

Town of Lunenburg

Finance Committee:
Mark Erickson, Chairman
Terri Burchfield, Vice-Chairman
John Henshaw, Secretary
Karin Menard
Jay Simeone



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Mark Erickson
3/10/16

Lunenburg Finance Committee Minutes February 25, 2016

Location: Town Hall
Present: Mark Erickson, Terri Burchfield, Jay Simeone, Karin Menard, John Henshaw
Also Present: Karen Brochu, Municipal Finance Director, Jack Rodriquez, Director of Public Works

- 1) Mark E. called the Finance Committee meeting to order at 7:00 pm. He announced that this meeting is broadcast on the Lunenburg Public Access Cable Channel. The video recording is posted on YouTube at <https://www.youtube.com/user/LunenburgAccess> and select Finance Committee 02.25.16.
- 2) Comments:
 - a. Public: None
 - b. New Communications:
 - i) There will be a planning board meeting on 3/14/16 to amend two protective by-laws of the Town and to hear a re-zoning request.

Note: These minutes are an overview of this presentation. For specific details, copies of Jack Rodriquez, Director of the DPW are attached to these minutes which are on file in the Town Clerk's office.

- 3) Department of Public Works, FY2017 Budget. Presented by Jack Rodriquez, Director of the DPW.

Department of Public Works Fiscal 2017 Budget Presentation by Director Jack Rodriquez. Below is a summary of the presentation. For details you can access the presentation on the Finance Committee Page on the Lunenburg On-line site.	
Overview:	• The FY17 recommended budget is \$40,191, or 2.7% higher than the FY16 recap. • The budget includes one additional staff member in the highway labor account at \$35,702. This is to fill an open requisition from a couple of years ago. The increase net of this addition is \$4,489, or 0.3%.
Effects on Current Service Levels:	• The FY17 recommended budget funds the DPW at a level sufficient to provide services at the same level as in the past few years. • However, there is nothing extra in the budget for increases in expenses (e.g. salt and sand or gasoline) that are beyond the department's control.

Future Challenges and Opportunities:

- There is nothing in the budget for maintenance of some Town buildings (e.g. TC Passios) which is a vulnerability.
- The vehicle replacement schedule driven by the amount of capital funding is a key factor driving vehicle maintenance costs.
- Unfunded mandates including:
 - Updating signage when older signs require replacement, stormwater management system.
 - Stormwater system management system upgrade.

Land Use Fiscal 2017 Budget Presentation by Land Use Director Adam Birney

Overview

These line items are requests for funding of some above target items in their FY17 Budget:

- \$600 in materials to repair and maintain bridges with volunteers providing the labor.
- \$1,000 in educational materials (e.g. flyers) covering wetlands, information on Town Conservation Lands, and trails in these conservation lands.
- Information kiosks to make these materials available to the general public.

There is the possibility for grant funding. However, these are very small line items, that may not lend themselves to grants. Because of the nature of conservation lands, it does not readily lend to user fees.

- 4) Mark relayed the Town Manager's news that that the Monty Tech assessment has come in at \$65,641 more than expected due to enrollment of 13 more students from Lunenburg which increases the enrollment from 78 to 91 students from Lunenburg.
- 5) Minutes: John reported that the minutes are not ready yet.
- 6) Committee and Department Updates:

<u>Committee/Department</u>	<u>Update</u>
DPW—John H.	No report.
Capital Planning—John H.	No report.
Public Access Cable—John H.	Working on plan for fy17. Going to negotiate with Comcast to increase their payment to PACC. By statute the range is 2 ½% to 5%. Lunenburg is at 2 ½%. Survey of other Towns shows in the 4% to 5% range. The PACC sees an opportunity to increase funding from Comcast to a level
Library—Terri B.	No report.
Public Safety—Terri B.	No report.
Schools—Karin M.	No report.
Monty Tech—Karin M.	No report.
Council on Aging—Karin M.	No report.

Sewer Commission—Jay S.	The commission approved their FY17 budget. They are doing an RFP for three one-year maintenance contracts, and are starting their manhole inspections.
Green Task Force—Jay S.	No report.
School Bldg. Comm.--Mark E.	No report.
Building Re-Use—Mark E.	No report.

- 7) Next meeting: March 3 – with FY17 budget presentations from the school department and the library.
- 8) Mark reminded the Town that this committee remains two members short of the seven members called for in the Town Charter and invited those interested to fill out a talent bank form.
- 9) Adjournment: Terri made a motion to adjourn and Karin seconded the motion. The committee approved the motion 5-0 at 8:21.

Respectfully submitted by John Henshaw March 6, 2016

Attachment: DPW FY17 Presentation

Department of Public Works



FY 17 Budget

Snow Account FY16 Year-to-Date



Account	Appropriation	YTD Expended	In the Pipe-Line (Approx.)	TOTALS
Overtime	\$18,000	\$14,296	\$10,565	\$24,860
Contract. Serv.	\$129,500	\$42,464	\$23,680	\$66,144
Supplies	\$120,000	\$147,187	\$6,656	\$153,843
Hired Equip.	\$7,500	\$0	\$0	\$0
TOTAL	\$275,000	\$203,946	\$40,901	\$244,847

Estimated Remaining YTD 2/18/16 : \$30,153

FY16 \$275,000



FY17 \$275,000

Snow Storm Information

Date	Start Time	End Time	Loads	In-House	Contractors	Snow	Depth	Ice	Comments
12/26/2015	10:30:00 PM	2:30:00 AM	14	9	0	☐		☒	called the men in @ 10:30pm freezing rain, made a sanding run. Materials sand \$367.00 salt \$938.00 Total Materials \$1,295.00 Labor \$1,030.00 total storm cost \$2,325.000
12/29/2015	12:30:00 AM	8:00:00 PM	56	9	17	☒	3"	☒	Snow changed to sleet early morning , Made sanding runs sleet changed to freezing rain had sub contractors plow off the 3' of snow ,freezing rain remained over night ,made sanding run before commute ! D.P.W labor \$5,017.00 \$ 8,675.00 Total Labor \$13,692.00 Materials Salt \$2,280.00 Sand \$867.00 Total \$3,147.00 \$16,839.00
12/30/2015	5:00:00 AM	7:00:00 AM	14	11	0	☐		☒	POLICE CALLED 5:00AM BLACK ICE , HAD THE MEN MAKE A SANDING RUN, EVENT ENDING @ 9:00 AM . MATERIALS SAND \$357.00 SALT \$951.00 TOTAL MATERIALS \$ 1,295.00 TOTAL LABOR \$1,093.00 TOTAL SANDING RUN \$2,388.00
1/9/2016	6:30:00 AM	10:30:00 AM	16	8	1	☐	ice	☒	Police called at 6:30am , Made sanding run icy conditions ! Materials Sand \$410.00, Salt \$1,072.00 total Materials \$1,482.00 Labor \$1,803.76 Total sanding run \$3,285.76
1/12/2016	5:00:00 PM	3:00:00 AM	32	9	1	☒	2"	☐	LIGHT SNOW STARTED @ 5:00PM MADE 2 SANDING RUNS , MATERIALS SALT \$2,144.00 SAND \$816.00 TOTAL MATERIALS \$2,960.00 LABOR D.P.W \$2,572.26 1 SUB CONTRACTOR \$922.05 TOTAL LABOR \$3,494.65 TOTAL STORM COST \$ 6,454.05
1/13/2016	5:00:00 AM	7:00:00 AM	12	6	0	☐	ICY SP	☒	POLICE CALLED @ 5:00AM ICY SPOTS TOWN WIDE , SENT D.P.W MEN OUT ON SANDING RUN , MATERIALS SAND \$153.00 SALT \$402.00 TOTAL MATERIALS \$555.00 D.P.W LABOR \$514.52 TOTAL STORM COST \$1,069.52

Date	Start Time	End Time	Loads	In-House	Contractors	Snow	Depth	Ice	Comments
1/13/2016	5:00:00 AM	7:00:00 AM	12	6	0	☐	SPOTS	☒	POLICE CALLED ICY SPOTS TOWN WIDE, SENT THE D.P.W MEN SPOT SANDING , MATERIALS SALT \$804.00 SAND \$306.00 TOTAL MATERIALS \$1,110.00 TOTAL LABOR D.P.W \$514.52 TOTAL STORM COST \$1,624.52
1/16/2016	6:30:00 AM	1:00:00 PM	30	9	1	☒	LIGHT	☐	POLICE CALLED FOR LIGHT SNOW DID A SANDING RUN AND SOME SCRAPEING , 9 TOWN EMPLOYEES 1 SUB CONTRACTOR , MATERIALS \$ 2,775.00 LABOR SUB \$799.11 L.D.P.W \$2,132.26 TOTAL LABOR \$2,931.37
1/16/2016	6:30:00 PM	10:30:00 AM	16	7	1	☐		☒	POLICE CALLED @ 6:30PM ROADS ICING UP MADE A SANDING RUN ! SALT \$1,072.00 SAND \$408.00 TOTAL MATERIALS \$1,480.00 LABOR 1 SUB 4HRS \$491.76 7 D.P.W. 4 HRS \$4,917.76 TOTAL LABOR \$ 1,520.80 TOTAL STORM \$ 3,000.80
1/17/2016	9:00:00 PM	12:00:00 AM	16	8	1	☒	3"	☐	POLICE CALL LIGHT SNOW , MADE SANDING RUN ROADS TURNED BLACK & WET . SNOW GOT HEAVY @ TIMES SNOW ENDING @ 5:30 AM CALLED IN SUB SALT \$1,072.00 SAND \$459.00 TOTAL MATERIALS \$1,531.00 LABOR 1 SUB CONTRACTOR \$491.76 D.P.W \$771.78 TOTAL LABOR \$1,263.54 TOTAL STORM COST \$2,794.54
1/18/2016	12:00:00 AM	11:00:00 AM	18	9	19	☒	3"	☐	CALLED IN SUB CONTRACTORS @ 5:30AM TO HELP SCRAPE ROADS , AND SANDED , SALT \$1,206.00 SAND \$459.00 TOTAL MATERIALS \$1,665.00 LABOR SUB CONTRACTORS \$6,940.00 D.P.W \$3,608.44 TOTAL MATERIALS/ LABOR \$11,213.80
2/5/2016	4:00:00 AM	6:30:00 PM	36	10	19	☒	8"	☐	CALLED DPW GUYS IN AT4:AM, CALLED SUB CONTRACTORS IN AT 8:30AM SNOW ENDED AT 2:30PM CLEANED UP AND WENT HOME AT 6:30PM SAND \$2,070.00 SALT \$1,206.00 TOTAL MATERIALS \$ 3,276.00 DPW LABOR\$4,592.56 SUB CONTRACTOR LABOR \$ 15,615.00 TOTAL LABOR \$20,208.56 TOTAL STORM COST \$23,504.56

Date	Start Time	End Time	Loads	In-House	Contractors	Snow	Depth	Ice	Comments
2/6/2016	9:30:00 AM	1:30:00 PM	6	7	0	☒	1"	☐	DPW GUYS CAME IN TO SCRAPE ROADS, POST STORM, MATERIALS SALT \$402.00 SAND \$153.00 TOTAL SAND/SALT \$555.00 LABOR \$1,029.04 TOTAL STORM COST
2/7/2016	5:30:00 AM	9:30:00 AM	3	3	0	☐		☒	POLICE CALLED ICE SPOTS TOWN WIDE MATERIALS \$277.00 LABOR \$432.00 TOTAL COST \$709.00
2/8/2016	11:30:00 AM	3:00:00 AM	27	8	19	☒	3"	☐	STARTED TO SNOW AT 11:30AM, MADE SANDING RUN WITH DPW AND 1 SUB CONTRACTOR, LIGHT SNOW ALL DAY MOST OF THE NIGHT, SAND \$689.00 / SALT \$1,809.00 TOTAL MATERIALS \$2,498.00 DPW LABOR \$3,936.00 SUB CONTRACTOR LABOR \$8,675.00 TOTAL LABOR \$12,611.00
2/10/2016	7:00:00 PM	11:00:00 PM	21	7	0	☒	COATI	☐	POLICE CALLED AT 7:00PM SLICK ROADS, MATERIALS SALT \$1,407.00 / SAND \$535.50 TOTAL MATERIALS \$1,942.50 DPW LABOR \$1,029.04 TOTAL SANDING RUN \$2,971.54
2/15/2016	7:30:00 PM	12:00:00 AM	18	7	2	☒	2-3 INC	☐	POLICE CALLED ROADS GETTING SLICK, 7:30PM MADE A SANDING RUN, MATERIALS SALT \$1,206.00 SAND \$459.00 TOTAL MATERIALS \$1,446.52 LABOR D.P.W \$2,315.34 2 SUB CONTRACTORS LABOR \$987.52 TOTAL LABOR \$3,302.86
2/16/2016	12:00:00 AM	12:00:00 PM	8	8	18	☒	2-3 INC	☐	CONTINUED FROM 12/15/16 CALLED SUB CONTRACTORS IN @ 5:AM TO CLEAN UP, MATERIALS SALT \$1,206.00 SAND \$459.00 TOTAL MATERIALS \$1,665.65 LABOR D.P.W \$3,087.12 SUB CONTRACTORS \$8,675.45 TOTAL LABOR \$10,410.54 TOTAL STORM COST COMBINED 2/15/ 2/16 16 IS \$15379.05

Date	Start Time	End Time	Loads	In-House	Contractors	Snow	Depth	Ice	Comments
2/17/2016	1:30:00 AM	5:30:00 AM	7	0	0	☐	ICY	☒	POLICE CALLED @ 1:30AM ICY CONDITIONS TOWN WIDE, D.P.W GUYS MADE A SANDING RUN, MATERIALS SALT \$804.00 SAND \$535.00 TOTAL MATERIALS \$1,339.00 D.P.W LABOR \$1,029.00 TOTAL STORM COST \$2,368.00

Balanced Budget



- œ Target Number (level funding) = Level Service
- œ Level funding = Less than optimal Service
- œ Clearly Defined Expectations

œ Perception:

- œ Taxes increase ↑
- œ Services decline ↓

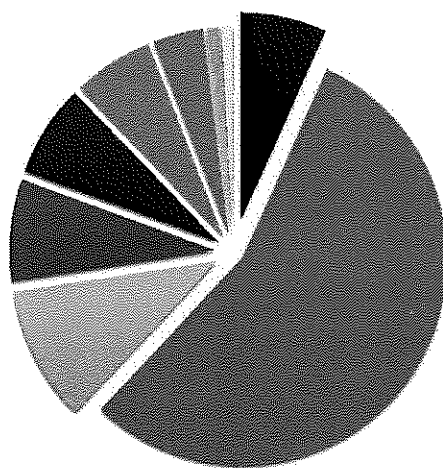
œ Reality:

- œ Taxes increase ↑
- œ Level of service remains the same =

Approx. Cost of Services to Average Homeowner

Average Single Family Home:
\$256,969

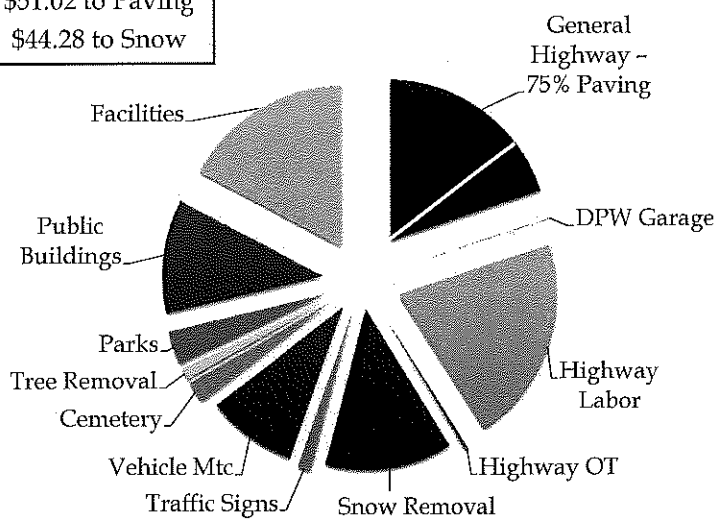
Average Tax Bill FY16:
\$5,039.16



- Public Works - \$340.56
- Education - \$2,785.70
- Debt Exclusions - \$534.50
- Public Safety - \$401.36
- Gen Expense/Benefits - \$362.89
- Debt Service - \$313.96
- General Government - \$201.54
- Culture Recreation - \$55.40
- Human Services - \$43.25

DPW Budget Allocation - \$340.56

\$51.02 to Paving
\$44.28 to Snow



Cemetery



- œ Superintendent Salary Only
- œ Perpetual care
- œ Sale of Lots

FY16 \$48,940



FY17 \$46,775

Parks



- œ Town Facilities
 - œ Wallis Park
 - œ McNally Field
 - œ Fitzgerald Field
 - œ Marshall Park (4)
- œ Track & Field Complex

FY16 \$71,974



FY17 \$71,348

Facilities & Public Buildings

- œ DPW Garage
- œ Public Safety Complex
- œ Park Building
- œ Town Hall
- œ Cemetery Building
- œ Eagle House
- œ Town Beach
- œ Town Common
- œ Ritter Building
- œ Teen Center
- œ Old Primary School
- œ Veterans Park

œ Protect our investment

œ Outsource VS In-House

œ Building Reuse

Facilities: FY16 \$359,919 • FY17 \$365,307

Public Buildings: FY16 \$265,451 • FY17 \$241,910

Vehicle Maintenance



œ Annual Capital Plan is Crucial

œ Advanced Technologies

œ Additional Mechanic Assistant

FY16 \$187,536 • FY17 \$192,419

Tree Removal



- œ Current Purchase of Service Allocation - \$21,000
- œ Hazardous Tree Survey
 - œ 1,181 Trees
 - œ Discretionary Service

FY16 \$30,500



FY17 \$24,641

Traffic Signs & Devices



- œ MUTCD Compliant
 - œ Manual of Uniform Traffic Control Devices
 - œ Unfunded Mandate

FY16 \$27,745



FY17 \$28,253



A Plant Health Care Consultant

MA Certified Arborist # 1114 ISA Certified Arborist # 0716A American Society of Consulting Arborist
TREE INVENTORIES • APPRAISALS • DIAGNOSIS • TREE RISK ASSESSMENTS

November 23, 2015

Town of Lunenburg
Attention: Jack Rodriquenz
Department of Public Works
Lunenburg, MA. 01462

Dear Mr. Rodriquenz,

Enclosed is the Tree Risk Management Inventory on an Excel spread sheet as per your agreement. This inventory was started and completed in November 2015. All trees on the 95 plus miles of road in the Town of Lunenburg were visually inspected, including trees leaning or hanging over the roads that may potentially fail and fall into the right of way. One thousand one hundred eighty one (1,181) trees were recorded on the inventory data base. This data base is listed in column form and includes location using street name, pole numbers or house number (where we could find one). Tree species are identified using the common tree name, tree location private or town property, estimated diameter and estimated height. The trees are placed in the following risk categories; Extreme, High and Medium. Extreme is number one priority 1, High is number two priority 2, and Medium number three priority 3. You will see abbreviations where there was not enough space in the comment column: CD= Codominate stem (2 stems), MS= Multi-stems, (more them 2 stems), clumps = more than 2 separate trees in the close proximity. The diameter of the Codominant and multi-stemmed trees were added together which is indicated by the larger number in the estimated DBH column of the excel data. If you need additional information please contact me.

Sincerely,

Carl A. Cathcart



A Plant Health Care Consultant
Consulting Certified Arborist

Town of Lunenburg Tree Risk Assessment

November 2015

Prepared by Carl A. Cathcart Consulting Arborist 149 Randall Road Stow MA, 01775

Prepared by Carl A. Cathcart Consulting Arborist 149 Randall Road Stow MA. 01775										
Location						Priority	Priority	Priority		
Street	Pole #	Tree #	Common name	Priv. Prop	Est. DBH (in)	Est. Height (ft)	Extreme	High	Medium	Comments
Summer St.	51	1	Red maple	x	15	50			x	Deadwood prune
394 Summer St.	10	2	Red oak		30	60		x		Deadwood prune
378 Summer St.	11	3	Red oak		50	60			x	Deadwood prune
63 Graham St.	7	4	Red oak		20	60		x		Deadwood prune, east side road
Graham St.		5	Red oak		18	60			x	Deadwood prune, east side road
Graham St	6	6	Choke Cherry		8	45			x	Deadwood prune, west side of street
Graham St	6	7	Red oak		24	45			x	Deadwood prune, east side road
44 Graham St	6	8	White ash	x	15	40	x			Deadwood prune, west side of street
47 Graham St.	6	9	6 R & W oaks		24	50	x		x	Deadwood prune large DW over road
Graham St	5	10	Red oak		40	50	x			Prune large DW over road
42 Graham St	5	11	Red maple	x	30	50		x		Deadwood prune, east side road
18 Graham St.	3	12	4 R &W oaks		30	55			x	Deadwood prune, east side road
83 Whalom St.	43	13	Red oak	x	20	50			x	Deadwood prune, east side road
Whalom St.	42	14	Black Birch				x			Remove, south side
Whalom St.	41	15	Wt. Pine		20	70			x	Prune dead branches
140 Whalom St.	40	16	American ash		30	65	x			Remove, south side
Whalom St.	39	17	American ash		18	45	x			Prune branch leaning dead tree
Whalom St.	39	18	American ash		10	50	x			Remove
149 Whalom St.	39	19	Red oak		20	65			x	Deadwood prune, east side road
152 Whalom St	38	20	Sugar maple		20	40		x		Deadwood prune south side
Whalom St.	38	21	Red oak		20	45	x			Deadwood prune corner tree west side
Whalom St.	27	22	3 Elm	x	8		x			Remove 3 dead, south side
Whalom St.	26	23	Lombardy Poplar	x	12	60	x			Deadwood prune north side
Whalom St.	22	24	2 Horsechestnut		28/24	55			x	Deadwood prune north side
297 Whalom St.	23	25	Red maple		18	45	x			Remove, north side
337 Whalom St	14	26	Red maple	x	34	45	x			Deadwood prune (4 Elizabeth St.)
11 Buttonwood St.	2	27	Sugar maple		28	50	x			Remove, south side
40 John St		28	Red maple	x	24	50			x	Remove branch over road
34 Hamlin St.		29	Red maple	x	28	50	x			Remove, NE side
28 Hamlin St.	3	30	White oak	x	30	60			x	Deadwood prune
45 Otis St.	5	31	White oak	x	24	50			x	Deadwood prune
45 Burke St	5	32	Red maple	x	20	35			x	Remove, west side
45 Burke St.	6	33	Red oak	x	18	50			x	Deadwood prune
41 Burke St.	2 & 3	34	2 Red oak		20	60			x	Deadwood prune, south side
785 West St	72	35	Little leaf linden	x	20	50			x	Deadwood prune decay trunk area
Pleasant St.	23	36	Choke cherry	x	20	50			x	Deadwood prune, south side
727 West St.	66	37	Red oak	x	30	60			x	Deadwood prune, south side
West St.		38	Red oak		20	50			x	Deadwood prune, south side
West St.	64	39	White oak		24	50	x			Dead, remove
West St.	63	40	Red oak		30	60		x		Deadwood prune, east side road
West St.	62	41	Red oak		24	60			x	Deadwood prune, east side road
West St.	62	42	Red oak		36	60		x		Deadwood prune, east side road
618 West St.	61	43	Red oak		18	50			x	Deadwood prune, east side road
554 West St.	55	44	3 Red Oak	x	20	50			x	North side deadwood prune
37 Wallis Park	5	45	Red oak		28	50			x	Prune branch over road
25 Wallis Park	3	46	White oak	x	25	65		x		Deadwood prune, west side of street
32 Kirby St.	3	47	Red maple	x	24	55			x	Deadwood prune, west side of street
38 Pierce Ave	3	48	Red maple	x	12	30	x			Remove branch over road
38 Pierce Ave	3	49	Red Oak		20	50		x		Prune branch over road, south side
40 Pierce Ave	3	50	Red oak		20	55		x		Deadwood prune
40 Pierce Ave	4	51	White oak		20	50		x		Deadwood prune
40 Pierce Ave	4	52	Sugar maple	x	24	50	x			Remove
48 Pierce Ave	14	53	White Pine	x	34	80		x		Dead branch over road
48 Pierce Ave	14	54	White oak		20	50		x		codominant stem
62 Ramgren Rd	6	55	Red oak		40	50			x	Deadwood prune
43 Ramgren Rd		56	Red oak MS		60	50			x	Deadwood prune
Youngs Rd	167(1)	57	Red oak		18	45			x	Deadwood prune
Youngs Rd	2	58	Red oak		22	55		x		Lg. deadwood over road, south side
Youngs Rd	2	59	Red oak		20	50			x	Deadwood prune
126 Youngs Rd	5	60	2 Red oak	x	26	55			x	Deadwood prune

A Plant Health Care Consultant

Compliance is Key



- œ Lake Shirley Dam
 - œ Inspections & Emergency Plan
- œ Landfill
 - œ Inspections & Monitoring Compliant

Storm Water



- œ Defined by Federal Rules as:
 - œ "Separate storm water system including ditches, curbs, gutters, storm drains, and similar means of collecting or conveying runoff that does not connect with a wastewater system (sewer)"
- œ Unfunded Mandate
- œ Compliant with 2003 permit
- œ New round of permitting not released yet
- œ Task Force

FY16 \$40,000



FY17 \$50,000

LUNENBURG, MA
EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	SECTION 1 - INTRODUCTION	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
1.7.2	Complete Notice of Intent (NOI)		90 days from effective date	Prepare and Submit Notice of Intent.	
1.9.1	Endangered Species Determination (complete review; certify in Notice of Intent)		90 days from effective date	Revisit location of permitted stormwater discharges relative to endangered species and ensure no adverse impact (Part of NOI) or develop BMPs to reduce impact.	
1.9.2	Histoic Properties Determination (complete review; certify in Notice of Intent)		90 days from effective date	Revisit location of permitted stormwater discharges relative to historic properties and ensure no adverse impact (Part of NOI) or develop BMPs to reduce impact.	
1.10	Develop Written Stormwater Management Plan (SWMP)		1 year from effective date	Develop written plan outlining activities and measures to be implemented to meet the conditions of the permit. The SWMP will be developed in Year 1 and then will need to be updated on an ongoing basis throughout the permit term. Required contents of the SWMP are outlined in Section 1.10.2 of the 2014 Draft MA MS4 General Permit.	\$15,000 - \$25,000
1.10.b	Update Best Management Practices (BMPs)		1 year from effective date	Modify and update BMPs from the 2003 permit to meet the conditions of the new permit - to be completed as part of the NOI process.	
1.10.1	Maintain copy of Stormwater Management Plan, make available to public		1 year from effective date	Make SWMP available to the public at Town Hall and/or on Town website.	
SECTION 2 - NON-NUMERIC EFFLUENT LIMITATIONS					
2.1 - Water Quality Based Effluent Limitations					
2.1.1.b	For MS4 discharges to a water body with an approved TMDL identified in Part 2.2.1, comply with Part 2.2.1 and Appendix F of the Permit		see Appendix F of the 2014 Draft MA MS4 General Permit	Lunenburg does not currently have any water bodies with approved TMDLs that are regulated by the permit.	
2.1.1.c	For MS4 discharges to a water body that is water quality limited and not subject to an approved TMDL, or for municipalities located within Part 2.2.2a-b, comply with Part 2.2.2 and Appendix H of the Permit		see Appendix H of the 2014 Draft MA MS4 General Permit	Per Part 2.2.2, Lunenburg has been identified as a municipality that discharges to water bodies that are impaired due to phosphorus, or their tributaries, and is therefore subject to the requirements of Appendix H. For Lake Shirley, the causes of the impairment are listed as Excess Algal Growth and Dissolved Oxygen, both of which have Total Phosphorus listed as the monitoring parameter. In addition to Total Phosphorus, another cause of the impairment for Lake Shirley is turbidity, where the monitoring parameter is Total Suspended Solids. Therefore, Lake Shirley is also impaired due to solids, and subject to the requirements of Appendix H, Part V.	Costs included under 1.7.2, 1.10, H.II and H.V
2.1.1.d	For all other discharges (not subject to the requirements of Part 2.1.1.b and Part 2.1.1.c of the Permit) contributing to a violation of applicable receiving water quality standards, eliminate condition causing or contributing to exceedance of water quality standards		within 60 days of becoming aware of the situation	If a discharge is identified that contributes to an exceedance of applicable water quality standards, eliminate the conditions contributing to or causing the exceedance within 60 days.	Cost included under IDDE under Item 2.3.4.2.a.
2.1.2	Written notification to MADEP & EPA as needed & documentation in the Town's SWMP regarding new or increased stormwater discharges		as-needed	Any new or increased stormwater discharges must satisfy MA antidegradation regulations.	

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	2.2 - Discharges to Impaired Waters	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.2	Identify all outfalls/interconnections that discharge to waters with an approved TMDL or discharge to certain waters identified as "water quality limited water bodies"		SWMP (1 yr) & annual MS4 stormwater reports	Identify all outfalls or interconnections that discharge to water quality limited water bodies.	(1) (2)
2.2.1	For MS4 discharges to a water body with an approved TMDL, comply with Appendix F, Part A of the Permit		see Appendix F of the 2014 Draft MA MS4 General Permit	Lunenburg does not currently have any water bodies with approved TMDLs that are regulated by the permit.	
IMPAIRED - PHOSPHORUS (INCLUDES TRIBUTARIES)					
H.II.1.a.1	Distribute clippings/fertilizer message to required audiences		Annually in March/April	Develop and disseminate required public education information.	\$2,500 - \$3,500 per year over 5 year permit term
H.II.1.a.1	Distribute pet waste management message to Residential		Annually in June/July		
H.II.1.a.1	Distribute leaf litter disposal message to Residential/Business/Commercial		Annually August-October		
H.II.1.a.1.2	2.3.6 Ordinance to require BMPs optimized for Phosphorus removal		With 2.3.6: 2 years from effective date	Include in Town's Stormwater Management Bylaw a requirement that new development and redevelopment stormwater BMPs be optimized for phosphorus removal.	(3)
H.II.1.a.1.2	2.3.6: b to include consideration of BMPs that infiltrate stormwater		With 2.3.6: 1.b: 4 years from effective date	Inventory and priority ranking of Town property and infrastructure that could be retrofitted with BMPs to include consideration of BMPs that infiltrate stormwater.	Cost included under 2.3.6.d.3.
H.II.1.a.1.3	2.3.7 Grass-clippings procedures & blowing prohibited for MS4 property		With 2.3.7: 1 year from effective date	Develop program to manage grass clippings and leaf litter on permittee owned property.	Cost included under 2.3.7.a.i.
H.II.1.a.1.3	2.3.7 Sweep streets/lot >2/yr spring & fall		Sweep at least twice/year	Increase frequency of sweeping of public streets and municipal parking lots to a minimum of two times per year in drainage area tributary to Lake Shirley.	Cost included under 2.3.7.a.ii.c & d.
H.II.1.b	Complete Phosphorus Source Identification Report to include: (1) calculation of total MS4 area draining to the impaired water or its tributaries; incorporating updated mapping of the MS4 and catchment delineations produced pursuant to Part 2.3.4.6; (2) All screening and monitoring results pursuant to Part 2.3.4.7.d; targeting the receiving water segment(s); (3) Impervious area and DCIA for the target catchment; (4) Identification, delineation and prioritization of potential catchments with high phosphorus loading; and (5) Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment, including the removal of impervious area of permittee-owned properties.		4 years from effective date; With Year 4 Annual Report	Develop Phosphorus Source Identification Report to include the items listed in Appendix H.	\$7,500 to \$10,000
H.II.1.c	Complete Retrofit Evaluation, including Implementation plan & schedule		5 years from effective date; With Year 5 Annual Report	Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Part 2.3.6.d.ii. or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries.	\$5,000 to \$7,500
H.II.1.c	Plan/install at least one structural BMP demonstration project		6 years from effective date	Plan/install one structural BMP demonstration project.	\$25,000 to \$75,000 (includes engineering design & construction)
H.II.1.c	Install remaining BMPs		As per plan/schedule in Year 5 Annual Report	Install remaining BMPs in accordance with the plan and schedule outlined.	Depends on number of permittee owned properties for retrofit opportunity within the drainage area. Assume 2 additional locations. Budget \$25,000 to \$75,000 per location for design & construction.
H.II.1.c	Track/report BMP installations & estimated Phosphorus removal		Annual Report after installation; not later than Year 6	Document in Annual Report: type of BMP installed, total area treated by BMP, design storage volume of the BMP and estimated amount of phosphorus removed.	(2)
Alternative to Requirements H.II.1 (above)					
H.II.2	Submit documentation that discharges do not contain Phosphorus		When Approved by EPA/DEP	Submit documentation that discharges do not contain phosphorus through long-term monitoring.	

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline IMPAIRED - OIL/GREASE, SOLIDS OR METALS: 60 days from awareness (or plan/schedule)	Needs Specific to Lunenburg	Estimated Cost to Comply
H.V.3	If discharge is found to be to an Impaired Water, remove condition or implement BMPs identified under Appendix H.V.4.1.1. and H.V.4.1.2. to reduce solids.		Eliminate condition causing or contributing to the impairment & document actions in SWMP.	
H.V.4.1.1	2.3.6 Ordinance to require spill containment isolation for Commercial/Industrial properties	With 2.3.6; 2 years from ED	Include in Town's Stormwater Management Bylaw a requirement that for new development and redevelopment, stormwater management systems designed on commercial and industrial land use areas draining to the impaired water incorporate spill containment isolation.	(3)
H.V.4.1.2	Increased street sweeping & CB inspection/cleaning in targeted areas	Annual Reports	Increase street sweeping and catch basin cleaning in high density areas with high pollutant load potential tributary to Lake Shirley. The Town already sweeps street adjacent to water resources twice per year. Street sweeping and catch basin cleaning schedule to be determined by the permittee. Catch basin sumps to be no more than 50% full.	Street sweeping cost included under 2.3.7.a.iii.c & d. Catch basin cleaning cost included under 2.3.7.a.iii.b.
H.V.5	Submit documentation that discharges do not contain solids	Alternative to Requirements H.V.4.1-4 (above) When Approved by EPA/DEP	Submit documentation that discharges do not contain solids through long-term monitoring.	
2.3 - Requirements to Reduce Pollutants to the Maximum Extent Practicable (MEP)				
PUBLIC EDUCATION & OUTREACH				
2.3.2.a-d	Distribute at least 2 educational messages to each of 4 targeted audiences (residents, businesses/commercial/institutional, developers and industrial). Different messages to the same targeted audience shall be distributed at least one year apart.	begin year 1; continue throughout permit term	Develop/distribute a minimum of 8 messages over the permit term. Educational messages can include brochures, newsletters, information posted to the Town's website, newspaper articles, public service announcements, displays in municipal buildings, etc.	\$10,000 - \$20,000 for 5-year permit term (\$2,000 to \$4,000 per year) (Varies depending on whether materials are readily available or need to be developed from scratch.)
2.3.2.e	Identify method to evaluate effectiveness of message; implement	not stated	Determine method to evaluate message effectiveness; implement method.	
2.3.2.f	Modify ineffective messages/methods	before next message distribution	Modify message or distribution methods if applicable.	
2.3.2.g	Report on messages as per permit	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
PUBLIC INVOLVEMENT & PARTICIPATION				
2.3.3.a	Meet Public Notice requirements	continuous	Ensure that all public involvement activities comply with state public notice requirements.	-
2.3.3.a	Make Stormwater Management Plan & Annual MS4 Stormwater Report available to public	continuous	Make SWMP and annual MS4 stormwater reports available to public at Town Hall and/or on the Town's website.	-
2.3.3.b	Public opportunity to participate in the review/implementation of the Stormwater Management Program	annually	May be implemented through the use of Town website, Town hotline, clean-up teams, monitoring teams, or a stormwater advisory committee.	\$2,500 - \$5,000 for 5-year permit term (\$500 to \$1,000 per year) (assumes at least one activity annually over five years and that volunteer organizations will assist)
2.3.3.c	Report on public participation opportunities	annually	Report progress in Annual MS4 Stormwater Report.	(2)
ILLCIT DISCHARGE DETECTION & ELIMINATION				
2.3.4.2.a	Eliminate illicit discharges	60 days from detection or as expeditiously as possible	Eliminate illicit discharges as they are identified or establish a schedule for elimination for discharges that cannot be removed within 60 days.	Budget \$10,000 to \$20,000 per year over 10 years as an allowance for removal of illicit contractions.
2.3.4.2.a	Report dates of illicit identification and schedules for removal	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.4.a	Mitigate SSOs	Expediently as possible	Eliminate SSO as expeditiously as possible and take interim mitigation measures to minimize the discharge of pollutants to and from the Town until elimination is completed.	-

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.4.4.b	Complete Inventory of Sanitary Sewer Overflows (SSOs)	120 days from effective date	Identify all known locations where SSOs have discharged within the previous five years.	Town Forces
2.3.4.4.c	Report SSOs	24 hours of awareness	Provide verbal notice to EPA within 24 hours, and written notice to EPA and MADEP within 5 days.	Town Forces
2.3.4.4.d	Update SSO Inventory	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.5	Develop outfall & interconnection inventory	1 year from effective date	This requirement includes identifying each outfall and interconnection, recording its location and condition, and providing a framework for tracking inspections, screenings and other activities. The inventory needs to include the information identified under Item 2.3.4.5.c. The Town has approximately 450 outfalls and interconnections. Most of the Town's outfalls have been located in the field. Condition information has also been recorded for most of these outfalls as part of dry weather screening previously completed by the Town.	Assume inventory for the remaining outfalls and any information required as part of the inventory, but not collected to date for other outfalls, would be completed in conjunction with dry weather screening.
2.3.4.5.b	Report on outfall & interconnection inventory	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.5.b	Physically label all MS4 outfalls with unique identifier	end of permit term	All MS4 outfall pipes must be labeled in the field with a unique identifier. The Town has approximately 400 outfalls. It appears that a unique identifier has been added to all outfalls in GIS, and this same identifier must be used to physically label all outfalls in the field.	\$20,000 to \$40,000 (\$4,000 to \$8,000 per year) (Assume \$50 to \$100 per sign per outfall to purchase and install.)
2.3.4.6	Map the MS4 features required & recommended in 2.3.4.6.a.i, ii & iii	2 years from effective date	The Town has mapped their outfalls and receiving waters, but only limited mapping has been completed for the rest of the storm drain system. Anticipated mapping additions include: pipes; open channel conveyances; catch basins; drain manholes; interconnections with other MS4s; municipally owned stormwater treatment structures; 450 catchment delineations; and use impairments for water bodies on the 303(d) list. Unique identifiers may also need to be added to all outfalls in GIS if not already included or modification may be needed.	\$130,000 to \$160,000
2.3.4.6.c	Report on mapping progress	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.7	Written IDDE program (include responsibility statement, written procedure for outfall/interconnection sampling, written procedure for IDDE investigation)	1 year from effective date	Develop a written IDDE Program to meet the conditions of the permit.	\$2,500 - \$5,000
2.3.4.7.a	Adopt regulatory mechanism providing legal authority to prohibit/investigate/eliminate illicit discharges	Should have been completed under 2003 permit.	The Town amended their existing Zoning Bylaws at the December 5, 2007 Town Meeting to incorporate a new bylaw section (Section 6.8) governing discharges to the municipal storm drain system.	-
2.3.4.7.c	Complete initial illicit discharge potential assessment and priority ranking based on existing information	1 year from effective date	Assess and rank all outfall drainage areas ("catchments") for the potential to have illicit discharges and/or SSOs. Develop matrix to rank each outfall catchment area. Priority rank catchments based on where certain risk factors may be present as provided in the permit. The Town has approximately 400 outfalls, which equates to 400 catchments for ranking. Assume an additional 50 interconnection for a total of 450 catchments for ranking.	\$10,000 - \$15,000
2.3.4.7.c.iii	Report on list of catchments and results of rankings	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.4.8.a	Dry-weather outfall/interconnection screening & sampling (except Excluded & Problem Catchments)	3 years from effective date	Inventory & complete dry weather screening & sampling of every MS4 outfall and interconnection. Dry weather sampling parameters shall include, at a minimum, ammonia, chlorine, E.coli, surfactants and temperature. Phosphorus and TSS will also need to be included at all outfalls tributary to Lake Shirley to meet the impaired waters requirement. All can be performed with test kits with the exception of bacteria and phosphorus; however, cost provided assumes lab analysis for ammonia, E.coli, surfactants, TSS and phosphorus, and test kits for temperature and chlorine. The Town has approximately 450 outfalls and interconnections. For budgeting purposes, it is assumed that all outfalls/interconnections will have dry weather flow in need of sampling (70 outfalls/interconnections). Outfalls/interconnections with evidence of contamination, but without active dry weather flow would need to be revisited. Assume that approx. 5% of all outfalls + interconnections (25 outfalls/interconnections) would need to be revisited and that 20% (5 outfalls/interconnections) would have dry weather flow. The Town completed dry weather screening of 401 outfalls under the 2003 Permit, and 32 outfalls had dry weather flow, but no dry weather samples were collected.	\$50,000 to \$75,000
2.3.4.8.b	Implement IDDE catchment investigation procedure as per 2.3.4.7.a (System Vulnerability, MHI inspection, wet-weather sampling, segment isolation, etc.)	3 months from written procedure; not more than 15 months from effective date	Assume that 30% of all outfalls/interconnections have at least one System Vulnerability Factor in its catchment, which triggers the requirement for wet-weather sampling. For this reason, the Budget Estimate assumes that 30% of the 450 outfalls/interconnections will require wet-weather sampling (135 outfalls/interconnections). For budgeting purposes, it is assumed that an Illicit Discharge Detection and Elimination Investigation Program will need to be implemented in 85% of catchments. Catchments with no potential for illicit discharges (based on the catchment ranking exercise completed under Task 2.3.4.7.c.) can be excluded from the IDDE Program.	Assume \$40,000 to \$50,000 in Year 2 for wet weather sampling. Budget \$40,000 to \$50,000 allowance per year in Years 2 to 10 for IDDE investigation and sampling. Budget \$10,000 to \$20,000 allowance per year in Years 2 to 10 for CCTV inspection and dye testing to investigate illicit connections. Budget allowance for removal of illicit connections included under 2.3.4.2.a.
2.3.4.8.c	Complete IDDE in all catchments, regardless of sampling results	Not specified (see 2.3.4.8.c.ii)		
2.3.4.8.c.i	Complete IDDE investigation in 80% of Problem Catchments	3 years from effective date		(2)
2.3.4.8.c.ii	Complete IDDE investigation in 100% of Problem Catchments	5 years from effective date		(2)
2.3.4.8.c.iii	Complete IDDE investigation in all catchments where outfall/interconnection screening information indicates sewer input based upon olfactory/visual evidence or sampling results	5 years from effective date		(4)
2.3.4.8.c.iii	Complete IDDE investigation in 40% of catchments	5 years from effective date		(2)
2.3.4.8.c.iii	Complete IDDE investigation in 100% of catchments	10 years from effective date		
2.3.4.8.e	Evaluate & report IDDE program progress	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.4.9	Define indicators of IDDE program success	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.4.10	Conduct IDDE employee training	at least annually	Continue to train employees about the IDDE Program including how to recognize illicit discharges and SSOs.	
2.3.4.10	Report on IDDE employee training	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.5	Implement & enforce Construction Site Stormwater Runoff Control (CSSRC) Program	not stated	Continue to implement and enforce a program to reduce pollutants in stormwater runoff from construction activities per the 2003 Permit.	

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.5.c.i	Adopt regulatory mechanism requiring use of sediment/erosion control at construction sites	Should have been completed under 2003 permit.	The Town's Zoning Bylaws were amended at the December 5, 2007 Town Meeting to include Section 6.7, which regulates stormwater management for any construction activity that results in a land disturbance equal to or greater than one acre of land. It requires the implementation of erosion and sediment controls to prevent impacts during disturbance and construction activities. The Town's Subdivision Regulations also require developers to prepare and submit an Erosion Control Plan covering all phases of construction.	-
2.3.5.c.ii	Develop written procedures for site inspections and enforcement of sediment and erosion control measures. The procedures shall clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The program shall provide that the permittee may, to the extent authorized by law, impose sanctions to ensure compliance with the local program.	1 year from effective date	Ensure that procedures for site inspections and enforcement of sediment and erosion control measures are in written form and meet permit requirements.	(3)
2.3.5.c.iii	Require developers to implement a sediment and erosion control program that includes BMPs appropriate for the conditions at the construction site.	not stated	Ensure that current requirements meet all the conditions of the permit, and revise as needed.	(3)
2.3.5.c.iv	Include requirements for waste control, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes, in the CSSRC ordinance.	not stated	Include current requirements in Town's CSSRC Program if not already included.	(3)
2.3.5.c.v	Develop written site plan review procedures. Site plan review shall include a review by the permittees of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development. The review procedure shall incorporate procedures for the consideration of potential water quality impacts; procedures for pre-construction review; and procedures for receipt and consideration of information submitted by the public. Site plan review procedure shall include evaluation of opportunities for use of low impact design and green infrastructure. When the opportunity exists, the permittee shall encourage project proponents to incorporate these practices into the site design. The permittee shall track the number of site reviews, inspections, and enforcement actions.	1 year from effective date	Ensure that the Town's site plan review procedures are in written form and that they meet current permit requirements.	(3)
POST-CONSTRUCTION STORMWATER MANAGEMENT				
2.3.6.a	Implement & enforce SW management for New Development/Redevelopment	not stated	Continue to implement and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects per the 2003 Permit.	-
2.3.6	Adopt regulatory mechanism that regulates runoff from new development/redevelopment	Should have been completed under 2003 permit.	The Town's Zoning Bylaws were amended at the December 5, 2007 Town Meeting to include Section 6.7, which regulates stormwater management for all development and redevelopment projects that disturb one (1) acre or more.	-

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.6.a.ii	Amend existing regulatory mechanism to contain provisions at least as stringent as those outlined under Part 2.3.6.a.i which include: (a) designing stormwater management systems to retain the first inch of runoff from all impervious surfaces or provide pollutant removal equal to or greater than the level of pollutant removal provided through the use of bioinfiltration on the first inch of runoff from all impervious surfaces; (b) requiring the use of treatment BMPs instead of infiltration BMPs on sites with documented soil contamination and on industrial sites; (c) incorporating designs that allow for the shutdown and containment of BMPs designed to include infiltration near environmentally sensitive areas; (d) require BMPs to be constructed in accordance with The Massachusetts Stormwater Handbook Volume 2 Chapter 2; (e) require the development of a long-term operation and maintenance plan to inspect and repair installed BMPs; and (f) avoid disturbance of areas susceptible to erosion and sediment loss.	2 years from effective date	The Town will need to amend their existing regulations to incorporate the provisions listed. Of those items listed, the Town does currently require the development of an O&M Plan for all new development/redevelopment projects where more than one acre is disturbed. Further enhancement may be needed to the existing O&M plan requirements to meet the conditions of the permit.	(3)
2.3.6.a.iii	Develop procedures for Post Construction Stormwater Management to ensure submission of as-built plans within a year from completed construction, and long-term O&M of BMPs; include in written SWMP.	1 year from effective date	The Town's existing Stormwater Management Bylaw currently requires the submission of O&M Plans for the long-term operation and maintenance of BMPs. The Town may need to further amend their O&M Plan requirements to meet the conditions of the permit. The Town must also have procedures in place that require the submission of as-built plans within a year from completed construction.	(3)
2.3.6.a.iii	Report on measures to comply with 2.3.6.a.iii in annual MS4 stormwater report	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.6.b	Develop a report assessing street/parking design related to creation of impervious cover	Report progress annually; complete 3 years from effective date	Develop report assessing current street design and parking lot guidelines and other local requirements impacting the creation of impervious cover. Determine whether design standards can be modified to support low impact design. If modifications can be made, outline recommendations and proposed schedule for modifying applicable standards.	\$5,000 - \$10,000
2.3.6.c	Develop a report assessing local regulations to allow the listed green practices	Report progress annually; complete 4 years from effective date	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices (green roofs, infiltration practices, water harvesting devices) allowable when appropriate site conditions exist.	\$5,000 - \$10,000
2.3.6.d.i & ii	Estimate baseline impervious area and annual increase/decrease in acres of impervious area	annual MS4 stormwater reports	Develop method to track changes in impervious area as development/redevelopment occurs. Starting impervious area estimates available from EPA. Estimates to be included in Annual MS4 Stormwater Report each year.	(2)
2.3.6.d.iii	Inventory & priority ranking for permittee-owned BMP retrofits	4 years from effective date	Complete an inventory and priority ranking of Town property and infrastructure that could be retrofitted with BMPs to reduce frequency, volume and pollutant loads associated with stormwater discharges.	\$10,000 - \$20,000
2.3.6.d.iv	Report progress on implementation of BMP retrofits	annual MS4 stormwater reports beginning Year 5	Report progress in Annual MS4 Stormwater Report.	(2)
GOOD HOUSEKEEPING & POLLUTION PREVENTION FOR PERMITTEE-OWNED OPERATIONS:				
2.3.7.a.i & ii	Develop written operation & maintenance procedures for municipal activities.	1 year from effective date	Develop written operation & maintenance procedures for parks and open space, buildings and facilities where pollutants are exposed to stormwater runoff, as well as vehicles and equipment.	\$7,500 - \$10,000
2.3.7.a.ii	Complete inventory of listed municipal facilities	1 year from effective date; review/update annually	Develop inventory of all municipal facilities; Review inventory annually and update as necessary.	Town Forces

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.7.a.ii.b	Provide training on use, storage, & disposal of petroleum products to applicable staff	not stated	Provide training on use, storage, & disposal of petroleum products to applicable municipal staff.	(4)
2.3.7.a.iii.a	Written program detailing activities/procedures the MS4 will implement to ensure infrastructure is maintained in timely manner	1 year from effective date	Develop written plan/schedule for activities such as street sweeping, catch basin cleaning, maintenance of structural BMPs, cleaning of storm drains, and assessment/upgrade of drainage system infrastructure.	Cost included under 2.3.7.a.i.
2.3.7.a.iii.b	Develop & implement a plan to optimize catch basin cleaning & include in written SWMP	1 year from effective date	Develop and implement a plan to optimize inspection, cleaning, and maintenance of catch basins to ensure that permit conditions are met.	\$5,000 to \$7,500
2.3.7.a.iii.b	Implement routine inspection/cleaning/maintenance of catch basins to ensure sumps <50% full; report on activities as specified; investigate excessive sediment; log/report CB cleaning	continuous; annual MS4 stormwater reports	Clean catch basins as needed to ensure that no sump is more than 50% full at any given time. The Town has between 700 and 900 catch basins town-wide and currently cleans all catch basins at least once every two years. Catch basins adjacent to water resources are cleaned twice per year in the spring and the fall. Assume that the Town's currently cleaning schedule will meet the permit requirements.	The Town cleans their catch basins using Town staff and equipment. It is assumed that no additional expenditures for catch basin cleaning will be needed above what the Town currently spends.
2.3.7.a.iii.c & d.	Sweep streets/parking lots 1x/year in spring; report on efforts	annually; annual MS4 stormwater reports	The Town currently sweeps all public streets and municipal parking lots annually. Roadways adjacent to water resources are swept twice per year. The Town will need to continue to sweep streets in the drainage area tributary to Lake Shirley at least twice per year in the spring and the fall to meet the permit conditions outlined under Appendix H, Part II.1.a.1.3. All municipal parking lots within the Lake Shirley drainage area will also need to be swept twice per year in the spring and the fall.	The Town currently completes street sweeping using Town staff and equipment. It is assumed that no additional expenditures for street sweeping will be needed above what the Town currently spends.
2.3.7.a.iii.d	Ensure proper storage of CB cleanings & street sweeping to prevent runoff	NA	Examine storage of CB cleanings & street sweepings	Cost included under 2.3.7.a.i.
2.3.7.a.iii.e	Establish procedures for winter road maintenance	not stated	Look at storage and usage of salt and sand; evaluate opportunities for use of alternative deicers.	Cost included under 2.3.7.a.i.
2.3.7.a.iii.f	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; and for annual inspection of treatment structures	not stated	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; inspect treatment structures annually at a minimum.	Cost to develop procedures included under 2.3.7.a.i.; implementation & inspection to be completed by the Town
2.3.7.a.iv	Report on all Good Housekeeping/Pollution Prevention requirements	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.a.v	Keep written record of all Good Housekeeping/Pollution Prevention activities	continuous	Keep written record of all maintenance activities, inspections and training completed.	-
2.3.7.b	Develop/implement written Stormwater Pollution Prevention Plans for required facilities as per permit	2 years from effective date	Develop and implement SWPPPs for all municipal waste handling facilities. The Town already has an existing SWPPP developed for the DPW Facility on Chase Road. This SWPPP should be reviewed to ensure that it meets all permit requirements. The Town has a capped landfill on Youngs Avenue where yard waste is collected 12 weekends per year and composted. It is not anticipated that a SWPPP will be needed for this facility.	\$2,500 to \$5,000 (Budget included for any updates that may be needed to the Town's existing SWPPP for the DPW Facility to meet the permit requirements.)

EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - ENTIRE PERMIT
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.7.b.ii & iii	Perform SWPPP required actions/inspections/training	frequencies as per permit	Perform quarterly inspections at facilities and conduct annual employee training.	(4)
2.3.7.b.iii	Report on Stormwater Pollution Prevention Plan inspections	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.b.iv	Maintain written records for 2.3.7	continuous	Keep written record of all maintenance activities, inspections and training completed.	-
SECTION 3 - ADDITIONAL REQUIREMENTS FOR DISCHARGES TO SURFACE DRINKING-WATER SUPPLIES AND THEIR TRIBUTARIES				
3.0.a	Make MS4 discharges to surface drinking water supply sources & their tributaries a priority in the SWMP	continuous; report annually	The Town does not have any stormwater discharges to surface water drinking water supply sources or their tributaries.	-
3.0.b	Provide pretreatment/spill control for MS4 discharges to public surface drinking water supply sources & their tributaries	continuous; report annually	The Town does not have any stormwater discharges to surface drinking water supply sources or their tributaries.	-
3.0.c	Avoid direct discharges to Class A waters	continuous; report annually	There are no Class A waters in Lunenburg.	-
SECTION 4 - PROGRAM EVALUATION, RECORDKEEPING & REPORTING				
4.1.a	Self-evaluate compliance with the permit; include documentation of evaluation in written SWMP	annually	Annually evaluate Town's compliance with permit conditions.	(2)
4.1.b	Evaluate BMP effectiveness & change if needed under provisions of permit	not stated	Evaluate BMP effectiveness in achieving permit objectives & modify BMPs accordingly as needed.	(2)
4.1.b	Report BMP modifications	annual MS4 stormwater reports	Include in Annual MS4 Stormwater Report.	(2)
4.2	MS4 must keep records for ≥5yrs; make available to public	Continuous	Maintain annual MS4 stormwater reports and make available to the public.	-
4.3	Document results of MS4 outfall screening/sampling & any other monitoring/studies	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
4.4	Submit Annual MS4 Stormwater Report	annually 90 days from effective date	Prepare Annual MS4 Stormwater Report.	\$7,500 - \$10,000/yr (It is anticipated that first year annual costs will be higher than subsequent years.)

Requirements specific to discharges to impaired waters without an approved TMDL (Appendix H)

Planning Level Estimate for Permit Compliance;
Planning Level Estimate for Permit Compliance (w/ 20% contingency):

\$1,042,500 to \$1,632,500
\$1,251,000 to \$1,959,000

- (1) Cost included as part of completing Notice of Intent and developing written Stormwater Management Plan.
(2) Cost included as part of preparing Annual MS4 Stormwater Report.
(3) Budget \$10,000 to \$15,000 to review all regulatory mechanisms and make recommendations on how to modify the regulations for compliance.
(4) Budget \$10,000 to \$15,000 the first year to conduct all employee training required under the permit, and budget \$5,000 to \$7,500 in Years 2 through 5 of the permit.
(5) Costs for IDDE investigation and correction of illicit connections were generated for the 10-year timeframe allotted.

LUNENBURG, MA
EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - YEAR 1
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	SECTION 1 - INTRODUCTION	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
1.7.2	Complete Notice of Intent (NOI)		90 days from effective date	Prepare and Submit Notice of Intent.	
1.8.1	Endangered Species Determination (complete review; certify in Notice of Intent)		90 days from effective date	Revisit location of permitted stormwater discharges relative to endangered species and ensure no adverse impact (Part of NOI) or develop BMPs to reduce impact.	
1.9.2	Historic Properties Determination (complete review; certify in Notice of Intent)		90 days from effective date	Revisit location of permitted stormwater discharges relative to historic properties and ensure no adverse impact (Part of NOI) or develop BMPs to reduce impact.	
1.10	Develop Written Stormwater Management Plan (SWMP)		1 year from effective date	Develop written plan outlining activities and measures to be implemented to meet the conditions of the permit. The SWMP will be developed in Year 1 and then will need to be updated on an ongoing basis throughout the permit term. Required contents of the SWMP are outlined in Section 1.10.2 of the 2014 Draft MA MS4 General Permit.	\$15,000 - \$25,000
1.10.b	Update Best Management Practices (BMPs)		1 year from effective date	Modify and update BMPs from the 2003 permit to meet the conditions of the new permit - to be completed as part of the NOI process.	
1.10.1	Maintain copy of Stormwater Management Plan, make available to public		1 year from effective date	Make SWMP available to the public at Town Hall and/or on Town website.	
SECTION 2 - NON-NUMERIC EFFLUENT LIMITATIONS					
2.1 - Water Quality Based Effluent Limitations					
2.1.1.b	For MS4 discharges to a water body with an approved TMDL identified in Part 2.2.1, comply with Part 2.2.1 and Appendix F of the Permit		see Appendix F of the 2014 Draft MA MS4 General Permit	Lunenburg does not currently have any water bodies with approved TMDLs that are regulated by the permit.	
2.1.1.c	For MS4 discharges to a water body that is water quality limited and not subject to an approved TMDL or for municipalities located within Part 2.2.2a-b, comply with Part 2.2.2 and Appendix H of the Permit		see Appendix H of the 2014 Draft MA MS4 General Permit	Per Part 2.2.2, Lunenburg has been identified as a municipality that discharges to water bodies that are impaired due to phosphorus, or their tributaries, and is therefore subject to the requirements of Appendix H. For Lake Shirley, the causes of the impairment are listed as Excess Algal Growth and Dissolved Oxygen, both of which have Total Phosphorus listed as the monitoring parameter. In addition to Total Phosphorus, another cause of the impairment for Lake Shirley is turbidity, where the monitoring parameter is Total Suspended Solids. Therefore, Lake Shirley is also impaired due to solids, and subject to the requirements of Appendix H, Part V.	Costs included under 1.7.2, 1.10, H.II and H.V.
2.1.1.d	For all other discharges (not subject to the requirements of Part 2.1.1.b and Part 2.1.1.c of the Permit) contributing to a violation of applicable receiving water quality standards, eliminate condition causing or contributing to exceedance of water quality standards		within 60 days of becoming aware of the situation	If a discharge is identified that contributes to an exceedance of applicable water quality standards, eliminate the conditions contributing to or causing the exceedance within 60 days.	Cost included under IDDE under Item 2.3.4.2.a.
2.1.2	Written notification to MADEP & EPA as needed & documentation in the Town's SWMP regarding new or increased stormwater discharges		as-needed	Any new or increased stormwater discharges must satisfy MA anti-degradation regulations.	
2.2 - Discharges to Impaired Waters					
2.2	Identify all outfalls/interconnections that discharge to waters with an approved TMDL or discharge to certain waters identified as "water quality limited water bodies"		SWMP (1 yr) & annual MS4 stormwater reports	Identify all outfalls or interconnections that discharge to water quality limited water bodies.	(1) (2)
2.2.1	For MS4 discharges to a water body with an approved TMDL, comply with Appendix F, Part A of the Permit		see Appendix F of the 2014 Draft MA MS4 General Permit	Lunenburg does not have currently any water bodies with approved TMDLs that are regulated by the permit.	

Item No.	Requirement	IMPAIRED - PHOSPHORUS (INCLUDES TRIBUTARIES)	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
H.II.1.a.i.1	Distribute clippings/fertilizer message to required audiences		Annually in March/April		
H.II.1.a.i.1	Distribute pet waste management message to Residential		Annually in June/July		
H.II.1.a.i.1	Distribute leaf litter disposal message to Residential/Business/Commercial		Annually August-October		
H.II.1.a.i.2	2.3.6 Ordinance to require BMPs optimized for Phosphorus removal		With 2.3.6, 2 years from effective date	Develop and disseminate required public education information. Include in Town's Stormwater Management Bylaw a requirement that new development and redevelopment stormwater BMPs be optimized for phosphorus removal.	\$2,500 - \$3,500 per year over 5 year permit term
H.II.1.a.i.3	2.3.7 Grass-clippings procedures & blowing prohibited for MS4 property		With 2.3.7, 1 year from effective date	Develop program to manage grass clippings and leaf litter on permittees owned property.	(3)
H.II.1.a.i.3	2.3.7 Sweep streets (lots >2/yr spring & fall		Sweep at least twice/year	Increase frequency of sweeping of public streets and municipal parking lots to a minimum of two times per year in drainage area tributary to Lake Shirley.	Cost included under 2.3.7 a.i.
H.V.3	If discharge is found to be to an Impaired Water, remove condition or Implement BMPs identified under Appendix H.V.4.i.1, and H.V.4.i.2, to reduce solids.	IMPAIRED - OIL/GREASE, SOLIDS OR METALS	60 days from awareness (or plan/schedule)	Eliminate condition causing or contributing to the impairment, & document actions in SWMP	Cost included under 2.3.7 a.iii.c & d.
H.V.4.i.1	2.3.6 Ordinance to require spill containment/isolation for Commercial/Industrial properties		With 2.3.6 i/2 years from EDI	Include in Town's Stormwater Management Bylaw a requirement that for new development and redevelopment, stormwater management systems designed on commercial and industrial land use areas draining to the impaired water incorporate spill containment isolation.	(3)
H.V.4.i.2	Increased street sweeping & CB inspection/cleaning in targeted areas		Annual Reports	Increase street sweeping and catch basin cleaning in high density areas with high pollutant load potential tributary to Lake Shirley. The Town already sweeps street adjacent to water resources twice per year. Street sweeping and catch basin cleaning schedule to be determined by the permittee. Catch basin sumps to be no more than 50% full.	Street sweeping cost included under 2.3.7 a.iii.c & d. Catch basin cleaning cost included under 2.3.7 a.iii.b.
H.V.5	Submit documentation that discharges do not contain solids	Alternative to Requirements H.V.1-4 (above)	When Approved by EPA/DEP	Submit documentation that discharges do not contain solids through long-term monitoring.	
2.3.2.a-d	Distribute at least 2 educational messages to each of 4 targeted audiences (residents, businesses/commercial/institutional, developers and industrial). Different messages to the same targeted audience shall be distributed at least one year apart.	2.3 - Requirements to Reduce Pollutants to the Maximum Extent Practicable (MEP)	begin year 1; continue throughout permit term	Develop/distribute a minimum of 8 messages over the permit term. Educational messages can include brochures, newsletters, information posted to the Town's website, newspaper articles, public service announcements, displays in municipal buildings, etc.	\$10,000 - \$20,000 for 5-year permit term (\$2,000 to \$4,000 per year) (Varies depending on whether materials are readily available or need to be developed from scratch.)
2.3.2.e	Identify method to evaluate effectiveness of message; implement		not stated	Determine method to evaluate message effectiveness; implement method.	(2)
2.3.2.f	Modify ineffective messages/methods		before next message distribution	Modify message or distribution methods if applicable.	
2.3.2.g	Report on messages as per permit		annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.3.a	Meet Public Notice requirements	PUBLIC INVOLVEMENT & PARTICIPATION	continuous	Ensure that all public involvement activities comply with state public notice requirements.	
2.3.3.a	Make Stormwater Management Plan & Annual MS4 Stormwater Report available to public		continuous	Make SWMP and annual MS4 stormwater reports available to public at Town Hall and/or on the Town's website.	
2.3.3.b	Public opportunity to participate in the review/implementation of the Stormwater Management Program		annually	May be implemented through the use of Town website, Town hotline, clean-up teams, monitoring teams, or a stormwater advisory committee.	\$2,500 - \$5,000 for 5-year permit term (\$500 to \$1,000 per year) (assumes at least one activity annually over five years and that volunteer organizations will assist)
2.3.3.c	Report on public participation opportunities		annually	Report progress in Annual MS4 Stormwater Report.	(2)

Item No.	Requirement	ILLEGIT DISCHARGE DETECTION & ELIMINATION	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.4.2.a	Eliminate illicit discharges		60 days from detection or as expeditiously as possible	Eliminate illicit discharges as they are identified or establish a schedule for elimination for discharges that cannot be removed within 60 days.	Budget \$10,000 to \$20,000 per year over 10 years as an allowance for removal of illicit connections.
2.3.4.2.a	Report dates of illicit identification and schedules for removal		annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.4.a	Mitigate SSOs		Expediently as possible	Eliminate SSO as expeditiously as possible and take interim mitigation measures to minimize the discharge of pollutants to and from the Town until elimination is completed.	-
2.3.4.4.b	Complete Inventory of Sanitary Sewer Overflows (SSOs)		120 days from effective date	Identify all known locations where SSOs have discharged within the previous five years.	Town Forces
2.3.4.4.c	Report SSOs		24 hours of awareness	Provide verbal notice to EPA within 24 hours, and written notice to EPA and MADEP within 5 days.	Town Forces
2.3.4.4.d	Update SSO inventory		annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.5	Develop outfall & interconnection inventory		1 year from effective date	This requirement includes identifying each outfall and interconnection, recording its location and condition, and providing a framework for tracking inspections, screenings and other activities. The inventory needs to include the information identified under item 2.3.4.5.c. The Town has approximately 450 outfalls and interconnections. Most of the Town's outfalls have been located in the field. Condition information has also been recorded for most of these outfalls as part of dry weather screening previously completed by the Town.	Assume inventory for the remaining outfalls and any information required as part of the inventory, but not collected to date for other outfalls, would be completed in conjunction with dry weather screening.
2.3.4.5.b	Report on outfall & interconnection inventory		annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.5.b	Physically label all MS4 outfalls with unique identifier		end of permit term	All MS4 outfall pipes must be labeled in the field with a unique identifier. The Town has approximately 400 outfalls. It appears that a unique identifier has been added to all outfalls in GIS, and this same identifier must be used to physically label all outfalls in the field.	\$20,000 to \$40,000 (\$4,000 to \$8,000 per year) (Assume \$50 to \$100 per sign per outfall to purchase and install.)
2.3.4.6	Map the MS4 features required & recommended in 2.3.4.6.a.i, ii & iii		2 years from effective date	The Town has mapped their outfalls and receiving waters, but only limited mapping has been completed for the rest of the storm drain system. Anticipated mapping additions include: pipes; open channel conveyances; catch basins; drain manholes; interconnections with other MS4s; municipally owned stormwater treatment structures; 450 catchment delineations; and use impairments for water bodies on the 303(d) list. Unique identifiers may also need to be added to all outfalls in GIS if not already included or modification may be needed.	\$130,000 to \$160,000
2.3.4.6.c	Report on mapping progress		annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.7	Written IDDE program (include responsibility statement, written procedure for outfall/interconnection sampling, written procedure for IDDE investigation)		1 year from effective date	Develop a written IDDE Program to meet the conditions of the permit.	\$2,500 - \$5,000
2.3.4.7.a	Adopt regulatory mechanism providing legal authority to prohibit/investigate/eliminate illicit discharges		Should have been completed under 2003 permit.	The Town amended their existing Zoning Bylaws at the December 5, 2007 Town Meeting to incorporate a new bylaw section (Section 6.8) governing discharges to the municipal storm drain system.	-

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.5.c.i	Develop written procedures for site inspections and enforcement of sediment and erosion control measures. The procedures shall clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The program shall provide that the permittee may, to the extent authorized by law, impose sanctions to ensure compliance with the local program.	1 year from effective date	Ensure that procedures for site inspections and enforcement of sediment and erosion control measures are in written form and meet permit requirements.	(3)
2.3.5.c.iii	Require developers to implement a sediment and erosion control program that includes BMPs appropriate for the conditions at the construction site.	not stated	Ensure that current requirements meet all the conditions of the permit, and revise as needed.	(3)
2.3.5.c.iv	Include requirements for waste control, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes, in the CSSRC ordinance.	not stated	Include current requirements in Town's CSSRC Program if not already included.	(3)
2.3.5.c.v	Develop written site plan review procedures. Site plan review shall include a review by the permittee of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development. The review procedure shall incorporate procedures for the consideration of potential water quality impacts; procedures for pre-construction review; and procedures for receipt and consideration of information submitted by the public. Site plan review procedure shall include evaluation of opportunities for use of low impact design and green infrastructure. When the opportunity exists, the permittee shall encourage project proponents to incorporate these practices into the site design. The permittee shall track the number of site reviews, inspections, and enforcement actions.	1 year from effective date	Ensure that the Town's site plan review procedures are in written form and that they meet current permit requirements.	(3)
POST-CONSTRUCTION STORMWATER MANAGEMENT				
2.3.6.a	Implement & enforce SW management for New Development/Redevelopment	not stated	Continue to implement and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects per the 2003 Permit.	
2.3.6	Adopt regulatory mechanism that regulates runoff from new development/redevelopment	Should have been completed under 2003 permit.	The Town's Zoning Bylaws were amended at the December 5, 2007 Town Meeting to include Section 6.7, which regulates stormwater management for all development and redevelopment projects that disturb one (1) acre or more.	
2.3.6.a.ii	Amend existing regulatory mechanism to contain provisions at least as stringent as those outlined under Part 2.3.6.a.i which include: (a) designing stormwater management systems to retain the first inch of runoff from all impervious surfaces or provide pollutant removal equal to or greater than the level of pollutant removal provided through the use of bioinfiltration on the first inch of runoff from all impervious surfaces; (b) requiring the use of treatment BMPs instead of infiltration BMPs on sites with documented soil contamination and on industrial sites; (c) incorporating designs that allow for the shutdown and containment of BMPs designed to include infiltration near environmentally sensitive areas; (d) require BMPs to be constructed in accordance with The Massachusetts Stormwater Handbook Volume 2 Chapter 2; (e) require the development of a long-term operation and maintenance plan to inspect and repair installed BMPs; and (f) avoid disturbance of areas susceptible to erosion and sediment loss.	2 years from effective date	The Town will need to amend their existing regulations to incorporate the provisions listed. Of those items listed, the Town does currently require the development of an O&M Plan for all new development/redevelopment projects where more than one acre is disturbed. Further enhancement may be needed to the existing O&M plan requirements to meet the conditions of the permit.	(3)
2.3.6.a.ii	Develop procedures for Post Construction Stormwater Management to ensure submission of as-built plans within a year from completed construction, and long-term O&M of BMPs; include in written SVMMP.	1 year from effective date	The Town's existing Stormwater Management Bylaw currently requires the submission of O&M Plans for the long-term operation and maintenance of BMPs. The Town may need to further amend their O&M Plan requirements to meet the conditions of the permit. The Town must also have procedures in place that require the submission of as-built plans within a year from completed construction.	(3)
2.3.6.a.ii	Report on measures to comply with 2.3.6.a.ii in annual MS4 stormwater report	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.6.d.i & ii	Estimate baseline impervious area and annual increase/decrease in acres of impervious area	annual MS4 stormwater reports	Develop method to track changes in impervious area as development/redevelopment occurs. Starting impervious area estimates available from EPA. Estimates to be included in Annual MS4 Stormwater Report each year.	(2)
GOOD HOUSEKEEPING & POLLUTION PREVENTION FOR PERMITEE-OWNED OPERATIONS				
2.3.7.a.i & ii	Develop written operation & maintenance procedures for municipal activities.	1 year from effective date	Develop written operation & maintenance procedures for parks and open space, buildings and facilities where pollutants are exposed to stormwater runoff, as well as vehicles and equipment.	\$7,500 - \$10,000
2.3.7.a.ii	Complete inventory of listed municipal facilities	1 year from effective date; review/update annually	Develop inventory of all municipal facilities; Review inventory annually and update as necessary.	Town Forces
2.3.7.a.ii.b	Provide training on use, storage, & disposal of petroleum products to applicable staff	not stated	Provide training on use, storage, & disposal of petroleum products to applicable municipal staff.	(4)
2.3.7.a.ii.a	Written program detailing activities/procedures the MS4 will implement to ensure infrastructure is maintained in timely manner	1 year from effective date	Develop written plan/schedule for activities such as street sweeping, catch basin cleaning, maintenance of structural BMPs, cleaning of storm drains, and assessment/upgrade of drainage system infrastructure.	Cost included under 2.3.7.a.i.
2.3.7.a.iii.b	Develop & implement a plan to optimize catch basin cleaning & include in written SWMP	1 year from effective date	Develop and implement a plan to optimize inspection, cleaning, and maintenance of catch basins to ensure that permit conditions are met.	\$5,000 to \$7,500
2.3.7.a.iii.b	Implement routine inspection/cleaning/maintenance of catch basins to ensure sumps <50% full; report on activities as specified; Investigate excessive sediment; log/report CB cleaning	continuous; annual MS4 stormwater reports	Clean catch basins as needed to ensure that no sump is more than 50% full at any given time. The Town has between 700 and 900 catch basins town-wide and currently cleans all catch basins at least once every two years. Catch basins adjacent to water resources are cleaned twice per year in the spring and the fall. Assume that the Town's currently cleaning schedule will meet the permit requirements.	The Town cleans their catch basins using Town staff and equipment. It is assumed that no additional expenditures for catch basin cleaning will be needed above what the Town currently spends.
2.3.7.a.iii.c & d.	Sweep streets/parking lots 1x/year in spring; report on efforts	annually; annual MS4 stormwater reports	The Town currently sweeps all public streets and municipal parking lots annually. Roadways adjacent to water resources are swept twice per year. The Town will need to continue to sweep streets in the drainage area tributary to Lake Shirley at least twice per year in the spring and the fall to meet the permit conditions outlined under Appendix H, Part II.1.a.i.3. All municipal parking lots within the Lake Shirley drainage area will also need to be swept twice per year in the spring and the fall.	The Town currently completes street sweeping using Town staff and equipment. It is assumed that no additional expenditures for street sweeping will be needed above what the Town currently spends.
2.3.7.a.iii.d	Ensure proper storage of CB cleanings & street sweeping to prevent runoff	NA	Examine storage of CB cleanings & street sweepings	Cost included under 2.3.7.a.i.
2.3.7.a.iii.e	Establish procedures for winter road maintenance	not stated	Look at storage and usage of salt and sand; evaluate opportunities for use of alternative deicers.	Cost included under 2.3.7.a.i.
2.3.7.a.iii.f	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; and for annual inspection of treatment structures	not stated	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; inspect treatment structures annually at a minimum.	Cost to develop procedures included under 2.3.7.a.i.; implementation & inspection to be completed by the Town
2.3.7.a.iv	Report on all Good Housekeeping/Pollution Prevention requirements	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.a.v	Keep written record of all Good Housekeeping/Pollution Prevention activities	continuous	Keep written record of all maintenance activities, inspections and training completed.	-

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.7.b.i & iii	Perform SWPPP required actions/inspections/training	frequencies as per permit	Perform quarterly inspections at facilities and conduct annual employee training.	(4)
2.3.7.b.iii	Report on Stormwater Pollution Prevention Plan inspections	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.b.iv	Maintain written records for 2.3.7	continuous	Keep written record of all maintenance activities, inspections and training completed.	-
SECTION 4 - PROGRAM EVALUATION, RECORDKEEPING & REPORTING				
4.1.a	Self-evaluate compliance with the permit. Include documentation of evaluation in written SWMP	annually	Annually evaluate Town's compliance with permit conditions.	(2)
4.1.b	Evaluate BMP effectiveness & change if needed under provisions of permit	not stated	Evaluate BMP effectiveness in achieving permit objectives & modify BMPs accordingly as needed.	(2)
4.1.b	Report BMP modifications	annual MS4 stormwater reports	Include in Annual MS4 Stormwater Report.	(2)
4.2	MS4 must keep records for ≥5yrs; make available to public	Continuous	Maintain annual MS4 stormwater reports and make available to the public.	-
4.3	Document results of MS4 outfall screening/sampling & any other monitoring/studies	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
4.4	Submit Annual MS4 Stormwater Report	annually 90 days from effective date	Prepare Annual MS4 Stormwater Report.	\$7,500 - \$10,000/yr (It is anticipated that first year annual costs will be higher than subsequent years.)

Requirements specific to discharges to impaired waters without an approved TMDL (Appendix H)

Planning Level Estimate for Permit Compliance (w/ 20% contingency):

\$266,500 to \$349,000
\$319,800 to \$418,800

(1) Cost included as part of completing Notice of Intent and developing written Stormwater Management Plan.

(2) Cost included as part of preparing Annual MS4 Stormwater Report.

(3) Budget \$10,000 to \$15,000 to review all regulatory mechanisms and make recommendations on how to modify the regulations for compliance.

(4) Budget \$10,000 to \$15,000 the first year to conduct all employee training required under the permit, and budget \$5,000 to \$7,500 in Years 2 through 5 of the permit.

(5) Costs for IDDE investigation and correction of illicit connections were generated for the 10-year timeframe allotted.

LUNENBURG, MA
EPA NPDES PHASE 2 STORMWATER - MS4 GENERAL PERMIT REVIEW - YEAR 2
Breakdown of Permit Requirements (Based on 2014 Draft Massachusetts MS4 General Permit)

Item No.	Requirement	SECTION 2 - NON-NUMERIC EFFLUENT LIMITATIONS 2.1: Water Quality Based Effluent Limitations	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.1.1.b	For MS4 discharges to a water body with an approved TMDL identified in Part 2.2.1, comply with Part 2.2.1 and Appendix F of the Permit	see Appendix F of the 2014 Draft MA MS4 General Permit		Lunenburg does not currently have any water bodies with approved TMDLs that are regulated by the permit.	
2.1.1.c	For MS4 discharges to a water body that is water quality limited and not subject to an approved TMDL, or for municipalities located within Part 2.2.2.a-b, comply with Part 2.2.2 and Appendix H of the Permit	see Appendix H of the 2014 Draft MA MS4 General Permit		Per Part 2.2.2, Lunenburg has been identified as a municipality that discharges to water bodies that are impaired due to phosphorus, or their tributaries, and is therefore subject to the requirements of Appendix H. For Lake Shirley, the causes of the impairment are listed as Excess Algal Growth and Dissolved Oxygen, both of which have Total Phosphorus listed as the monitoring parameter. In addition to Total Phosphorus, another cause of the impairment for Lake Shirley is turbidity, where the monitoring parameter is Total Suspended Solids. Therefore, Lake Shirley is also impaired due to solids, and subject to the requirements of Appendix H, Part V.	Costs included under 1.7.2, 1.10, H.II and H.V.
2.1.1.d	For all other discharges (not subject to the requirements of Part 2.1.1.b and Part 2.1.1.c of the Permit) contributing to a violation of applicable receiving water quality standards, eliminate condition causing or contributing to exceedance of water quality standards	within 60 days of becoming aware of the situation		If a discharge is identified that contributes to an exceedance of applicable water quality standards, eliminate the conditions contributing to or causing the exceedance within 60 days.	Cost included under IDDE under Item 2.3.4.2.a.
2.1.2	Written notification to MA DEP & EPA as needed & documentation in the Town's SWMP regarding new or increased stormwater discharges	as-needed		Any new or increased stormwater discharges must satisfy MA antidegradation regulations.	
2.2	Identify all outfalls/interconnections that discharge to waters with an approved TMDL or discharge to certain waters identified as "water quality limited water bodies"	2.2: Discharges to Impaired Waters SWMP (1 yr) & annual MS4 stormwater reports		Identify all outfalls or interconnections that discharge to water quality limited water bodies.	(1) (2)
2.2.1	For MS4 discharges to a water body with an approved TMDL, comply with Appendix F, Part A of the Permit	see Appendix F of the 2014 Draft MA MS4 General Permit		Lunenburg does not currently have any water bodies with approved TMDLs that are regulated by the permit.	
H.II.1.a.1	Distribute clippings/fertilizer message to required audiences	IMPAIRED: PHOSPHORUS (INCLUDES TRIBUTARIES) Annually in March/April		Develop and disseminate required public education information.	\$2,500 - \$3,500 per year over 5 year permit term
H.II.1.a.1.1	Distribute pot waste management message to Residential	Annually in June/July		Inventory and priority ranking of Town property and infrastructure that could be retrofitted with BMPs to include consideration of BMPs that infiltrate stormwater.	Cost included under 2.3.6.d.3.
H.II.1.a.1.2	Distribute leaf litter disposal message to Residential/Business/Commercial	Annually August-October		Increase frequency of sweeping of public streets and municipal parking lots to a minimum of two times per year in drainage area tributary to Lake Shirley.	Cost included under 2.3.7.a.II.c & d.
H.II.1.a.1.3	2.3.6.1.b to include consideration of BMPs that infiltrate stormwater	With 2.3.6.1.b-4 years from effective date			
H.II.1.a.1.3	2.3.7 Sweep streets/lots >2/yr spring & fall	Sweep at least twice/year			
H.V.3	If discharge is found to be to an impaired water, remove condition or implement BMPs identified under Appendix H.V.4.1.1 and H.V.4.1.2 to reduce solids	IMPAIRED: OIL/GREASE, SOLIDS OR METALS 60 days from awareness (or plan/schedule)		Eliminate condition causing or contributing to the impairment & document actions in SWMP	
H.V.4.1.2	Increased street sweeping & CB inspection/cleaning in targeted areas	Annual Reports		Increase street sweeping and catch basin cleaning in high density areas with high pollutant load potential tributary to Lake Shirley. The Town already sweeps street adjacent to water resources twice per year. Street sweeping and catch basin cleaning schedule to be determined by the permittee. Catch basin sumps to be no more than 50% full.	Street sweeping cost included under 2.3.7.a.II.c & d. Catch basin cleaning cost included under 2.3.7.a.II.b

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3 - Requirements to Reduce Pollutants to the Maximum Extent Practicable (MEP)				
PUBLIC EDUCATION & OUTREACH				
2.3.2.a-d	Distribute at least 2 educational messages to each of 4 targeted audiences (residents, businesses/commercial/institutional, developers and industrial). Different messages to the same targeted audience shall be distributed at least one year apart.	begin year 1; continue throughout permit term	Develop/distribute a minimum of 8 messages over the permit term. Educational messages can include brochures, newsletters, information posted to the Town's website, newspaper articles, public service announcements, displays in municipal buildings, etc. Determine method to evaluate message effectiveness; implement method. Modify message or distribution methods if applicable. Report progress in Annual MS4 Stormwater Report.	\$10,000 - \$20,000 for 5-year permit term (\$2,000 to \$4,000 per year) (Varies depending on whether materials are readily available or need to be developed from scratch.)
2.3.2.e	Identify method to evaluate effectiveness of message; implement	not stated		
2.3.2.f	Modify ineffective messages/methods	before next message distribution		
2.3.2.g	Report on messages as per permit	annual MS4 stormwater reports		(2)
PUBLIC INVOLVEMENT & PARTICIPATION				
2.3.3.a	Meet Public Notice requirements	continuous	Ensure that all public involvement activities comply with state public notice requirements.	
2.3.3.a	Make Stormwater Management Plan & Annual MS4 Stormwater Report available to public	continuous	Make SWMP and annual MS4 stormwater reports available to public at Town Hall and/or on the Town's website.	
2.3.3.b	Public opportunity to participate in the review/implementation of the Stormwater Management Program	annually	May be implemented through the use of Town website, Town hotline, clean-up teams, monitoring teams, or a stormwater advisory committee.	\$2,500 - \$5,000 for 5-year permit term (\$500 to \$1,000 per year) (assumes at least one activity annually over five years and that volunteer organizations will assist)
2.3.3.c	Report on public participation opportunities	annually	Report progress in Annual MS4 Stormwater Report.	(2)
ILLEGIT DISCHARGE DETECTION & ELIMINATION				
2.3.4.2.a	Eliminate illicit discharges	60 days from detection or as expeditiously as possible	Eliminate illicit discharges as they are identified or establish a schedule for elimination for discharges that cannot be removed within 60 days.	Budget \$10,000 to \$20,000 per year over 10 years as an allowance for removal of illicit connections.
2.3.4.2.a	Report dates of illicit identification and schedules for removal	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.4.a	Mitigate SSOs	Expediently as possible	Eliminate SSO as expeditiously as possible and take interim mitigation measures to minimize the discharge of pollutants to and from the Town until elimination is completed.	
2.3.4.4.b	Complete Inventory of Sanitary Sewer Overflows (SSOs)	120 days from effective date	Identify all known locations where SSOs have discharged within the previous five years.	Town Forces
2.3.4.4.c	Report SSOs	24 hours of awareness	Provide verbal notice to EPA within 24 hours, and written notice to EPA and MADEP within 5 days.	Town Forces
2.3.4.4.d	Update SSO inventory	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.4.5.b	Physically label all MS4 outfalls with unique identifier	end of permit term	All MS4 outfall pipes must be labeled in the field with a unique identifier. The Town has approximately 400 outfalls. It appears that a unique identifier has been added to all outfalls in GIS, and this same identifier must be used to physically label all outfalls in the field.	\$20,000 to \$40,000 (\$4,000 to \$8,000 per year) (Assume \$50 to \$100 per sign per outfall to purchase and install.)
2.3.4.6.c	Report on mapping progress	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)

Item No.	Requirement	Deadline	Needs Specific to Lunenburg	Estimated Cost to Comply
2.3.4.8.b	Implement IDDE catchment investigation procedure as per 2.3.4.7.e (System Vulnerability, MH inspection, wet-weather sampling, segment isolation, etc.)	3 months from written procedure, not more than 15 months from effective date	Assume that 30% of all outfalls/interconnections have at least one System Vulnerability Factor in its catchment, which triggers the requirement for wet-weather sampling. For this reason, the Budget Estimate assumes that 30% of the 450 outfalls/interconnections will require wet-weather sampling (135 outfalls/interconnections). For budgeting purposes, it is assumed that an Illicit Discharge Detection and Elimination Investigation Program will need to be implemented in 85% of catchments. Catchments with no potential for illicit discharges (based on the catchment ranking exercise completed under Task 2.3.4.7.c.) can be excluded from the IDDE Program.	Assume \$40,000 to \$50,000 in Year 2 for wet weather sampling. Budget \$40,000 to \$50,000 allowance per year in Years 2 to 10 for IDDE investigation and sampling. Budget \$10,000 to \$20,000 allowance per year in Years 2 to 10 for CCTV inspection and dye testing to investigate illicit connections. Budget allowance for removal of illicit connections included under 2.3.4.2.a.
2.3.4.8.c	Complete IDDE in all catchments, regardless of sampling results	Not specified (see 2.3.4.8.c.ii)		
2.3.4.8.c.i	Complete IDDE investigation in 80% of Problem Catchments	3 years from effective date		(2)
2.3.4.8.c.i	Complete IDDE investigation in 100% of Problem Catchments	5 years from effective date		(2)
2.3.4.8.c.ii	Complete IDDE investigation in all catchments where outfall/interconnection screening information indicates sewer input based upon olfactory/visual evidence or sampling results	5 years from effective date		(4)
2.3.4.8.c.iii	Complete IDDE investigation in 40% of catchments	5 years from effective date		(2)
2.3.4.8.c.iii	Complete IDDE investigation in 100% of catchments	10 years from effective date		
2.3.4.8.e	Evaluate & report IDDE program progress	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.4.9	Define indicators of IDDE program success	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
2.3.4.10	Conduct IDDE employee training	at least annually	Continue to train employees about the IDDE Program including how to recognize illicit discharges and SSOs.	
2.3.4.10	Report on IDDE employee training	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	
POST-CONSTRUCTION STORMWATER MANAGEMENT				
2.3.6.d.i & ii	Estimate baseline impervious area and annual increase/decrease in acres of impervious area	annual MS4 stormwater reports	Develop method to track changes in impervious area as development/redevelopment occurs. Starting impervious area estimates available from EPA. Estimates to be included in Annual MS4 Stormwater Report each year.	(2)
GOOD HOUSEKEEPING & POLLUTION PREVENTION FOR PERMITTEE-OWNED OPERATIONS				
2.3.7.a.ii.b	Provide training on use, storage, & disposal of petroleum products to applicable staff	not stated	Provide training on use, storage, & disposal of petroleum products to applicable municipal staff.	(4)
2.3.7.a.iii.b	Implement routine inspection/cleaning/maintenance of catch basins to ensure sumps <50% full; report on activities as specified; investigate excessive sediment; log/report CB cleaning	continuous; annual MS4 stormwater reports	Clean catch basins as needed to ensure that no sump is more than 50% full at any given time. The Town has between 700 and 900 catch basins town-wide and currently cleans all catch basins at least once every two years. Catch basins adjacent to water resources are cleaned twice per year in the spring and the fall. Assume that the Town's currently cleaning schedule will meet the permit requirements.	The Town cleans their catch basins using Town staff and equipment. It is assumed that no additional expenditures for catch basin cleaning will be needed above what the Town currently spends.
2.3.7.a.iii.c & d.	Sweep streets/parking lots 1x/year in spring; report on efforts	annually; annual MS4 stormwater reports	The Town currently sweeps all public streets and municipal parking lots annually. Roadways adjacent to water resources are swept twice per year. The Town will need to continue to sweep streets in the drainage area tributary to Lake Shirley at least twice per year in the spring and the fall to meet the permit conditions outlined under Appendix H, Part II, 1.a.i.3. All municipal parking lots within the Lake Shirley drainage area will also need to be swept twice per year in the spring and the fall.	The Town currently completes street sweeping using Town staff and equipment. It is assumed that no additional expenditures for street sweeping will be needed above what the Town currently spends.
2.3.7.a.iii.f	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; and for annual inspection of treatment structures	not stated	Establish/implement procedures to inspect/maintain storm drains & structural BMPs; inspect treatment structures annually at a minimum.	Cost to develop procedures included under 2.3.7.a.i.; implementation & inspection to be completed by the Town
2.3.7.a.iv	Report on all Good Housekeeping/Pollution Prevention requirements	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.a.v	Keep written record of all Good Housekeeping/Pollution Prevention activities	continuous	Keep written record of all maintenance activities, inspections and training completed.	-

Item No.	Requirement	Deadline	Needs Specific to Lumberton	Estimated Cost to Comply
2.3.7.b	Develop/implement written Stormwater Pollution Prevention Plans for required facilities as per permit	2 years from effective date	Develop and implement SWPPPs for all municipal waste handling facilities. The Town already has an existing SWPPP developed for the DPW Facility on Chase Road. This SWPPP should be reviewed to ensure that it meets all permit requirements. The Town has a capped landfill on Youngs Avenue where yard waste is collected 12 weekends per year and composted. It is not anticipated that a SWPPP will be needed for this facility.	\$2,500 to \$5,000 (Budget included for any updates that may be needed to the Town's existing SWPPP for the DPW Facility to meet the permit requirements.)
2.3.7.b.ii & iii	Perform SWPPP required actions/inspections/training	frequencies as per permit	Perform quarterly inspections at facilities and conduct annual employee training.	(4)
2.3.7.b.iii	Report on Stormwater Pollution Prevention Plan Inspections	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
2.3.7.b.iv	Maintain written records for 2.3.7	continuous	Keep written record of all maintenance activities, inspections and training completed.	-
SECTION 4 - PROGRAM EVALUATION, RECORDKEEPING & REPORTING				
4.1.a	Self-evaluate compliance with the permit; include documentation of evaluation in written SWMP	annually	Annually evaluate Town's compliance with permit conditions.	(2)
4.1.b	Evaluate BMP effectiveness & change if needed under provisions of permit	not stated	Evaluate BMP effectiveness in achieving permit objectives & modify BMPs accordingly as needed.	(2)
4.1.b	Report BMP modifications	annual MS4 stormwater reports	Include in Annual MS4 Stormwater Report.	(2)
4.2	MS4 must keep records for ≥5yrs; make available to public	Continuous	Maintain annual MS4 stormwater reports and make available to the public.	-
4.3	Document results of MS4 outfall screening/sampling & any other monitoring/studies	annual MS4 stormwater reports	Report progress in Annual MS4 Stormwater Report.	(2)
4.4	Submit Annual MS4 Stormwater Report	annually 90 days from effective date	Prepare Annual MS4 Stormwater Report.	\$7,500 - \$10,000/yr (It is anticipated that first year annual costs will be higher than subsequent years.)
Planning Level Estimate for Permit Compliance:				\$124,000 to \$179,000
Planning Level Estimate for Permit Compliance (w/ 20% contingency):				\$148,800 to \$214,800

Requirements specific to discharges to impaired waters without an approved TMDL (Appendix H)

- (1) Cost included as part of completing Notice of Intent and developing written Stormwater Management Plan.
(2) Cost included as part of preparing Annual MS4 Stormwater Report.
(3) Budget \$10,000 to \$15,000 to review all regulatory mechanisms and make recommendations on how to modify the regulations for compliance.
(4) Budget \$10,000 to \$15,000 the first year to conduct all employee training required under the permit, and budget \$5,000 to \$7,500 in Years 2 through 5 of the permit.
(5) Costs for IDDE investigation and correction of illicit connections were generated for the 10-year timeframe allotted.

Pavement Management Plan



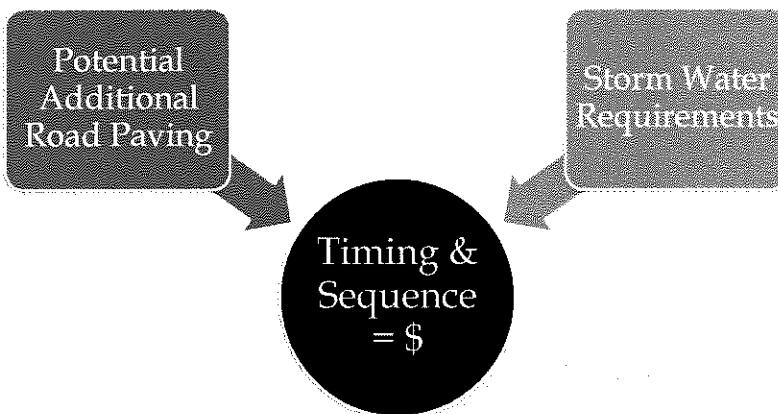
- œ Newly revised plan – electronic database
- œ Backlog of work remains at 9 million+
- œ Existing funding sources
- œ Revised financial model
- œ Accelerated (Performance) Patching Plan

FY16 \$250,000



FY17 \$250,000

The Challenge



Pot Hole Log

Date	Location	Resident Name	Resident Contact	Pothole	Issue and Response
11/18/2015	West st,Electric to Pratt ,Pleasant st , White woods ,Chase rd, w.Townsend rd,Gilchrist st,Kirby st, youngs rd,White st	Lunenburg D.P.W		☒	30 @ west st, 11 @ Electric and Pratt , 5@ Pleasant st, 3 @ White Woods ,16 @ Chase rd, 4 2 Gilchrist st 12 W.Townsend rd, 1@ Kirby St ,1@ youngs rd, 1@ White st TOTAL OF 56 POT HOLES FILLED
11/20/2015	389 Page st	Patricia Blanchard	(978) 785-6033	☒	Keatings did overlay in spring , Road complete no pot holes
11/30/2015	hollis rd	Mary Ann Wiesman	978-582-4075	☒	Pot holes @ 259,287,365 repaired 12/1/15
11/30/2015	259- 287 -365 Hollis rd	Mary Ann Weisman	tmke@Lunenburgonline.com	☒	Pot holes, caller says someone fell in pot hole , we repaired 12/1/15 REPAIRED 5 POT HOLES
12/3/2015	Round road	Joe Norton	978 - 582-0755	☒	Pot holes Completed Whole rd ,Ruth & Parmeteir rd , Complete 12/17/15 HOT MIX
12/15/2015	Robbs hill rd	Naci Bell	978-582-5512	☒	Did to big overlays on robbs Hill rd to patch pot holes ,Complete 12/15/15 HOT MIX
12/28/2015	interc of south rd and sandy cove rd along cove rd	Taina Fernandez	61 Cove rd	☒	repaired pot holes , 1/4/15 HOT MIX
12/30/2015	Pine st 7 2a	Scott mc Parland	857-919-6174	☒	pot hole on pins st ,repaired 1/4/15 HOT MIX
1/4/2016	Graham @ summer ,Resevior rd,Houghton Mills , Page st	Lunenburg D.P.W		☒	Graham@ Summer 2, Resevior 1@ 301 2@ 181 2@ 92 1@ 62,Houghton Mills , 2, 1@ 104 page st TOTAL OF 11 POT HOLES FILLED
1/4/2016	Island rd ,Williams , pennisula dr, Sandy Cove rd , cove rd,	Lunenburg D.P.W		☒	Island rd 1@ 5, 1@ 39, 22 58, Williams dr ,1@ 25, pennisula dr 1@ 72, 2@85 ,2@121 Sandy cove rd 1@ 60 4@113 ,cove rd 4 TOTAL OF 13 POT HOLES FILLED

Date	Location	Resident Name	Resident Contact	Pothole	Issue and Response
1/4/2016	Pine st, Canterbury, Hemlock , South Row ,Island rd , Sandy Cove rd	Lunenburg D.P.W		☒	4@ 62 & 32 Pine st, 1@ 142 Canterbury rd, 1@ 105 Hemlock rd 2@ 44 South row rd ,3@ 60 1 @ 65, 1@12 sandy Cove, 2@ 77 2@85, 1 @1-101, 1@ 106, 1@ 112 ,22 126, 2@ 140 1@ 166 6@ 145 TOTAL OF 29 POT HOLES FILLED
1/6/2016	WIDE	TOWN	L.D.P.W	☒	CENTRE PIZZA 2 ,ELECTRIC AV1, MASS AV CENTER OF TOWN 1, CHASE RD 11, WHITE ST 2 , MAPLE PKW9, PRATT ST3, HOLMANST/NORTH CEMETERY2,27OAK AV 1, 27 CLIFFVEIW 2, 133/145 SOUTH ROW2 199/211 SOUTH ROW 4 239 SOUTH ROW 3 COVE RD 3, 24 WEST ST1, 89 WEST ST 6, 202 WEST ST 1,92 AUTUM DR 1, 62 AUTUM DR 1, 289 RESEVOIR RD 7 ,230 SOUTH ROW1, PAGE ST 1,393 ARBOR ST TOTAL OF 64 POT HOLES FILLED
1/12/2016		TOWN WIDE	L.D.P.W	☒	HOLLIS RD 7 , NATICK ST 10 , 2A 1 , BURCH ISLAND2, HOLLIS RD 3, POND ST 2, PROSPECT 3, LEO/SHIRLEY RD 3, TOTAL OF 31 POT HOLES FILLED
1/15/2016		TOWN WIDE	L.D.P.W	☒	RESEVIOR 15, LOONGWOOD 2, LEOMINSTER RD 4, PAGE ST 5, SUMMER ST 16, WHALOM RD 2, TOTAL OF 44 POT HOLES FILLED
1/21/2016		TOWN WIDE	L.D.P.W	☒	CHASE RD 2, SUMMER ST 18, BEACHVIEW 1, SANDY COVE RD 3, COVE TER 5, ARBOR ST 4 BURRAGE ST 9 , TOTAL OF 42 POT HOLES FILLED
1/25/2016	WIDE	TOWN	L.D.P.W	☒	SOUTH ROW 2, COVE RD 2, SANDY COVE RD 4, PENNINSULA DR 1 , SUMMER ST 2 , RT 13 ELECTRIC AV 19 TOTAL OF 30 POT HOLES FILLED
2/2/2016	WIDE	TOWN	L.D.P.W	☒	SUNNY HILL RD 3, TOWNSEND HARBOR RD 1, 885 FLATHILL RD 2, 34 ROUND RD 2, TOTAL OF 8 POT HOLES FILLED
2/9/2016		TOWN WIDE	L.D.P.W	☒	18 PROSPECT 1, PROSPECT ROTARY 1, 4 PROSPECT 1 TOTAL OF 3 POT HOLES FILLED

Date	Location	Resident Name	Resident Contact	Pothole	Issue and Response
2/18/2016	TOWN WIDE	L.D.P.W	L.D.P.W	☒	CROSS ST1 , SOUTH ROW 7, 156 SOUTH ROW 3, 112 ISLAND RD 1 , 25 WILLAMS 2, PENNINSULA DR 2, LEOMINSTER RD 2 26 LAKESIDE AV 6, 63 GRAHAM ST 1, 191 SUMMER ST 3, 15 ELM ST 1, CHSAE RD 5 , NORTHEND SUBSRU 5, 228 WHITE ST 2, PLESANT ST 2 , 178 HOLLIS RD 1 TOTAL OF 44 POT HOLES FILLED

TOWN OF LUNENBURG

Adam R. Burney
Land Use Director



Tel: (978) 582-4147
Fax: (978) 582-4353
960 Massachusetts Avenue
Lunenburg, MA 01462

Date: February 25, 2016

To: Kerry Speidel, Town Manager
Town of Lunenburg

From: Adam R. Burney, Land Use Director

RE: Conservation Commission Budget Amendments

It was brought to my attention that the Conservation Commission would like to amend their budget request to include the following items:

Fund	Line	Description	Amount
11712	521003	Bridge Repair & Mtc.	\$600.00
11712	531009	Educational Materials	\$1,000.00
11712	531014*	Kiosk*	\$600.00

Please note that Line 531014 Kiosks is not currently in the budget but the request didn't fit in any existing Line.

If you have any questions or require further information please do not hesitate to contact me.