follows:

Signs and panel markers will not be measured separately but shall be incidental to the various Traffic Control Devices and Maintenance of Traffic Control Devices lump sum pay items. Flashing arrow boards, barricades, battery operated flashing and steady burn lights, drums and cones will not be measured separately but shall be incidental to the various Traffic Control Devices and Maintenance of Traffic Control Devices lump sum pay items. Such payment shall be full compensation for all incidentals necessary to install and maintain the respective devices. Portable change-able message signs will be measured by each unit authorized and installed on the project. No additional payment will be made for devices that require replacement due to poor condition or inadequate retro-reflectivity.

652.8 Basis of Payment

The first paragraph is revised to read as follows:

The accepted quantity of signs and panel markers will not be measured separately but shall be incidental to the various Traffic Control Devices and Maintenance of Traffic Control Devices lump sum pay items. Such payment shall be full compensation for furnishing and installing all signs, sign supports, and all incidentals necessary to complete the installation of the signs.

The second paragraph is revised to read as follows:

The accepted quantity of flashing arrow boards, barricades, battery operated flashing and steady burn lights, drums and cones will not be paid separately but shall be incidental to the various Traffic Control Devices and Maintenance of Traffic Control Devices lump sum pay items. Such payment shall be full compensation for all incidentals necessary to install and maintain the respective devices.

The accepted quantity of portable change-able message signs will be paid for at the contract unit price each of the actual number of portable change-able message signs authorized furnished and installed. Such payment shall be full compensation for all incidentals necessary to install and maintain the respective portable change-able message signs. See Special Provision Section 652 Maintenance of Traffic (General) for additional information.

The accepted quantity of Flaggers will be paid for at the contract unit price per hour for the actual number of Flaggers authorized and furnished. See General Provision 652, and Special Provisions 652.7 Method of Measurement under Section 652 Maintenance of Traffic (General) for additional information.

The accepted quantity of Truck Mounted Attenuator will be paid for at the contract unit price per calendar day for the actual number of Truck Mounted Attenuator days authorized and furnished. See Special Provision Section 652 Maintenance of Traffic (Truck Mounted Attenuator) for additional information.

652.8.1.2 Payment by Lump Sum

The following paragraphs are added to the end of the section:

Traffic Control Devices and Maintenance of Traffic Control Devices - Ramp J and Ramp M will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on Ramp J and Ramp M, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Two Rod Road will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on Two Rod Road and the Maine Turnpike under Two Rod Road, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Cummings Road will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on Cummings Road and the Maine Turnpike under Cummings Road,, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 45 will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on the Exit 45 – Interchange Ramp bridge and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Forest Avenue will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on Forest Avenue, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 36 will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on the Exit 36 bridges and the Maine Turnpike the Exit 36 bridges, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 42 will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on the Exit 42 bridge and the Maine Turnpike under the Exit 42 bridge, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Gorham Road will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on Gorham Road and the Maine Turnpike and I-295 Southbound On ramp under Gorham Road, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 44 will be paid at the contract lump sum price. Such payment shall be full compensation for furnishing and installing all signs, drums, cones, barricades, and flashing arrow panels as shown on the Plans, or necessary for effective traffic control on the Exit 44 - I 295 Southbound On bridge and the Maine Turnpike under the Exit 44 - I 295 Southbound On bridge, and for all days the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost or stolen; and for cleaning, maintaining and removing all devices used for traffic control.

652.8.2 Other Items

The following pay items are added:

652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Ramp J and Ramp M	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Two Rod Road	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Cummings Road	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 45	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Forest Avenue	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 36	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 42	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Gorham Road	Lump Sum
652.361	Traffic Control Devices and Maintenance of Traffic Control Devices - Exit 44	Lump Sum

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.

The following section is added:

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.

The following section is added:

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 a travel lane or shoulder 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 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.

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.

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:

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. 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.
2. 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.
3. Dust control items, other than those under Standard Specification Section 637, Dust Control, if applicable, shall be included in the plan.

Construction Requirements

1. All temporary erosion control devices shall be in place and approved by the Resident prior to any operations resulting in disturbed area. 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 distrubed area
2. 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.
3. 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 if applicable.
4. 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.
5. Temporary erosion control measures shall be maintained until the site is permanently stabilized with vegetation or other permanent control measures.
6. 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.
7. During periods of approved suspension, the Contractor shall inspect and maintain temporary and permanent erosion and sedimentation controls.
8. 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.
9. Disturbance of natural resources beyond the construction limits shown on the Plans is not allowed.
10. 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.
11. 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.
12. 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.
13. All cross culvert outlets shall be armored before the end of the work day.
14. 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.

15. 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.
16. 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.
17. 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.
18. 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.
19. 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.

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.

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, polymide 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.

6. Temporary Mulch

Temporary stabilization with mulch or other non-erodable cover is required on all exposed soils that will not be worked for more than 7 days. Areas within 75 feet of a wetland or waterbody shall be stabilized within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.

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.

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.

Temporary Mulch – See Section 619 Mulch.

656.10 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, for maintaining the bales, stakes or sandbags, and for the removing and disposing of the bales, stakes or sandbags 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 dumped stone will be paid for at the Contract unit price per 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 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.

Temporary Mulch – See Section 619 Mulch.

Payment will be made under:

Pay Item		Pay Unit
656.50	Baled Hay, in place	Each
656.60	Temporary Berms	Linear Foot
656.62	Temporary Slope Drains	Linear Foot
656.632	30 inch Temporary Silt Fence	Linear Foot

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART III – APPENDICES

APPENDIX A

ALLOWABLE LANE CLOSURE TIMES

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 32 TO EXIT 36 LANE REQUIREMENTS - NORTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	0900	0600	0900	0600	0900	0600	0900	0600	1900	1700	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2200	0600	
June (first 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	0900	0600	0900	0600	0900	0600	0900	0600	1900	1000	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2300	0600	
June (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1800	0600	1800	0600	1800	0600	1800	0600	1900	0900	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1900	0600	1900	0600	1900	0600	1900	0600	2100	0800	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2345	0600	
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1900	0600	1900	0600	1900	0600	1900	0600	2100	0800	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2345	0600	
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	0900	0600	0900	0600	0900	0600	0900	0600	1900	1700	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2300	0700	
October (1st 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	0900	0600	0900	0600	0900	0600	0900	0600	1900	0900	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2345	0700	
October (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	0900	0600	0900	0600	0900	0600	0900	0600	0900	1700	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2200	0700	
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Three lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 32 TO EXIT 36 LANE REQUIREMENTS - SOUTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
Double lane closure permitted	2200	0500	2100	0500	2100	0500	2100	0500	2100	0500	2100	0700	
June (first 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1400	1900	1400	1900	1400	1900	1400	1900	1300	1900	1700	See notes below
Double lane closure permitted	2200	0500	2100	0500	2100	0500	2100	0500	2100	0500	2100	0700	
June (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1400	1900	1400	1900	1400	1900	1400	1900	1300	1900	1000	See notes below
Double lane closure permitted	2200	0500	2100	0500	2100	0500	2100	0500	2100	0500	2100	0600	
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1300	1900	1300	1900	1300	1900	1300	1900	0900	1900	0800	See notes below
Double lane closure permitted	2300	0500	2200	0500	2200	0500	2200	0500	2200	0500	2200	0600	
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2100	1300	1900	1300	1900	1300	1900	1300	1900	0900	1900	0800	See notes below
Double lane closure permitted	2300	0500	2200	0500	2200	0500	2200	0500	2200	0500	2200	0600	
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
Double lane closure permitted	2200	0500	2100	0500	2100	0500	2100	0500	2100	0500	2100	0700	
October													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
Double lane closure permitted	2100	0500	2000	0500	2000	0500	2000	0500	2000	0600	2100	0700	
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Three lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 36 TO EXIT 44 LANE REQUIREMENTS - NORTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1000	0600	1000	0600	1000	0600	1000	0600	1900	1700	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2200	0600	
June (first 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1000	0600	1000	0600	1000	0600	1000	0600	1900	0900	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2300	0600	
June (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1800	0600	1800	0600	1800	0600	1800	0600	1900	0800	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1900	0600	1900	0600	1900	0600	1900	0600	2100	0800	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2345	0600	
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1900	0600	1900	0600	1900	0600	1900	0600	2100	0800	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2345	0600	
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1000	0600	1000	0600	1000	0600	1000	0600	1900	1700	See notes below
Double lane closure permitted	2100	0500	2200	0500	2200	0500	2200	0500	2200	0500	2300	0600	
October (first 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1000	0600	1000	0600	1000	0600	1000	0600	1900	0900	See notes below
Double lane closure permitted	2100	0500	2200	0500	2200	0500	2200	0500	2200	0500	2345	0600	
October (last 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	0600	1000	0600	1000	0600	1000	0600	1000	0600	1700	1700	See notes below
Double lane closure permitted	2100	0500	2100	0500	2100	0500	2100	0500	2100	0500	2200	0600	
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Three lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 36 TO EXIT 44 LANE REQUIREMENTS - SOUTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	1400	1900	1400	1900	1400	1900	1400	1900	1300	1900	1700	See notes below
Double lane closure permitted	2200	0500	2200	0500	2200	0500	2200	0500	2200	0500	2200	0600	
June (1st 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1400	1900	1400	1900	1400	1900	1400	1900	1300	1900	1700	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
June (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1400	1900	1400	1900	1400	1900	1400	1900	1300	1900	1000	See notes below
Double lane closure permitted	2200	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1300	1900	1300	1900	1300	1900	1300	1900	0900	1900	0900	See notes below
Double lane closure permitted	2300	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2100	1100	1900	1100	1900	1100	1900	1100	1900	0900	1900	0900	See notes below
Double lane closure permitted	2300	0500	2300	0500	2300	0500	2300	0500	2300	0500	2300	0600	
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1300	1900	1300	1900	1300	1900	1300	1900	1300	1900	1700	See notes below
Double lane closure permitted	2200	0500	2200	0500	2200	0500	2200	0500	2200	0600	2200	0600	
October													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1300	1900	1300	1900	1300	1900	1300	1900	1300	1900	1700	See notes below
Double lane closure permitted	2200	0500	2200	0500	2200	0500	2200	0500	2200	0600	2200	0600	
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Three lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 44 TO EXIT 45 LANE REQUIREMENTS - NORTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0500	2000	0500	2000	0500	2000	0500	2000	0500	2200	0700	See notes below
June													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	0500	2000	0500	2000	0500	2000	0500	2000	0500	2200	0700	See notes below
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	0500	2000	0500	2000	0500	2000	0500	2000	0500	2300	0700	See notes below
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	0500	2000	0500	2000	0500	2000	0500	2000	0500	2300	0700	See notes below
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0500	1900	0500	1900	0500	1900	0500	1900	0500	2200	0700	See notes below
October													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0500	1900	0500	1900	0500	1900	0500	1900	0500	2200	0700	See notes below
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Two lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 44 TO EXIT 45 LANE REQUIREMENTS - SOUTHBOUND ROADWAY

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0600	1900	0600	1900	0600	1900	0600	1900	0700	1900	0900	See notes below
June													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	0600	2000	0600	2000	0600	2000	0600	2000	0600	2000	0800	See notes below
July													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2100	0600	2000	0600	2000	0600	2000	0600	2000	0600	2000	0800	See notes below
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2100	0600	2000	0600	2000	0600	2000	0600	2000	0600	2000	0800	See notes below
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0600	1900	0600	1900	0600	1900	0600	1900	0700	1900	0800	See notes below
October													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	0600	1900	0600	1900	0600	1900	0600	1900	0700	1900	0900	See notes below
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Two lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 44 SB RAMP LANE REQUIREMENTS - SOUTHBOUND ON RAMP

May													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
June													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1900	1400	1900	1400	1900	1400	1900	1400	1900	1400	1900	1700	See notes below
July (first 2 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1400	1900	1400	1900	1400	1900	1400	1900	1400	1900	0900	See notes below
July (last 3 weeks)													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1400	1900	1400	1900	1400	1900	1400	1900	1000	1900	0900	See notes below
August													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	2000	1300	1900	1300	1900	1300	1900	1300	1900	1000	1900	0900	See notes below
September													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
October													
	Sun to Mon		Mon to Tue		Tue to Wed		Wed to Thur		Thur to Fri		Fri to Sat		
Single lane closure permitted	1800	1500	1900	1500	1900	1500	1900	1500	1900	1400	1900	1700	See notes below
	Notes:												
	#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2											
	#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2											
	#5	Two lanes shall be open to traffic for all Holiday and Weekend periods and other											
		specified periods in accordance with this chart.											

MAINE TURNPIKE AUTHORITY
2016.05
APPENDIX "A"
EXIT 45 RAMP CLOSURES

Exit 45 Southbound Off Ramp				
Month	Weekday		Thursday	Sunday
	Day	Night	(Night Only)	(Night Only)
	(Mon-Fri)	(Mon-Thur)		
April	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
May	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
June	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
July	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Aug.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Sept.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Oct.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Nov.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am

Exit 45 Southbound ON Ramp				
Month	Weekday		Thursday	Sunday
	Day	Night	(Night Only)	(Night Only)
	(Mon-Fri)	(Mon-Thur)		
April	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
May	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
June	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
July	n/a	9:00 pm-5:30 am	9:00 pm-5:30 am	9:00 pm-5:30 am
Aug.	n/a	9:00 pm-5:30 am	9:00 pm-5:30 am	9:00 pm-5:30 am
Sept.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Oct.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am
Nov.	n/a	8:00 pm-5:30 am	8:00 pm-5:30 am	8:00 pm-5:30 am

Notes:	
#1	For Memorial Day weekend restrictions, See Supplemental Specifications Section 101.2
#2	For Fourth of July weekend restrictions, See Special Provisions Section 101.2
#3	For Labor Day weekend restrictions, See Supplemental Specifications Section 101.2
#4	For Columbus Day weekend restrictions, See Supplemental Specifications Section 101.2
#5	Two lanes shall be open to traffic for all Holiday and Weekend periods and other
	specified periods in accordance with this chart.