

MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 2

CONTRACT 2018.02

**EXIT 47 INTERSECTION IMPROVEMENTS,
PAVEMENT REHABILITATION, AND CLEAR ZONE IMPROVEMENTS
MILE 47.3**

The following changes are made to the Proposal, Plans and Specifications.

PROPOSAL

1. Proposal Sheets P-2 through P-10 are deleted in their entirety and replaced with the attached Proposal Sheets P-2 through P-11. The revisions to the P-Sheets include the following:
 - Item 202.203 “Pavement Butt Joint” quantity is revised.
 - Item 409.152 “Bituminous Tack Coat, Applied” is added to the contract.
 - Item 424.323 “Asphalt Rubber Mastic Crack Sealer – Applied” is added to the contract.
 - Item 627.944 “Pavement Markings – Recessed Tape – Words, Arrows, Stop Bars” is added to the contract.
 - Item 627.75 “White or Yellow Pavement and Curb Marking” quantity is revised.

PLANS

1. Sheet 2, “Estimated Quantities and Earthwork Summary”: This plan sheet is removed and replaced with the attached revised Sheet 2.
2. Sheet 5, “Typical Sections 2”: Note 1 under the heading “Pavement Marking Notes” is deleted and replaced with the following:
 1. Item 627.9411, “Pavement Marking Tape – Dotted White or Yellow Lane Line – 6” Width” for DWLL shall be installed in an “in-and-out” grooving pattern. See detail this sheet.
3. Sheet 5, “Typical Sections 2”: The heading “627.941 DWLL PERMANENT PAVEMENT MARKINGS WITH TAPE” is revised to read “627.9411 DWLL PERMANENT PAVEMENT MARKINGS WITH TAPE”

4. Sheet 16, "General Plan": The following Note is added under the heading "Notes":
 4. Pavement Butt Joints shall be installed in the following locations, or as directed by the Resident:
 - From Station 5+86.00 to Station 6+16.00
 - From Station 7+14.00 to Station 6+84.00
 - From Station 13+39.00 to Station 13+84.00
 - From Station 17+16.00 to Station 17+61.00
 - From Station 109+35.00 to Station 110+10.00
 - From Station 205+00.00 to Station 205+75.00
 - From Station 315+16.00 to Station 315+91.00
 - From Station 406+25.00 to Station 407+00.00
5. Sheet 19A, "Exit 48 Striping Plans", attached hereto, is added to the plan set following Sheet 19. This sheet illustrates the proposed striping work to be completed at Exit 48.

SPECIFICATIONS

1. Special Provision Section 107.4.7, LIMITATIONS OF OPERATIONS", Page SP-9: The final paragraph under the heading "Rand Road Intersection Improvements and Embankment Widening" is deleted and replaced with the following:

"Due to the presence of marine deposits, material stockpiles exceeding 25 cubic yards will not be permitted on the north side of Rand Road to minimize the potential for slope instability. To the extent practical, the Contractor shall spread materials delivered for embankment construction as they arrive on site."
2. Special Provision Section 107.4.7, LIMITATIONS OF OPERATIONS", Page SP-7: The following limitation is added:

"The Contractor shall not be allowed to run pavers, rollers, steel tracked equipment or other equipment over the Exit 47 Toll Plaza concrete slab that, in the opinion of the Resident, may damage the concrete slab or the embedded loops for the toll equipment."
3. Special Provision Section 409, BITUMINOUS TACK COAT, pages SP-26 through SP-27, is removed and replaced with the attached Special Provision Section 409, BITUMINOUS TACK COAT.
4. Special Provision Section 424, ASPHALT RUBBER MASTIC CRACK SEALER, included herein, is inserted following page SP-28.
5. Special Provision Section 627, PAVEMENT MARKINGS (Recessed Pavement Marking Tape), included herein, is inserted following page SP-72.

6. Special Provision Section 652, “MAINTENANCE OF TRAFFIC (Specific Project Maintenance of Traffic Requirements)”, Page SP-110: The first sentence of the last paragraph is deleted and replaced with the following:

“Interchange work shall be completed Sunday through Thursday nights between 6:00 pm and 6:00 am at which times ramps are permitted to be closed.”

7. Special Provision Section 652, “MAINTENANCE OF TRAFFIC (Specific Project Maintenance of Traffic Requirements)”, Page SP-111: Under the heading “Interchange (north of toll plaza) Traffic Control Requirements”, the first sentence of the first paragraph is deleted and replaced with the following:

“All lanes must remain open all days between the hours of 6:00 am and 6:00 pm.”

8. Standard Specification Section 652, “MAINTENANCE OF TRAFFIC” (Section 652.41 Traffic Officers) is amended by the following:

“Traffic officers will be uniformed Portland Police Department officers for use during the shutdown of the temporary and permanent signals.”

9. Appendix A, included herein, is added to the bid book after page SP-126.

ATTACHMENTS

- P-Sheets (10 pages)
- Plan Sheets (2 pages)
- Special Provision 409.152 (2 pages)
- Special Provision 424.323 (3 pages)
- Special Provision 627.944 (2 pages)
- Appendix A (MS4 Documents) (1 page)
 - MS4 Target BMP Adoption Plan (4 pages)
 - MS4 Stormwater Awareness Plan (4 pages)

Notes: The above items shall be considered as part of the bid submittal.

The total number of pages included with this addendum is Thirty-two (32).

All bidders are requested to acknowledge the receipt of the Addendum No. 2 by signing below and faxing this sheet to Nathaniel Carll, Purchasing Department, Maine Turnpike Authority at 207-871-7739. Bidders are also required to acknowledge receipt of this Addendum No. 2 on Page P-10 of the bid package.

Business Name

Print Name and Title

Signature

Date
August 17, 2018

Very truly yours,

MAINE TURNPIKE AUTHORITY

Nathaniel Carll
Purchasing Department
Maine Turnpike Authority

SCHEDULE OF BID PRICES

CONTRACT NO. 2018.02

Intersection Improvements, Pavement Rehabilitation & Clear Zone Improvements

Exit 47

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
202.202	Removing Pavement Surface	Square Yard	28,600				
202.2026	Removing Pavement Surface - Drainage Paths	Square Foot	530				
202.203	Pavement Butt Joint	Square Yard	2,450				
203.20	Common Excavation	Cubic Yard	780				
203.24	Common Borrow	Cubic Yard	1,836				
304.10	Aggregate Subbase Course - Gravel	Cubic Yard	560				
304.14	Aggregate Base Course - Type A	Cubic Yard	190				
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	350				
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size, (Polymer Modified) RAP	Ton	2,630				
403.212	Hot Mix Asphalt, 4.75 mm Nominal Maximum Size (Shim)	Ton	150				
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate)	Ton	2,280				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
409.152	Bituminous Tack Coat, Applied	Gallon	2,520				
419.30	Sawing Bituminous Pavement	Linear Foot	1,200				
424.323	Asphalt Rubber Mastic Crack Sealer - Applied	Pound	2,500				
470.08	Berm Dropoff Correction - Grindings	Ton	180				
520.23	Asphaltic Plug Joint	Linear Foot	195				
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority (1020')	Lump Sum	1				
527.341	Work Zone Crash Cushion TL-2	Each	3				
603.175	18 inch Reinforced Concrete Pipe Class III	Linear Foot	8				
603.209	30 inch Culvert Pipe Option III	Linear Foot	144				
603.28	Concrete Collar	Each	1				
604.18	Adjusting Manhole or Catch Basin to Grade	Each	4				
604.184	Rebuild Catch Basin to Grade - Type II	Each	4				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
606.13	31" W-Beam Guardrail - Mid-Way Splice (7' Steel Post, 8" Offset Blocks, Single Faced)	Linear Foot	150				
606.131	31" W-Beam Guardrail - Mid-Way Splice (8' Steel Post, 8" Offset Blocks, Single Faced)	Linear Foot	450				
606.1723	Bridge Transition Type III	Each	1				
606.178	Guardrail Beam	Linear Foot	200				
606.352	Reflectorized Beam Guardrail Delineator	Each	230				
606.3531	Permanent Flexible Delineator Post	Each	4				
606.355	Delineator Post - Remove and Stack	Each	10				
606.356	Underdrain Delineator Post	Each	3				
606.3621	Guardrail Adjust - Single Rail	Linear Foot	3,200				
606.3622	Guardrail Adjust - Double Rail	Linear Foot	2,050				
606.471	Single Offset Block-W-Beam	Each	200				
606.791	Guardrail - Flared Terminal - 31" W-Beam Guardrail	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:							
610.08	Plain Riprap	Cubic Yard	100				
610.181	Temporary Stone Check Dam	Cubic Yard	4				
613.319	Erosion Control Blanket	Square Yard	1,900				
615.07	Loam	Cubic Yard	420				
618.14	Seeding Method Number 2	Unit	34				
619.1201	Mulch - Plan Quantity	Unit	34				
619.1202	Temporary Mulch	Lump Sum	1				
620.58	Erosion Control Geotextile	Square Yard	240				
626.12	36" x 24" x 21" Quazite Junction Box	Each	4				
626.21	Metallic Conduit	Linear Foot	50				
626.22	Non-metallic Conduit	Linear Foot	3,000				
626.223	Horizontal Directional Drilled Conduit	Linear Foot	600				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
626.332	30-inch Diameter, greater than 8-feet long, and all 36-inch and 42-inch Diameter Foundations	Cubic Yard	4				
626.35	Controller Cabinet Foundation	Each	1				
627.712	White or Yellow Pavement Marking Line	Linear Foot	19,650				
627.75	White or Yellow Pavement and Curb Marking	Square Foot	800				
627.77	Remove Existing Pavement Markings	Square Foot	1,900				
627.78	Temporary Pavement Marking Line, White or Yellow	Linear Foot	8,150				
627.812	Temporary Raised Pavement Marker	Each	1,100				
627.9411	Pavement Marking Tape - Dotted White or Yellow Lane Line - 6" Width	Linear Foot	100				
627.944	Pavement Markings - Recessed Tape - Words, Arrows, Stop Bars	Square Foot	750				
629.05	Hand Labor, Straight Time	Hour	50				
631.10	Air Compressor (Including Operator)	Hour	40				
631.11	Air Tool (Including Operator)	Hour	40				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
631.12	All Purpose Excavator (including operator)	Hour	50				
631.17	Truck - Large (Including Operator)	Hour	50				
631.32	Culvert Cleaner (Including operator)	Hour	8				
631.36	Foreman	Hour	50				
634.175	Replacement LED Fixture, Installed	Each	1				
643.72	Temporary Traffic Signal	Lump Sum	1				
643.80	Traffic Signal Modifications at Exit 47 and Rand Road	Lump Sum	1				
643.83	Video Detection System Supply and Install	Lump Sum	1				
645.1061	Relocate Existing Sign Assembly and Post	Each	4				
645.271	Regulatory, Warning, Confirmation and Route Assembly Sign, Type II	Square Foot	72				
652.30	Flashing Arrow Board	Each	1				
652.33	Drum	Each	55				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
652.34	Cone	Each	55				
652.35	Construction Signs	Square Foot	3,200				
652.361	Maintenance of Traffic Control Devices	Lump Sum	1				
652.38	Flagger	Hour	240				
652.381	Traffic Officers	Hour	20				
652.45	Truck Mounted Attenuator	Calendar Day	10				
655.16	Fiber Optic Cable	Linear Foot	650				
655.165	Fiber Optic Splice Panel	Each	2				
656.50	Baled Hay,in place	Each	15				
656.60	Temporary Berms	Linear Foot	1,100				
652.41	Portable-Changeable Message Sign	Each	4				
656.632	30" Temporary Silt Fence	Linear Foot	1,150				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
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: _____

Date: 8/17/2018

Filename: 002_Est_Qtys & EW Summary.dgn

Item No.	Item	Unit	Interchange Paving	Intersection Improvements	Total Quantity
202.202	Removing Pavement Surface	SY	28600		28600
202.2026	Removing Pavement Surface - Drainage Paths	SF	530		530
202.203	Pavement Butt Joint	SY	2450		2450
203.20	Common Excavation	CY		780	780
203.24	Common Borrow	CY		1836	1836
304.10	Aggregate Subbase Course - Gravel	CY		560	560
304.14	Aggregate Base Course - Type A	CY		190	190
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	TON		350	350
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size, (Polymer Modified) RAP	TON	2450	180	2630
403.212	Hot Mix Asphalt, 4.75 mm Nominal Maximum Size (Shim)	TON	150		150
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate)	TON	2100	180	2280
409.152	Bituminous Tack Coat, Applied	GAL	2350	170	2520
419.30	Sawing Bituminous Pavement	LF		1200	1200
424.323	Asphalt Rubber Mastic Crack Sealer - Applied	LB	2350	150	2500
470.08	Berm Dropoff Correction - Grindings	TON	180		180
520.23	Asphaltic Plug Joint	LF	195		195
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority (1020')	LS		1	1
527.341	Work Zone Crash Cushion TL-2	EA		3	3
603.175	18 inch Reinforced Concrete Pipe Class III	LF		8	8
603.209	30 inch Culvert Pipe Option III	LF		144	144
603.28	Concrete Collar	EA		1	1
604.18	Adjusting Manhole or Catch Basin to Grade	EA		4	4
604.184	Rebuild Catch Basin to Grade - Type II	EA		4	4
606.13	31" W-Beam Guardrail - Mid-Way Splice (7' Steel Post, 8" Offset Blocks, Single Faced)	LF		150	150
606.131	31" W-Beam Guardrail - Mid-Way Splice (8' Steel Post, 8" Offset Blocks, Single Faced)	LF		450	450
606.1723	Bridge Transition Type III	EA		1	1
606.178	Guardrail Beam	LF	200		200
606.352	Reflectorized Beam Guardrail Delineator	EA	220	10	230
606.3531	Permanent Flexible Delineator Post	EA		4	4
606.355	Delineator Post - Remove and Stack	EA		10	10
606.356	Underdrain Delineator Post	EA		3	3
606.3621	Guardrail Adjust - Single Rail	LF	3200		3200
606.3622	Guardrail Adjust - Double Rail	LF	2050		2050
606.471	Single Offset Block-W-Beam	EA	200		200
606.791	Guardrail - Flared Terminal - 31" W-Beam Guardrail	EA		1	1
610.08	Plain Riprap	CY		100	100
610.181	Temporary Stone Check Dam	CY		4	4
613.319	Erosion Control Blanket	SY		1900	1900
615.07	Loam	CY		420	420
618.14	Seeding Method Number 2	UNIT		34	34
619.1201	Mulch - Plan Quantity	UNIT		34	34
619.1202	Temporary Mulch	LS		1	1
620.58	Erosion Control Geotextile	SY		240	240
626.12	36" x 24" x 21" Quazite Junction Box	EA		4	4
626.21	Metallic Conduit	LF		50	50
626.22	Non-metallic Conduit	LF		3000	3000
626.223	Horizontal Directional Drilled Conduit	LF		600	600
626.332	30-inch Diameter, greater than 8-feet long, and all 36-inch and 42-inch Diameter Foundations	CY		4	4
626.35	Controller Cabinet Foundation	EA	1		1
627.712	White or Yellow Pavement Marking Line	LF	16825	2825	19650
627.75	White or Yellow Pavement and Curb Marking	SF		800	800
627.77	Remove Existing Pavement Markings	SF		1900	1900
627.78	Temporary Pavement Marking Line, White or Yellow	LF		8150	8150
627.812	Temporary Raised Pavement Marker	EA	1100		1100
627.9411	Pavement Marking Tape - Dotted White or Yellow Lane Line - 6" Width	LF	75	25	100
627.944	Pavement Markings - Recessed Tape - Words, Arrows, Stop Bars	SF	750		750
629.05	Hand Labor, Straight Time	HR		50	50
631.10	Air Compressor (Including Operator)	HR		40	40
631.11	Air Tool (Including Operator)	HR		40	40
631.12	All Purpose Excavator (including operator)	HR		50	50
631.17	Truck - Large (Including Operator)	HR		50	50
631.32	Culvert Cleaner (Including operator)	HR		8	8
631.36	Foreman	HR		50	50
634.175	Replacement LED Fixture, Installed	EA	1		1
643.72	Temporary Traffic Signal	LS	1		1
643.80	Traffic Signal Modifications at Exit 47 and Rand Road	LS	0.75	0.25	1
643.83	Video Detection System Supply and Install	LS	1		1
645.1061	Relocate Existing Sign Assembly and Post	EA		4	4
645.271	Regulatory, Warning, Confirmation and Route Assembly Sign, Type II	SF		72	72
652.30	Flashing Arrow Board	EA		1	1
652.33	Drum	EA		55	55
652.34	Cone	EA		55	55
652.35	Construction Signs	SF	2560	640	3200
652.361	Maintenance of Traffic Control Devices	LS	0.75	0.25	1
652.38	Flaggers	HR		240	240
652.381	Traffic Officers	HR		20	20
652.41	Portable-Changeable Message Sign	EA	2	2	4
652.45	Truck Mounted Attenuator	CD		10	10
655.16	Fiber Optic Cable	LF	650		650
655.165	Fiber Optic Splice Panel	EA	2		2
656.50	Baled Hay, in place	EA		15	15
656.60	Temporary Berms	LF		1100	1100
656.632	30" Temporary Silt Fence	LF		1150	1150
659.10	Mobilization	LS	0.75	0.25	1

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	689
GRUBBING IN FILL	87
TOTAL COMMON EXCAVATION (for estimate)	776

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	2,005
GRUBBING IN FILL	87
TOTAL FILL	2,092

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION	776
DEDUCTIONS:	
GRUBBING IN CUT	210
GRUBBING IN FILL	87
LOAM SALVAGE IN CUT	0
LOAM SALVAGE IN FILL	0
UNDERCUT	0
MUCK EXCAVATION	0
PAVEMENT SALVAGE (CUT & FILL)	230
(2) TOTAL DEDUCTIONS	527
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)	249
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)	0
RIPRAP EXCAVATION	35
TOTAL AVAILABLE NON-ROCK EXCAVATION	284

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3) TOTAL FILL	2,092
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TOTAL AVAIL. NON-ROCK EXCAV.	284 x 0.90 =	256
TOTAL AVAIL. STR. ROCK EXCAV.	0 x 1.30 =	0
TOTAL WASTE MATERIAL TO BE UTILIZED	0 x 0.00 =	0

(4) TOTAL AVAILABLE EXCAVATION	256
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION	1,836

IF NO BORROW IS NEEDED, SURPLUS MATERIAL = AVAILABLE EXCAVATION MINUS TOTAL FILL, PLUS TOTAL WASTE MATERIAL TO BE WASTED	-1,836
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BORROW NEEDED MINUS REQUIRED GRANULAR BORROW WITHIN FILL	1,836
COMMON BORROW (FOR ESTIMATE) = 1,836 x 1.00 =	1,836

Scale: N/A

Designed by:



HNTB CORPORATION
340 County Road, Suite 6-C
Westbrook, ME 04092
TEL (207) 774-5155
FAX (207) 228-0909



**THE GOLD STAR
MEMORIAL HIGHWAY**

**EXIT 47
INTERSECTION IMPROVEMENTS
ESTIMATED QUANTITIES
& EARTHWORK SUMMARY**

No.	Revision	By	Date
1	EST. QUANTITIES REVISED	AJS	8/18

CONSULTANT PROJECT MANAGER: Tim R Cote, P.E.			
Designed	By	Date	Checked
Drawn	AJS	07\18	RWH 07\18
	AJS	07\18	in Charge of RAL 07\18

MTA PROJECT MANAGER: Ralph C. Norwood IV, P.E., PTOE

CONTRACT: 2018.02

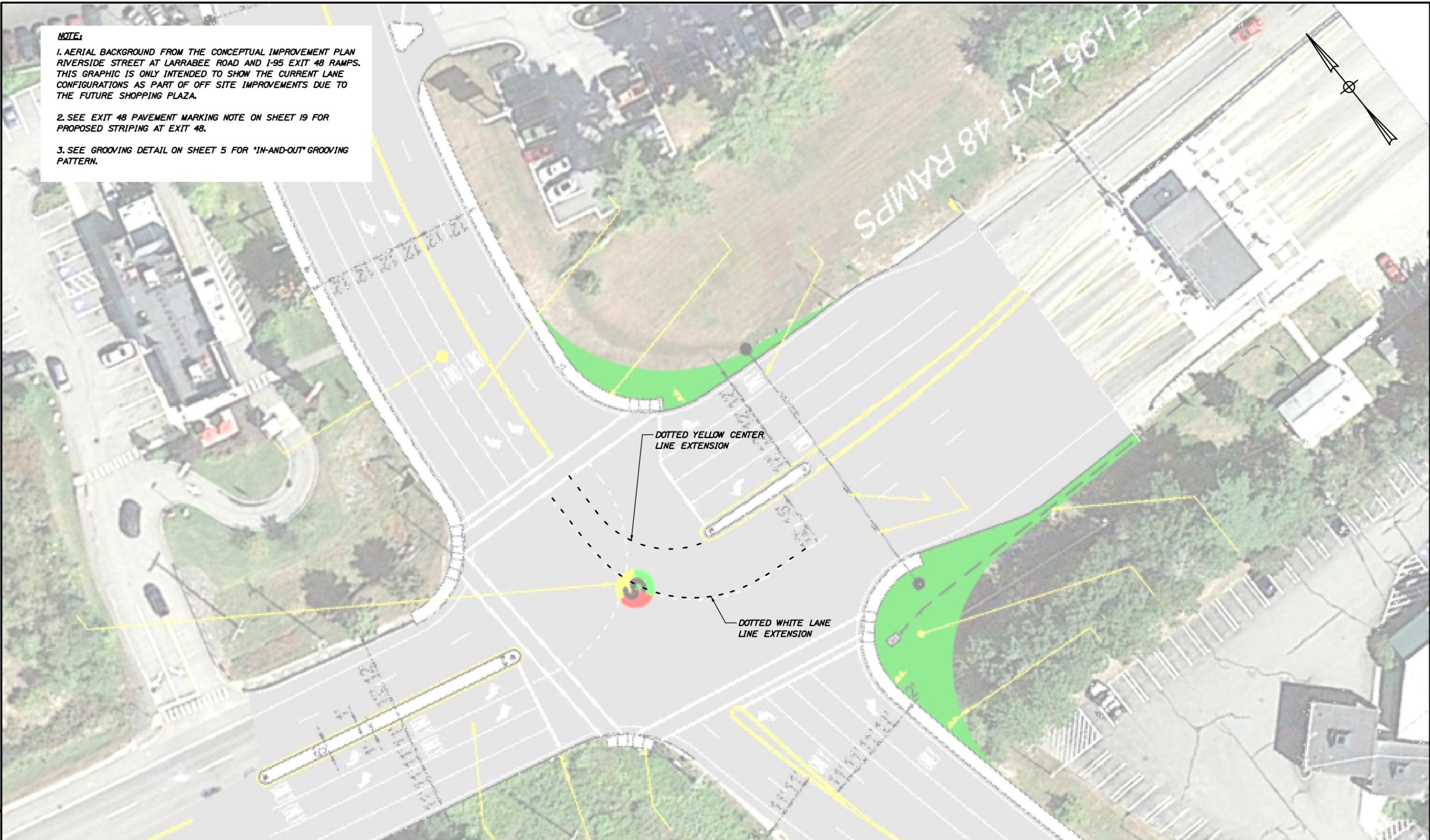
SHEET NUMBER: ES-1

2 OF 38

NOTE:

1. AERIAL BACKGROUND FROM THE CONCEPTUAL IMPROVEMENT PLAN RIVERSIDE STREET AT LARRABEE ROAD AND I-95 EXIT 48 RAMPS. THIS GRAPHIC IS ONLY INTENDED TO SHOW THE CURRENT LANE CONFIGURATIONS AS PART OF OFF SITE IMPROVEMENTS DUE TO THE FUTURE SHOPPING PLAZA.
2. SEE EXIT 48 PAVEMENT MARKING NOTE ON SHEET 19 FOR PROPOSED STRIPING AT EXIT 48.
3. SEE GROOVING DETAIL ON SHEET 5 FOR "IN-AND-OUT" GROOVING PATTERN.

Date: 8/16/2018



Filename: 019A_StripingDetailExit48.dgn

Scale:			
<i>NOT TO SCALE</i>			
No.	Revision	By	Date
1	NEW SHEET	AJS	8/18

Designed by:					
HNTB					
CONSULTANT PROJECT MANAGER: Tim R Cote, P.E.					
	By	Date	By	Date	
Designed	AJS	08/18	Checked	RWH	08/18
Drawn	AJS	08/18	In Charge of	RAL	08/18

HNTB CORPORATION
 340 County Road, Suite 6-C
 Westbrook, ME 04092
 TEL (207) 774-5155
 FAX (207) 228-0909



MAINE
TURNPIKE

**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood IV, P.E., P.T.O.E.

**INTERSECTION IMPROVEMENTS
EXIT 47**

EXIT 48 STRIPING PLAN

SHEET NUMBER: SP-2
19A OF 38

CONTRACT: 2018.02

SPECIAL PROVISION

SECTION 409

BITUMINOUS TACK COAT

409.01 Description

This Subsection is deleted and replaced with the following:

This work consists of furnishing and applying one uniform application of UltraTack (NTSS-1HM) by Blacklidge or an approved equal as indicated in this specification and as per manufacturers' recommendation.

409.05 Equipment

Add "or as determined by the Resident", after the words "gal/yd²]" in the fourth line of the second paragraph of this Subsection.

409.06 Preparation of Surface

The following paragraph is added:

All existing pavement and shoulder areas on which bituminous concrete mixtures are to be placed shall receive a tack coat. The surface area where the tack coat is to be applied shall be dry and cleaned of all dirt, sand, and loose material. Cleaning shall be accomplished by use of revolving brooms or mechanical sweepers. Undesirable material not removed by the above means shall be cleaned by hand sweeping or scraping, or a combination of both. Small areas otherwise inaccessible may be swept with hand brooms. The tack coat shall be applied only when the existing surface is dry.

409.07 Application of Bituminous Material

The following sentence is added:

A representative from Blacklidge shall be present on the first say of production.

409.08 Method of Measurement

The following paragraphs are added:

Measurement will be based on delivery slips made out in duplicate by the Contractor and signed by the Resident, or his representative, at the point of delivery. One of these slips shall be retained by the Resident and one by the Contractor. Delivery slips shall be furnished by the Contractor and shall provide space for identifying the vehicle and driver, for stating the volume of

material carried, the source of the material, the date, and the Resident or his representative's signature.

Material included in the delivery slips and not used or rejected shall be deducted from the amount being measured for payment. Each day's delivery slips shall be reconciled by the Contractor and the Resident within 24-hours.

Cleaning of the surface area where tack coat is to be applied shall be incidental to Item 409.152, Bituminous Tack Coat - Applied.

409.09 Basis of Payment

The following pay items are added:

<u>Pay Item</u>		<u>Pay Unit</u>
409.152	Bituminous Tack Coat – Applied	Gallon

SPECIAL PROVISION

SECTION 424

ASPHALT RUBBER MASTIC CRACK SEALER

424.01 Description

This work shall consist of the furnishing and placement of a mastic material in the longitudinal, transverse and random cracks of the milled bituminous concrete pavement in accordance with these Special Provisions.

Placement shall consist of:

1. Crack cleaning and drying
2. Material preparation and application
3. Material finishing and shaping.

424.02 Materials

GAP 201 Mastic shall be supplied by Maxwell Products or an approved equal designed especially for improving the strength and performance of the base asphalt cement with sealant and engineered aggregates.

424.03 Weather

Mastic shall not be applied on a wet surface or when the atmospheric temperature is below 45°F as determined by an approved thermometer (placed in the shade at the crack sealing location), or when weather conditions are otherwise unfavorable for proper construction procedures.

424.04 Equipment

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

(a) Air Compressor: Air compressors shall be portable and capable of furnishing not less than 4 yd³ of air per minute at not less than 90 psi pressure at the nozzle. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.

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

(c) Hot Air Lance: Should operate with propane and compressed air in combination at 2000°F - 3000°F, exit air heated at 310 m/s [1000 ft/s]. The lance should draw propane from no smaller than a 100 pound tank using separate hoses for propane and air draw. The hoses shall be wrapped together with reflectorized wrap to keep them together and to protect workers in low light situations.

(d) Hand Tools: Shall consist of a square shaped box screed, brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work. The joints shall be raked open.

(e) Melting Kettle: The unit used to melt the joint sealing compound shall be a double boiler, indirect fired type. The space between inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 320°C [608°F]. The kettle shall be equipped with a satisfactory means of agitating and mixing the mastic. This may be accomplished by continuous stirring with mechanically operated paddles and/or a continuous circulating gear pump attached to the heating unit. The kettle must be equipped with thermostatic control calibrated between 200°F and 550°F.

424.05 Preparations of Cracks

All cracks greater than 1 1/4 in shall be blown free and raked off of loose material, dirt, vegetation, and other debris by high pressure air. Material removed from the crack shall be removed from the pavement surface by means of a power sweeper or appropriate hand tools as required. Cracks showing evidence of vegetation after being blown out shall be additionally cleaned by appropriate hand tools and additionally blown out. All cracks must be blown and heated via the hot air lance 10 minutes prior to the crack being sealed. Distance between the hot air lance and the crack sealing unit should be no more than 50 ft to eliminate reinvasion of water, debris, and other incompressibles. All debris, vegetation, and water shall be removed to enhance adhesion of the crack sealing material. This work shall not be done in inclement weather.

424.06 Preparation and Placement of mastic

The mastic material shall be heated and applied at the temperature specified by the manufacturer and approved by the Resident or authorized representative. Any material that has been heated above the manufacturer's specification longer than thirty minutes shall not be used. Material that is reheated or held at temperature for an extended period of time may be used as allowed by the manufacturer's specification and approval of the Resident or authorized representative. The Contractor shall provide the Resident or authorized representative with a suitable device for verifying the mastic temperature in the kettle and at the application site.

Any over application or spills are to be removed to the satisfaction of the Resident or authorized representative. Any sealed areas with damaged or contaminated sealer or visible voids are to be removed, prepared and resealed.

Mastic shall be delivered to the crack while the cracks are still hot from the hot air lance preparation through a pressure hose line and applicator shoe.. The cracks are to be filled, struck

off with a 2" overband on each side and smoothed at the surface of the milled surface. A heated steel hotplate may be used on the surface of the repair area after the mastic has been applied. Any loose material on the surface or in the crack, which may contaminate the crack sealer or impede bonding of the sealant to the pavement, is to be removed by hand tools prior to crack filling. No crack filling material shall be applied in a crack that is wet or where frost, snow, or ice is present.

424.07 Quality of Work

A Maxwell Products representative shall be present to verify the proper application, installation, material and pavement preparation on the first days' production. Excess of spilled mastic shall be removed from the pavement by approved methods and discarded. Any quality of work determined to be below normal acceptable standards will not be accepted and will be corrected and/or replaced as directed by the Resident or authorized representative at no additional expense to the Authority.

424.08 Method of Measurement

Asphalt Rubber Mastic Crack Sealer - Applied will be measured by the pound of mastic used. The manufacturer's weights of the mastic will be accepted as the basis for measurement.

424.09 Basis of Payment.

Asphalt Rubber Mastic Crack Sealer – Applied will be paid for at the contract unit price per pound complete in place. This price shall be full compensation for furnishing and placing crack sealer, including cleaning and drying cracks; and furnishing all labor, materials, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
424.323 Asphalt Rubber Mastic Crack Sealer - Applied	Pound

SPECIAL PROVISION

SECTION 627

PAVEMENT MARKINGS

(Recessed Pavement Marking Tape)

627.01 Description

The following sentence is added:

This work shall consist of furnishing and placing recessed, reflective pavement marking tape in conformity with the Plans, as specified herein and as directed by the Resident.

627.02 Materials

The following sentence is added:

Pavement Marking Tape for lane designation words, arrows, and stop bars shall be pre-cut by the manufacturer, and shall be 3M Stamark Extended Season Tape Series 380IES– High Performance pavement marking tape, color - white, as manufactured by 3M of St. Paul, Minnesota.

3M Traffic Safety Systems Division
Mr. Michael D. Allen
Tel: (401) 368-0438
Email: mdallen@mmm.com

627.05 Preparation of Surface

The following paragraph is added:

The Contractor shall mill a groove in the pavement for each tape length or area to be placed (“in- and-out” pattern). Continuous grooving for installation of the tape shall not be allowed. The groove length shall be the required tape length plus 12 inches on each end. Tape length spacing shall be as shown on the plans. The groove width for inlaid tape pavement marking shall be the pavement marking width plus 1 inch, with a tolerance of $\pm \frac{1}{4}$ inch. The groove width for inlaid tape pavement areas shall be the pavement marking width plus 3 inches, with a tolerance of ± 1 inch. The groove shall have a uniform depth of 150 Mils (± 20 Mils). Groove position shall be a minimum of 2 inches from the edge of the pavement marking to the longitudinal pavement joint.

The bottom of the groove shall have a smooth, flat finished surface. The use of gang stacked Diamond cutting blades is required for asphalt pavement surfaces. The spacers between

blade cuts shall be such that there will be less than a 10 mil rise in the finished groove between the blades.

Grooves shall be clean, dry and free of laitance, oil, dirt, grease, paint or other foreign contaminants. The Contractor shall prevent traffic from traversing the grooves, and re-clean grooves, as necessary, prior to application of the primer and pavement marking tape. Depth plates shall be provided by the contractor to assure that desired groove depth is achieved.

Reference is made to 3M Information Folder 5.18 Grooving Applications, May 2011, "Application Guidelines for Pavement Marking in Grooved Pavement Surfaces."

627.09 Method of Measurements

The following paragraph is added:

The accepted quantity of Pavement Markings – Recessed Tape – Words, Arrows, Stop Bars will be measured for payment by the square foot in place and accepted. The square foot areas of the Words and Arrows will be the areas posted in the Pavement Marking section of the MaineDOT Standard Details.

627.10 Basis of Payment

The following paragraphs are added:

The accepted quantity of Pavement Markings – Recessed Tape - Words, Arrows, Stop Bars will be paid for at the Contract unit price per square foot which price shall include all material, pavement grooving, equipment, labor and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
627.944 Pavement Markings – Recessed Tape – Words, Arrows, Stop Bars	Square Foot

APPENDIX A

MS4 Stormwater Awareness Plan and MS4 Targeted BMP Adoption Plan

Maine Turnpike Authority

MS4 Stormwater Awareness Plan

Developing and implementing a Best Management Plan (BMP) Adoption Plan is a requirement of the Maine Department of Environmental Protection's (DEP's) *General Permit for the Discharge of Stormwater from Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4s)*. Since MTA is subject to this MS4 permit and its six *Minimum Control Measures (MCMs)*, *Part IV(H)(1)(a)(ii)* requires MTA to conduct Public Education and Outreach (MCM #1) efforts that **encourage “employees and contractors to utilize BMPs that minimize stormwater pollution.”**

1.0 PERMIT LANGUAGE

Part IV(H)(1) of the MS4 Permit establishes three goals for *MCM #1 - Public Education and Outreach on Stormwater Impacts*. These include the following:

1. *To raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters;*
2. *To motivate staff and contractors to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and*
3. *To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.*

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by encouraging employees and contractors to use BMPs that minimize stormwater pollution as part of this Targeted BMP Adoption Plan. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with *Part IV(J)* of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

Impact indicators are related to the achievement of the goals and objectives of the program, such as (1) observable/measurable effects on behavior; or (2) percent or number of employees to describe sources of storm water pollution, proper spill response, or maintenance of a BMP.

¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2013.

3.0 OBJECTIVE

The objective of this Stormwater Awareness Plan is to raise awareness among MTA employees and contractors regarding stormwater issues. For example, stormwater runoff is one of the most significant sources of water quality problems for Maine's waters.

The goal of the Stormwater Awareness Plan is to provide information relative to stormwater impacts in an effort to raise awareness of MTA employees. For example, 100% of Highway Maintenance employees and Engineering Inspectors will attend training sessions at which stormwater issues and impacts will be addressed. Additionally, MTA will also work to raise awareness among MTA employees in other departments, such as Fare Collections by providing abbreviated Stormwater/Spill Prevention and Response training to supervisors and managers who will in turn inform additional employees regarding stormwater issues relative to MTA operations.

The goal of this Plan is to also raise awareness of contractors by providing this Plan, as well as the Targeted BMP Adoption Plan (which is designed to motivate employees and contractors to use BMPs to reduce polluted stormwater runoff), prior to starting work on MTA projects.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the potential impacts their activities may have on stormwater runoff and water quality in Maine. The message statement is:

“The effect stormwater runoff has on the water quality of Maine waters is impacted by the level of effort put into the construction, operation, and maintenance of MTA’s stormwater infrastructure. Polluted water entering the storm drain system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine.”

In addition to the Stormwater Awareness Plan message, the target audience will be informed of authorized non-stormwater discharges allowed by the permit provided they do not contribute to a violation of water quality standards, as determined by the DEP. These include the following:

- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Uncontaminated flows from foundation drains
- Air conditioning and compressor condensate
- Irrigation water
- Flows from uncontaminated springs
- Uncontaminated water from crawl space pumps
- Uncontaminated flows from footing drains
- Lawn watering runoff
- Flows from riparian habitats and wetlands
- Residual street wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material has been removed and detergents are not used)
- Hydrant flushing and fire fighting activity runoff
- Water line flushing and discharges from potable water sources

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

This Stormwater Awareness Plan and message will be provided to each MTA employee at annual training sessions and also to each contractor before commencement of work, in addition to the Targeted BMP Adoption Plan.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP’s NPS Training Program to be knowledgeable of stormwater, specifically erosion prevention, sedimentation control and other potential impacts to water quality in Maine.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA’s newsletters and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.
 - For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. Stormwater information will be discussed or provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below:

Date	Training Type
April	Erosion and Sediment Control (ESC) and Stormwater Pollution Prevention for highway maintenance Supervisors and Foremen
May - June	Spill Prevention Control and Countermeasures Plan (SPCC), Stormwater and Erosion and Sediment Control (ESC) for MTA maintenance and engineering employees.
October	Spill Prevention Control and Countermeasures Plan (SPCC) and Stormwater for Fare Collections

The training sessions are designed to meet the goal of increasing awareness, as well as encouraging utilization of targeted BMPs to reduce stormwater runoff and potential impacts. In addition to these training sessions, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, MTA’s requirement to have an OSRP certified by DEP’s NPS Program ensures that the contractor is aware of stormwater related issues. In addition, MTA distributes this Stormwater Awareness Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA’s employees are trained as defined by the Plan; and
- A design engineering firm, such as HNTB, who administer construction contracts, to ensure the Plan is properly implemented by the contractors.

4.4 EVALUATION PROTOCOL

MTA training is documented with attendance sign-in sheets, exam scores, in-class workshops and evaluation forms. A training database is maintained with information gathered from employees during each training session.

Process Indicators: Assessment of the program execution will be included in the annual report. The following topics will be reported for MTA employees:

1. Number of employees that attended training; and
2. Average exam scores for attendees.

Impact Indicators: Gauging the achievement of goals and objectives of the program will be included in the annual report. These will be addressed by the following behavioral change questions:

1. Number or percentage of employees to identify the goals of MCM #1 correctly;
2. Number or percentage of employees to identify source(s) of storm water pollution;
3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked by documenting the pre-construction meetings when this Plan and the Targeted BMP Adoption Plan are provided to each contractor and the contractor, in turn, provides MTA with the certification for their OSRP for the project.

4.5 PLAN MODIFICATION

This Stormwater Awareness Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

I have read and accept the policies outlined in this Stormwate Awareness Plan as required by MTA’s MS4 Permit.

Contractor Signature of Acknowledgement

Date

Printed Name

Project Number

Maine Turnpike Authority

MS4 Targeted BMP Adoption Plan

Developing and implementing a Best Management Plan (BMP) Adoption Plan is a requirement of the Maine Department of Environmental Protection's (DEP's) *General Permit for the Discharge of Stormwater from Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4s)*. Since MTA is subject to this MS4 permit and its six *Minimum Control Measures (MCMs)*, *Part IV(H)(1)(a)(ii)* requires MTA to conduct Public Education and Outreach (MCM #1) efforts that **encourage** "*employees and contractors to utilize BMPs that minimize stormwater pollution.*"

1.0 PERMIT LANGUAGE

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- 1. To raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters;*
- 2. To motivate staff and contractors to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and*
- 3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.*

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by encouraging employees and contractors to use BMPs that minimize stormwater pollution as part of this Targeted BMP Adoption Plan. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with *Part IV(J)* of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

Impact indicators are related to the achievement of the goals and objectives of the program, such as (1) observable/measurable effects on behavior; or (2) percent or number of employees to describe sources of storm water pollution, proper spill response, or maintenance of a BMP.

¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2013.

3.0 OBJECTIVE

The objective of this Targeted BMP Adoption Plan is to educate MTA's employees and contractors to use BMPs which reduce polluted stormwater runoff within UA.

The goal of the BMP Adoption Plan is to target BMPs in the MaineDOT BMP Manual to be utilized by employees and contractors that minimize stormwater pollution during construction activities, such as:

- (1) Installing silt fence prior to land disturbance; and
- (2) Ensuring that hay mulch is applied to soil at the end of each work day.

For MTA employees, focus will also be given to targeting BMPs relevant to transportation-related maintenance and good housekeeping activities, such as:

- (1) Regular sweeping of the mainline and peripheral facilities;
- (2) Annual catch basin clean-outs and sediment removal;
- (3) As needed ditch cleaning and repair;
- (4) On-going culvert maintenance and litter removal.

Contractors are also encouraged to utilize BMPs in accordance with standard construction contract language (e.g., Special Provision 656), as well as the MaineDOT BMP Manual.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the impacts their activities have on stormwater runoff and the importance of BMPs. The message statement is:

“Implementing appropriate BMPs, as described in MaineDOT’s Stormwater BMPs Manual, to all MTA related activities will help to minimize stormwater pollutants introduced to Maine’s waterbodies.”

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

Targeted BMPs are included in the MaineDOT BMP Manual that is available at each MTA maintenance facility and referenced in standard contract language for contractors.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP’s NPS Training Program to be knowledgeable in erosion prevention and sedimentation control.
- Existing standard contract language
 - Requires contractors to maintain a certified OSRP on-site who has authority to implement BMPs appropriately; and
 - Specifies that contractors must utilize MaineDOT’s BMP Manual, as well as other BMPs, to ensure construction site runoff is minimized.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA’s newsletters

and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.

- For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. This Target BMP Adoption Plan will also be provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below.

Date	Training Type
April	Erosion and Sediment Control (ESC) and Stormwater Pollution Prevention for Highway Maintenance Supervisors and Foremen
May - June	Spill Prevention Control and Countermeasures Plan (SPCC), Stormwater and Erosion and Sediment Control (ESC) for MTA maintenance and engineering employees.

In addition to the training sessions above, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, targeted BMPs are already being implemented in accordance with contract language and the MaineDOT BMP Manual. In addition, MTA distributes this Targeted BMP Adoption Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA’s employees are trained as defined by the Plan; and
- A design engineering firm, such as HNTB, who administer construction contracts, to ensure the Plan is properly implemented by the contractors.

5.0 EVALUATION PROTOCOL

MTA training is documented with attendance sign-in sheets, exam scores, in-class workshops and evaluation forms. A training database is maintained with information gathered from employees during each training session.

Process Indicators: Assessment of the program execution will be included in the annual report. The following topics will be reported for MTA employees:

1. Number of employees that attended training; and
2. Average exam scores for attendees.

Impact Indicators: Gauging the achievement of goals and objectives of the program will be included in the annual report. These will be addressed by the following behavioral change questions:

1. Number or percentage of employees to identify the goals of MCM #1 correctly;

2. Number or percentage of employees to identify source(s) of storm water pollution;
3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked and evaluated based on daily and/or weekly inspections conducted on-site.

6.0 PLAN MODIFICATION

This Targeted BMP Adoption Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

I have read and accept the policies outlined in this Stormwater Awareness Plan as required by MTA's MS4 Permit.

Contractor Signature of Acknowledgement

Date

Printed Name

Project Number