



STORMWATER MEMORANDUM OF AGREEMENT 2017 ANNUAL PROGRESS REPORT

I. INTRODUCTION

This Annual Progress Report has been prepared to satisfy the requirements of the Stormwater Memorandum of Agreement (MOA), dated June 2017 as adopted by the Maine Department of Environmental Protection (DEP), Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA).

In accordance with the 2017 MOA, MTA has included a list of projects that started construction within the last calendar year (2017) and a list of projects that are scheduled to start in the next calendar year (2018). Also included is a description of alternative stormwater management measures installed and their performance, if known; a description of instances where the General Standards were not fully applied because it was not practicable to do so and the extent to which the General Standards were not met; and a list of staff or designees who provided oversight on stormwater or erosion and sedimentation control.

II. 2017 CONSTRUCTION PROJECTS

In 2017, the MTA initiated 12 contracted construction projects involving soil disturbance. The majority of construction activities were focused on bridge repair/maintenance projects, toll system upgrades, emergency vehicle access ramps, and pavement rehabilitation. A complete list of the 2017 construction projects is provided as **Table 1**.

One ongoing MTA construction project (Contract 2015.12: Toll System Upgrades at Exits 32, 36, and 46 NB) and one initiated project (Contract 2016.08: Interchange 44 Barrier Toll Plaza Open Road Tolling Conversion) required post-construction treatment of stormwater in accordance with the Stormwater MOA.

III. 2018 CONSTRUCTION PROJECTS

In 2018, the MTA has initiated (or anticipates) 16 contracted construction projects involving soil disturbance. MTA's construction projects are focused primarily on bridge repair/rehabilitation, pavement rehabilitation/resurfacing, toll system upgrades, and interchange improvements. The ongoing and initiated/anticipated projects are summarized in **Table 2**. The MTA does not plan to initiate construction projects with post-construction stormwater BMP requirements in 2018.

IV. ALTERNATIVE STORMWATER MANAGEMENT MEASURES

The MTA did not install any alternative stormwater management measures in 2017.

V. INSTANCES WHERE THE GENERAL STANDARDS WERE REQUIRED

In 2017, two projects required compliance with the General Standards:

- Contract 2015.12: Toll System Upgrades at Exits 32, 36, and 46 NB
 - This linear project included approximately 0.59 acres of new impervious cover in an urban impaired stream (Thatcher Brook) watershed.
 - The project was located in an existing corridor and was required to comply with the General Standards to the extent practicable as determined through consultation with, and agreement by DEP. General Standards required treatment of 75% of new impervious, or 0.44 acres.

- Two (2) under drained soil filter detention basins, designed to treat a total of 0.62 acres of impervious cover, were installed as part of this project.
- Construction was completed in December 2017; however, permanent stabilization was not achieved until Spring 2018. The MTA plans to inspect the post-construction Best Management Practices (BMPs) for this project in 2018 to confirm that they are functioning effectively.
- Contract 2016.08: Interchange 44 Barrier Toll Plaza Open Road Tolling Conversion
 - This linear project includes approximately 3.34 acres of new impervious cover in an urban impaired stream (Red Brook) watershed.
 - The project is located in an existing corridor and is required to comply with the General Standards to the extent practicable as determined through consultation with, and agreement by DEP. General Standards requires treatment of 75% of new impervious, or 2.51 acres.
 - Approximately 720-feet of underdrain treatment swale and berm, designed to treat a total of 2.61 acres of impervious cover, is being installed as part of this project.
 - Construction of this project is scheduled to be complete in November 2019.

VI. STORMWATER MOA OVERSIGHT

MTA conducts annual stormwater and Erosion and Sedimentation Control (ESC) training, which includes a discussion of the MOA. In 2017, stormwater MOA compliance and oversight was provided by the following MTA personnel:

MTA Personnel	MTA Job Title
John Branscom	<i>Environmental Services Coordinator</i>
Peter Merfeld, P.E.	<i>Chief Operations Officer</i>
<i>MTA Engineering Personnel</i>	
Steve Tartre, P.E.	<i>Director of Engineering and Building Maintenance</i>
Scott Warchol	<i>Construction Program Manager</i>
Jeff Nadeau, P.E.	<i>Resident Engineer</i>
Ralph Norwood, P.E.	<i>Project Manager</i>
J. Ryan Leavitt, P.E.	<i>Senior Resident Engineer</i>
Scott McConihe	<i>Inspector</i>
Gerry Ouellette	<i>Inspector</i>
Jody Dyke	<i>Inspector</i>
<i>MTA Highway Maintenance Personnel</i>	
John Cannell	<i>Director of Highway & Equipment Maintenance</i>
Brian Taddeo, P.E.	<i>Highway Maintenance Engineer</i>
Roger Mathews	<i>Highway Division Supervisor</i>
Andy Perry	<i>Highway Division Supervisor</i>
Dale Cook	<i>Foreman at Gardiner and Litchfield Highway Maintenance Facility</i>
Rick Dionne	<i>Foreman at Auburn Highway Maintenance Facility</i>
Jeff Stevens	<i>Foreman at Gray Highway Maintenance Facility</i>
Bill Thompson	<i>Foreman at South Portland (Crosby) Highway Maintenance Facility</i>
Jim Sotir	<i>Foreman at Kennebunk Highway Maintenance Facility</i>
Joe Violette	<i>Foreman at York Highway Maintenance Facility</i>

In addition to these MTA staff, several engineering consulting contractors provided additional technical and professional services to MTA pertaining to stormwater and erosion control maintenance, inspection, design, planning, permitting and compliance.

TABLES

Table 1 – Review of 2017 MTA Construction Projects

Table 2 – Review of 2018 MTA Construction Projects

**TABLE 1
REVIEW OF 2017 MTA CONSTRUCTION PROJECTS WITH SOIL DISTURBANCE**

Contract Number	Contract Type	Description of Work	Limits of Disturbance (LOD)	Linear or Non-Linear	Soil Disturbance in a Chapter 502 Listed Watershed?	Amount of New Impervious Cover (IC) or Developed Area ¹	Existing Corridor	Applicable Standards ²	Post-Construction Stormwater BMPs
2015 & 2016 Construction Projects Active in 2017									
2016.02	Interchange Improvements	Gray: Gray Interchange Exit 63 (MM 63.3)	14.9 acres	Linear	No	42,700 sf of New Impervious Cover	Yes	Basic	None
2016.HMS	Other (Host Service Plaza Renovation)	Cumberland/Gray: Service Area Renovation	0.25 acres	Non-Linear	No	Remove 0.09 acres of Impervious Cover (Net Decrease)	N/A	Basic	None
2015.09	Other (Toll Upgrades)	Falmouth: Toll Plaza Replacement at Interchange 53 (MM 52.4)	3.68 acres	Linear	No	12,040 sf of New Impervious Cover	Yes	Basic	None
2015.12	Other (Toll Upgrades)	Biddeford/Saco/Portland: Toll system support upgrades at Exits 32, 36, and 46 NB (MM 31.6, 35.7, and 46.4)	2.77 acres	Linear	2.5 acres in Thatcher Brook Watershed	0.59 acres of New Impervious Cover (Net Increase)	Yes	General with Redevelopment Waiver	2 Underdrained Soil Filter Detention Basins
2015.13	Other (Toll Conversion)	Falmouth: Exit 52 Open Road Tolling Conversion	7.62 acres	Linear	No	96,406 sf of New Impervious Cover	Yes	Basic	None
Construction Projects Initiated in 2017									
2016.08	Other (Toll Upgrades)	Scarborough: Interchange 44 Barrier Toll Plaza Open Road Tolling Conversion (MM 44.3)	17.35 acres	Linear	17.35 acres in Red Brook Watershed	3.34 acres of New Impervious Cover (Net Increase)	Yes	General Standards to the Extent Practicable	720' Underdrain Treatment Swale and Berm
2017.01	Pavement Rehabilitation	Lewiston/Sabattus: Pavement Rehabilitation Clear Zone Improvements MM 80.7 to MM 88.6, Ferry Road Bridge Repairs MM 80.8, Sabattus Exit 86 Toll System Upgrades MM 86.0	1.51 acres	Linear	No	No change	Yes	Basic	None
2017.02	Resurfacing	Gray/New Gloucester: Pavement Rehabilitation Clear Zone Improvements (MM 64.4-68.5)	0.1 acre	Linear	No	No change	Yes	Basic	None
2017.03	Bridge Repair & Rehabilitation	Sabattus: Bridge Replacement at Maxwell Road Underpass (MM 90.0)	2.5 acres	Linear	No	No change	Yes	Basic	None
2017.04	Bridge Repair & Rehabilitation	West Gardiner/Hallowell: High Street Underpass Bridge Repair (MM103.6) and Winthrop Road Underpass Superstructure Replacement (MM 108.3)	1.71 acres	Linear	No	No change	Yes	Basic	None
2017.05	Bridge Repair & Rehabilitation	Kittery/York/Ogunquit/Wells/Saco/Scarborough: Southern Bridge Repairs - Beech Rd (MM 4.80), Cider Hill Rd (MM 6.20), Route 236 (MM 1.25), York Interchange (MM 6.80), Captain Thomas Rd (MM 14.80), Two Rod Rd (MM 42.00), North St (MM 35.30), Tatnic Rd (MM 15.21), and Route 1 On Ramp (MM 1.8)	0.5 acres	Linear	No	No change	Yes	Basic	None
2017.06	Bridge Repair & Rehabilitation	Saco/Auburn/Lewiston: Northern Bridge Repairs - Saco Interchange EB & WB (MM 35.7), Auburn Interchange NB & SB (MM 75.3), River Rd NB & SB (MM 79.4), Goddard Rd NB & SB (MM 79.6), and Lewiston Interchange NB & SB (MM 80.3)	0.6 acres	Linear	Contractor Access and Storage Only	No change	Yes	Basic	None
2017.07	Other (Bridge Painting)	Saco/Scarborough/Falmouth: Cleaning and Painting Steel Structures - Boom Rd, Two Rod Rd, Leighton Rd, Auburn St, and Falmouth Rd Bridges (MM 33.4, 42.0, 52.6, F0.6, & F1.6)	0.77 acres	Linear	No	No change	Yes	Basic	None
2017.08	Other (Sign Upgrades)	Kennebunk/Arundel/Biddeford/Saco/Scarborough/South Portland/Portland/Falmouth/Cumberland/Grey/New Gloucester: Guide Signing Upgrades, Phase Two, Exit 25 to Exit 63 (MM 23.3-73.0)	0.15 acres	Linear	Limited to Sign Posts	No change	Yes	Basic	None
2017.11	Other (Emergency Ramps)	Auburn: Emergency Vehicle Ramp & Bridge Repairs, Hackett Road Underpass (MM 76.9)	2.2 acres	Linear	No	11,600 sf of New Impervious Cover	Yes	Basic	None
2017.13	Other (Widening)	Cumberland/Gray: Acceleration Lanes & Shoulder Widening, Cumberland and Gray Service Plazas (MM58.8)	6.7 acres	Linear	No	0.98 acres of New Impervious Cover	Yes	Basic	None
2017.15	Other (Sign Upgrades)	Kittery/Saco: Installation of Variable Message Signs (MM 4.27 in Kittery and I-195 WB just east of the Exit 36 - Saco Toll Plaza)	0.20 acres	Linear	0.1 acres in Goosefare Brook Watershed	No change	Yes	Basic	None
2017.56	Other (Emergency Access)	Gray: Emergency Access Roads, Weymouth Road Underpass (MM 66.2)	2.33 acres	Linear	No	0.35 acres of New Impervious Cover	Yes	Basic	None

NOTES:

1 - Developed Area excluding area that within one calendar year of being disturbed is returned to a condition with the same drainage pattern that existed prior to the disturbance and is revegetated, provided the area is not mowed more than once per year.

2 - Applicable Standards refer to Chapter 500 Stormwater Management as it applies through MaineDOT's Environmental (ENV) Office "DEP Stormwater Rule Compliance Flowchart."

**TABLE 2
REVIEW OF 2018 MTA CONSTRUCTION PROJECTS WITH SOIL DISTURBANCE**

Contract Number	Contract Type	Description of Work	Limits of Disturbance (LOD)	Linear or Non-Linear	Soil Disturbance in a Chapter 502 Listed Watershed?	Amount of New Impervious Cover (IC) or Developed Area ¹	Existing Corridor	Applicable Standards ²	Post-Construction Stormwater BMPs
2016 and 2017 Construction Projects Active in 2018									
2016.02	Interchange Improvements	Gray: Gray Interchange Exit 63 (MM 63.3)	14.9 acres	Linear	No	42,700 sf of New Impervious Cover (Net Increase)	Yes	Basic	None
2016.08	Other (Toll Upgrades)	Scarborough: Interchange 44 Barrier Toll Plaza Open Road Tolling Conversion (MM 44.3)	17.35 acres	Linear	17.35 acres in Red Brook Watershed	3.3 acres of New Impervious Cover (Net Increase)	Yes	General Standards to the Extent Practicable	720' Underdrain Treatment Swale and Berm
2016.HMS	Other (Host Service Plaza Renovation)	Cumberland/Gray: Service Area Renovation	0.25 acres	Non-Linear	No	Remove 0.09 acres of Impervious Cover (Net Decrease)	N/A	Basic	None
Construction Projects Initiated/Anticipated in 2018									
2018.01	Pavement Rehabilitation	Litchfield/West Gardiner: Pavement Rehabilitation and Clear Zone Improvements MM 98.0 to 102.17	0.20 acres	Linear	No	No changes expected	Yes	Basic	None
2018.02	Interchange Improvements	Portland: Rand Road Intersection Improvements (Waterstone) and Interchange Pavement Rehabilitation (MM 47.3)	1.79 acres	Linear	0.8 acres in Nasons Brook Watershed	No changes expected	Yes	General with Redevelopment Waiver	None
2018.03	Interchange Improvements	Scarborough: Exit 44 Southbound On Ramp Improvements MM 44.3	5.11 acres	Linear	5.11 acres in Red Brook Watershed	0.72 acres of New Impervious Cover (Net Increase)	Yes	General with Redevelopment Waiver	None
2018.05	Bridge Repair & Rehabilitation	West Gardiner: Exit 103 I-295 Southbound Underpass Bridge Rehabilitation MM 103.0	3.7 acres	Linear	No	0.43 acres of New Impervious Cover (Net Increase)	Yes	Basic	None
2018.06	Other (Parking, Paving, Interchange, Bridge & Culvert)	Wells/Kennebunk/Biddeford: Parking Installation, Kennebunk Southbound Service Plaza, Mile 25.5, Paving Rehabilitation, Biddeford Interchange, Mile 31.6, Bridge and Culvert Repairs, Crediford Brook Culvert Mile 18.75, Route 111 Underpass Mile 31.3, Biddeford Interchange Underpass Mile 31.6	0.98 acres	Primarily Linear	0.37 acres in Thatcher Brook Watershed	3,000 sf of New Impervious Cover (Net Increase)	Yes	Basic	None
2018.07	Bridge Repair & Rehabilitation	Auburn/Lewiston: Androscoggin River Bridges Substructure Repairs MM 78.9	0.1 acres	Linear	No	No changes expected	Yes	Basic	None
2018.08	Bridge Repair & Rehabilitation	Kittery/York: Bridge Repairs Dennett Road Overpass Mile 0.6, Snow Fence Installation Wilson Road Underpass Mile 2.0 Wearing Surface Repairs York River Bridge Mile 5.2	0.15 acres	Linear	No	No changes expected	Yes	Basic	None
2018.09	Bridge Repair & Rehabilitation and Other (Access Roads)	Portland/Cumberland/Gray: Bridge Repairs (Running Hill Road, Blackstrap Road, and Weymouth Road Underpasses), Access Roads (Forest Lake Road), Superstructure Replacement and Access Roads (Dutton Hill Road Underpass) (MM 45.4, 58.3, 59.9, & 66.2)	4.52 acres	Linear	No	No changes expected	Yes	Basic	None
2018.10	Bridge & Culvert Repairs	Auburn/Sabattus/Litchfield: Bridge and Culvert Repairs (Danville Corner Road Underpass, Curtis Brook Culvert, Fisher Farm Road Underpass, Center Road Underpass (MM 75.8, 87.49, 87.5, & 91.9))	0.56 acres	Linear	No	No changes expected	Yes	Basic	None
2018.12	Pavement Rehabilitation	Auburn/Lewiston: Pavement Rehabilitation, Guardrail, Drainage, and Clear Zone Improvements, MM 74.9 to MM 80.7	1.3 acres	Linear	0.1 acres in Hart Brook Watershed	No changes expected	Yes	Basic	None
2018.13	Other (Sign Upgrades)	Biddeford/Saco/Scarborough/South Portland: Guide Sign Modifications, Phase III, Exits 32, 36, 42, 44, and 45	0.6 acres	Linear	Limited to Sign Posts & Foundations	No changes expected	Yes	Basic	None
2018.15	Bridge Repair & Rehabilitation	Auburn/Lewiston/West Gardiner: Androscoggin River Bridge Repair and Cobbosseecontee Stream Bridge Rehabilitation	1.46 acres	Linear	No	No changes expected	Yes	Basic	None
2018.16	Other (Emergency Ramps)	Falmouth: Emergency Vehicle Ramps, Blackstrap Road (MM 52.0)	2.9 acres	Linear	No	0.57 acres of New Impervious Cover (Net Increase)	Yes	Basic	None
2018.17	Other (Toll Upgrades)	Auburn/Kennebunk/Wells: Exit 75 Toll System Upgrades and Stream Relocation, MM 75.3; Exit 25 Toll System Upgrades, MM 25.5; Exit 19 Directional Bore, MM 19.0	4.44 acres	Linear	No	No changes expected	Yes	Basic	None
2018.18	Other (Fuel System Upgrades)	Kennebunk: Fuel System Upgrades to Kennebunk Service Plaza	5.26 acres	Non-Linear	No	1,400 sf of New Impervious Cover (Net Increase)	No	General with Redevelopment Waiver	None
2018.19	Bridge Repair & Rehabilitation	South Portland/Scarborough: Cummings Road Bridge Rehabilitation	5.5 acres	Linear	5.5 acres in Red Brook Watershed	0.89 acres of New Impervious Cover (Net Increase)	Yes	General with Redevelopment Waiver	None

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2018.20	Other (Toll Upgrades)	York: York Toll Plaza MM 8.8	34 acres	Linear	No	15 acres of New Impervious Cover (Net Increase)	No	General Standards to the Extent Practicable	To Be Determined
2018.21	Other (Culvert)	Saco: I-195 Culvert Linings	0.1 acres	Linear	0.1 acres in Goosefare Brook Watershed	No changes expected	Yes	Basic	None

NOTES:

1 - Developed Area excluding area that within one calendar year of being disturbed is returned to a condition with the same drainage pattern that existed prior to the disturbance and is revegetated, provided the area is not mowed more than once per year.

2 - Applicable Standards refer to Chapter 500 Stormwater Management as it applies through MaineDOT's Environmental (ENV) Office "DEP Stormwater Rule Compliance Flowchart."