To: Michael K. McGovern, Town Manager

From: Robert C. Malley, Director of Public Works

Date: October 6, 2015

Re: Proposed Roadway & Drainage Priorities - FY 2017 - FY 2021

Per your request, I have updated the current five-year roadway and drainage priorities plan that was initially approved as part of the Pavement Management Report (PMR) completed in 2013 by the firm of Gorrill-Palmer Consulting Engineers. The Pavement Management Report has been a very useful planning tool as we develop our annual road improvement plan for consideration by the Town Council. For the last several years, we have attempted to focus our improvements on the roads that carry a majority of traffic in a given area, while still doing some overlays on some of our neighborhood streets. These would include our only arterial (Route 77) and Connectors (Sawyer Road, Spurwink Avenue, Chas. E. Jordan Road and Old Ocean House Road) as defined in the PMR. We now need to shift our focus to the remainder of our Collectors (Scott Dyer Road and Shore Road) which are in need of attention and still address some local road paving needs.

Though our paving budget may seem adequate, it doesn't take long to expend funds on a typical paving project. The cost of asphalt has stabilized over the last couple of years which has helped stretch our limited funds. It is tied directly to the price of crude oil, which has been hovering at around \$50.00/barrel for the past few months. To provide a sense of how far our paving dollars go, it presently cost approximately \$114,000 to shim and overlay one mile of a typical local road that is 22 feet wide. This does not include any drainage and sidewalk improvements. There may be an opportunity to get some financial assistance with some of these paving projects. MDOT has a program that pays for 50% of the project cost if the road is eligible for their Municipal Partnership Initiative, or MPI Program, as they refer to it. We will be obtaining more information on that in the coming months.

Outlined below is the proposed plan for the next five-year cycle.

Program Proposed for FY 2017 - \$445,000

Scott Dyer Road and Hill Way are one of the busiest roadways in the town. They provide access to the Town Center, Middle School and to two neighborhoods (Elizabeth Park and Brentwood Acres). They are also the primary route for those heading to the Recycling Center. The pavement on both roads is in fair condition and bituminous curbing needs to be added and/or repaired in several areas. Just resurfacing the roads would result in a loss of curb reveal (on Scott Dyer) and not address some existing drainage problems. In

addition, the condition (or lack thereof) of the sidewalk on both Scott Dyer and Hill Way should be addressed. Funds are proposed to commence preliminary design and engineering for those improvements with a targeted project implementation date in the summer of 2017.

It is also proposed to shim and overlay Wells Road and allocate the residual funds (\$240,000) to continue resurfacing local roads per the Pavement Management Plan. A tentative list at the time of this submittal is Wood Road, Harrison Road, Waterhouse Road, Bradford Road, Two Lights Terrace, Lighthouse Point, Balsam Road, Hampton Road, Vernon Road & Park Circle. As in past years, an amount is carried for minor paving and small drainage projects (\$20,000).

Program Proposed for FY 2018 - \$470,000

Following the design work completed in FY 2017, it is proposed to commence the improvements noted above on Scott Dyer Road and Hill Way, which is has been roughly estimated at \$355,000 though the scope has not been developed yet. It is also proposed to pave the former school bus parking lot on the High School Campus. This lot abuts the IGA parking lot and is currently being used extensively by Community Services, the High School and the Facilities Department. It has not been paved since the High School was built in 1969. The pavement is in poor condition and it needs to be shimmed and then overlayed. New pavement markings (parking stalls and symbols) would be applied once the paving is complete.

The remainder of the appropriation (\$60,000) is proposed for local road overlays and small paving and drainage projects (\$20,000).

Program Proposed for FY 2019 - \$500,000

Shore Road is the northerly connection to the neighborhoods of Mountain View Park, Oakhurst, Cape Cottage Woods and Sherwood Forest. It is also one of the gateways to the community and is the primary conduit for visitors to reach Fort Williams Park. The last major paving improvements were done in 1993 and since that time the pavement condition has worsened, especially in the area of Oakhurst Road. There is also a need to upgrade some of the drainage infrastructure and assess the condition of the sidewalks.

Permanent repairs are programmed for FY 2019 to enable the Portland Water District to replace the water main in that section in 2018. The sub-surface drainage infrastructure between Island View and Stonybrook Road should also be upgraded. The pipe is corrugated metal which is quite susceptible to corrosion. We need to confirm this during our preliminary design, but it is likely that the bottoms of the pipes are rusted away in several locations and are not conveying storm water in the most efficient manner. In order to maintain the riding surface and minimize the amount of labor spent patching pot holes this winter; a very thin maintenance overlay is planned for the fall of 2015 between Stonybrook Road and the entrance to Birch Knolls.

It is also proposed to shim and overlay Eastman Road, which was last paved in 1998. Like many of our other Feeder Roads it was never built to a modern standard. There is minimal drainage infrastructure and the quality of the sub-base gravel is unknown. There are also some horizontal challenges in one of the sections, so some of the pavement may need to be milled off to reduce the height of any new pavement at some of the driveways.

The remainder of the appropriation (\$105,000) is proposed for local road overlays and small paving and drainage projects (\$20,000).

Program Proposed for FY 2020 - \$525,000

It is proposed to shim and overlay Fessenden Road (\$35,000), Broad Cove Road (\$110,000) and the remaining segment of Mitchell Road not paved in 2015 (\$200,000). These projects are pretty straight forward and will not require any pedestrian or drainage improvements unless a change in the scope is requested.

The remaining appropriation (\$160,000) is proposed for local road overlays and small paving and drainage projects (\$20,000).

Program Proposed for FY 2021 - \$560,000

It is proposed to shim and overlay Route 77 from Fowler Road to the Scarborough Line (\$105,000). This section of road is now within the urban compact and not under the jurisdiction of MDOT. It is also proposed to shim and overlay Oakhurst Road (\$130,000), which may include some pavement milling, minor drainage improvements and pedestrian improvements once a scope is developed. Finally, a shim and overlay of Woodland Road (\$80,000) is proposed. The westerly portion of Woodland Road is the primary link from Mitchell Road (along with Cottage Farms Road) to destinations on Shore Road, Willard Square and the SMCC campus.

The remaining appropriation (\$225,000) is proposed for local road overlays and small paving and drainage projects (\$20,000).

Roadway Drainage Priorities FY 2017 - FY 2021

Description	Distance	Width	Forecasted	Treatment	Cost	FY	Fund. Source	Total
			PCR			Year		
			in 2016				CIP	
Scott Dyer Road &	4695	26	2.20	Preliminary Design & Eng.				
Hill Way	700	24	1.90	for Ped. & Drainage Improv.	\$50,000	2017	\$50,000	\$50,000
Wells Road	4750	22	2.35	Shim & Overlay	\$135,000	2017	\$135,000	\$135,000
Local Road Overlays				Shim & Overlays	\$240,000	2017	\$240,000	\$240,000
Misc. Drainage & Paving					\$20,000	2017	\$20,000	\$20,000
Total								\$445,000
Scott Dyer Road &	4695	26	2.20					
Hill Way	700	24	1.90	Shim/Overlay/Ped./Drain.	\$350,000	2018	\$355,000	\$355,000
High School Parking Lot			n/a	Shim & Overlay	\$35,000	2018	\$35,000	\$35,000
Local Road Overlays					\$60,000	2018	\$60,000	\$60,000
Misc. Drainage & Paving					\$20,000	2018	\$20,000	\$20,000
Total								\$470,000
Shore Road - Surf to S.P. Line	4230	26	2.30	Shim/Overlay/Drainage	\$225,000	2019	\$225,000	\$225,000
Eastman Road	4030	22	2.20	Mill & Fill/Overlay	\$150,000	2019	\$150,000	\$150,000
Local Road Overlays				Shim & Overlays	\$105,000	2019	\$105,000	\$105,000
Misc. Drainage & Paving					\$20,000	2019	\$20,000	\$20,000
Total								\$500,000
Fessenden Road	1315	20	2.30	Shim & Overlay	\$35,000	2020	\$35,000	\$35,000
Broad Cove Road	3790	24	2.40	Shim & Overlay	\$110,000	2020	\$110,000	\$110,000
Mitchell Road - Belfield to S.P.	7265	22	2.40	Shim & Overlay	\$200,000	2020	\$200,000	\$200,000
Local Road Overlays				Shim & Overlays	\$160,000	2020	\$160,000	\$160,000
Misc. Drainage & Paving					\$20,000	2020	\$20,000	\$20,000
Total								\$525,000
Route 77 - Fowler to Scar. Line	2900	24	2.40	Shim & Overlay	\$105,000	2021	\$105,000	\$105,000
Oakhurst Road	3915	24	2.50	Mill & Fill/Overlay	\$130,000	2021	\$130,000	\$130,000
Woodland Road	2415	26	2.60	Shim & Overlay	\$80,000	2021	\$80,000	\$80,000
Local Road Overlays					\$225,000	2021	\$225,000	\$225,000
Misc. Drainage & Paving					\$20,000	2021	\$20,000	\$20,000
Total								\$560,000

Town Roads - Specs, ROW	, Sewer Status & Overlay I	History				
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Abaco Drive	762	24	50 feet	Yes	00	
Alder Street	370	22	50 feet	Yes	10	
Algonquin Road	1410	24	50 feet	Yes	12	Shim & Overlay
Appletree Lane	978	20	50 feet	Yes	00	Onin a Overlay
Autumn Tides Road	500	22	50 feet	Yes	05	
Avon Road	725	15	50 feet	Yes	86	
Baker Road	290	18	40 feet	Yes	10	
Balsam Road	400	22	40 feet	Yes	80	
Bay View Road	375	17	35 feet	Yes	06	
Bayberry Lane	1400	22	50 feet	No	80	
Beach Bluff Terrace	1745	19	40 feet	No	92	
Beverly Terrace	475	24	50 feet	Yes	03	Shim & Overlay
Birch Road	135	17	30 feet	Yes	72	Shim a Syshay
Birchwood Road	360	24	40 feet	Yes	98	
Blueberry Road	880	22	50 feet	Yes	06	
Bowery Beach Road		42	varies	No	67/71/09/10	Shoulders Milled Out & Repaved - 2009
Bradford Road	140	26	50 feet	Yes	91	
Brentwood Road	2545	24	50 feet	Yes	98	
Bridle Path Way	700	22	40 feet	Yes	15	Shim & Overlay
Broad Cove Road	3790	24	40 feet	Yes	01/03	
Campion Road	790	26	40 feet	Yes	97	
Cape Woods Drive	1265	24	50 feet	Yes	95	
Carriage Hill Road	380	24	40 feet	Yes	05	
Chambers Road	635	20	40 feet	Yes	99	
Channel View Road	750	22	40 feet	Yes	04	
Charles E. Jordan	5070	22	49.5 feet	No	14	Partial Reclaim, Shim & Overlay
Charles Road	745	26	40 feet	Yes	13	Full Depth Reconstruction
Cherry Circle	265	22	40 feet	Yes	98	·
Chesterwood Road	410	20	50 feet	Yes	01	
Cheverus Road	2240	22	50 feet	Yes	97	
City View Road	160	19	35 feet	Yes	10	
Cliff Avenue	525	24	40 feet	Yes	97	
Clinton Road	540	22	40 or 45	Yes	01	
Colefield Road	2420	22	50 feet	No	93	

Columbus Road	1840	24-26	50 feet	Yes	97	
Cooper Drive		26		Yes - F.M.	00	
Cottage Farms Road	1730	24	42 feet	Yes	02	
Cottage Lane	995	24	50 feet	Yes	94	
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Cove View Road	200	24	50 feet	No	98	
Crescent Road	320	16	40 feet	Yes	76	
Crescent View Avenue	1790	11	40 feet	No	80	
Cross Hill Road	4979	20	50 feet	Yes	00/01	
Dawe Road	220	24	40 feet	Yes	10	
Dean Way	765	22	50 feet	No	99	
Dearborn Drive	505	24	40 feet	Yes	80	
Dennison Drive				Yes - F.M.	96	
Dyer Pond Road	1765	22	50 feet	No	90	
Eastfield Road	1105	24	40 feet	Yes	05	
Eastman Road	4030	22	50 feet	Partial	98	
Elizabeth Road	210	24	35 feet	Yes	04	
Elmwood Road	825	24	40 feet	Yes	00	
Erie Road	190	26	50 feet	Yes	03	
Evergreen Circle	230	24	50 feet	Yes	98	
Farm Hill Road	1575	28-32	50 feet	Yes	06	
Fenway Road	800	24	40 feet	No	77	
Fernwood Lane	335	22	50 feet	Yes	06	
Fessenden Road	1315	20	50 feet	No	96	
Fickett Street	755	22	50 feet	No	9	Mill & Fill
Fieldstone Road	465	24	40 feet	Yes	02	
Forest Road	1085	22	35 feet	Yes	10	
Fowler Road Extension	4195	22	30 plus/minus	No	84	
Fowler Road	9135	22	30 plus/minus	No	15	Maintenance Overlay
Friar Lane	250	20	40 feet	Yes	15	Shim & Overlay
Garden Lane/Cir	310	11	20 feet	Yes	94	
Gateledge Drive	315	11	50 feet	Yes	10	
Geldert Lane	190	13	20 feet	Yes	14	Shim & Overlay
Gladys Road	1015	22-24	50 feet	No	77	
Glen Avenue	825	20	40 feet	Yes	97/02	
Glenden Road	160	18	40 feet	Yes	94	
Gordon's Lane	200	22	50 feet	Yes	10	

Granite Ridge Road	550	22	50 feet	Yes	10	
Graystone Road	335	24	50 feet	Yes	10	
Grover Road	560	26	40 feet	Yes	02	
Grover Road - Extended Portion	350	22	40 feet	No	05	
Hamlin Street		22	50 feet	Yes	05	
Hampton Road	1230	24	50 feet	No	78	
Hannaford Cove	3920	17	40 feet	No	98	
Harrison Avenue	220	24	50 feet	Yes	88	
Hawthorne Road	482	24	50 feet	Yes	01	
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Hemlock Hill Road	365	24	40 feet	Yes	04	
Hermit Thrush Road	500	22	40 or 45 feet	Yes	95	
Heritage Court	145	24	50 feet	No	98	
High Bluff Road	1095	19		Yes	94	
High View Road	1380	24	Unknown	Yes	05	
Hill Way	700	24	50 feet	No	88	
Hillcrest Drive	445	24	45 feet	No	00	
Hillcrest Road	600	18		Yes	95	
Hunts Point Road	3600	24	40 feet	Partial	04/87	
Island View Road	460	22	35 feet	Yes	04	
Ivie Road	1040	18	30 feet	Yes	80	
Jewett Road	1380	24	50 feet	No	04	
Jordan Farm Road	775	24	50 feet	No	91	
Jordan Lane	110	22	40 feet	No	90	
Julie Ann Lane	465	22	50 feet	No	98	
Juniper Lane	560	24	40 feet	Yes	02	
Katahdin Road	805	22	50 feet	Yes	12	Shim & Overlay
Kettle Cove Connector	240	10		No	96	
Kettle Cove Road	3000	22-24	49.5 feet	No	01	
Killdeer Road	990	24	50 feet	Yes	97	
Lawson Road	800	19	40 feet	No	76	
Ledgewood Lane	1400	22	40 feet	Yes	04	
Leighton Farm Road	990	24	50 feet	Yes	04	
Lighthouse Point Road	670	24	40 feet	No	80	
Lindenwood Road	700	18	45 feet	Yes	00	
Linwood Street	570	24	50 feet	Yes	77	
Littlejohn Road	1820	20-26	50 plus/minus	Yes	85 & 90	

Locksley Road	925	24	40 feet	Yes	90	
Longfellow Drive	2250	28-32	50 feet	Yes	06	
Lydon Lane	525	19-22	40 feet	Yes	97	
Maiden Cove Lane	215	12	20 feet	No	94	
Manter Street	1335	22	50 feet	Yes	10	
Maple Lane	825	26	40 feet	Yes	02	
Maplewood Road	165	22	50 feet	Yes	00	
Masefield Terrace	500	22	50 feet	Yes	06	
McAuley Road	2395	24	50 feet	Yes	97/10	
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Meadow View Lane	660	22	50 feet	Partial	93	
Meadow Way	915	22	40 feet	Yes	06	
Misty Lane	645	24	40 feet	Yes	03	
Mitchell Road	10330	22	49.5 feet	Yes	99/15	Shim & Overlay from Route 77 to Belfield
Montgomery Terrace	255	17	30 feet	Yes	02	
Mountain View Road	520	24	35 feet	Yes	04	
Murray Drive	1210	22	40 feet	Yes	02	
Oak Knoll Road	180	18	40 feet	No	87	
Oakhurst Road	3915	24	50 feet	Yes	01	
Oakwood Road	590	20	40 feet	Yes	99	
Ocean View Road	1985	18	35 feet	Yes	06/10	
Old Fort Road	1780	24	Unknown	Yes	90	
Old Ocean House Road	6650	24	50 feet	Partial	15	Shim & Overlay
Olde Colony Lane	1955	22	40 feet	No	12	Shim & Overlay
Orchard Road	940	22	40 feet	Yes	98	
Orchid Road	980	22	40 feet	Yes	95	
Ottawa Road	780	17	40 feet	Yes	76	
Park Circle	1525	22	50 feet	No	93	
Patricia Drive	650	22	40 feet	Yes	81	
Penwood Circle	210	22	40 feet	Yes	98	
Peppergrass Road	1079	20	50 feet	Yes	01	
Pheasant Hill Road	450	28	50 feet	No	96	
Philip Road	1245	24	40 feet	Yes	02	
Pilot Point Road	1570	22	50 feet	Yes	12	Shim & Overlay
Pine Point Road	450	26	50 feet	Yes	98	
Pine Ridge Road	855	22	40 feet	Yes	04	
Pleasant Avenue	910	22	40 feet	Yes	97	

Point Road	270	13	40 feet	No	97	
Pond View Road	575	24	50 feet	No	99	
Preble Street	490	13		Yes	98	
Prout Place	1725	22	50 feet	No	93	
Quartz Knob Road	285	24	50 feet	Yes	94	
Ramble Road	965	22	40 feet	Yes	02	
Rand Road	535	24	40 feet	Yes	02	
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Red Oak Lane	190	22	50 feet	Yes	06	
Reef Road	3110	20	40 feet	Yes	04	
Ridge Road	425	22	40 feet	Yes	10	
Robinhood Road	1360	22	40 feet	Yes	86	
Rock Crest Drive	2190	24	50 feet	Yes	94	
Rock Wall Lane	340	20	40 feet	Yes	95	
Rocky Hill Road	905	19	30 feet	Yes	76	
Rocky Knoll Road	670	22	45 feet	Yes	95	
Roundabout Lane	1040	22	40 feet	Yes	04	
Route 77 - 1	3025	24	Varies	Partial	03	
Route 77 - 2	6840	24	50		03	
Route 77 - 3	8795	24	feet		03	
Route 77 - 4	10745	26			03	
Route 77 - 5	13445	24			03	
Route 77 - 6	9495	24			09	Mill & Filled
Route 77 - 7	7390	24			71/09	Shoulders Milled Out & Repaved - 2009
Route 77 - 8	10220	24			10	Mill & Filled
Running Tide Road	1945	24	50 feet	Yes	06	
Russet Lane	370	24	Unknown	Yes	81	Sewer Replaced & Trench Cap
Salt Spray Lane	2165	20-24	40 feet	Yes	87	
Sawyer Road - 1 (Start @ Scar.)	4300	30	Varies 33 feet	No	98	
Sawyer Road - 2	4300	30	50 feet	No	09	Mill & Filled
Sawyer Road - 3	2455	22	40 feet	No	14	Shim & Overlay
Sawyer Road - 4	2730	22	40 feet	No	09	Maint. Overlay
Scott Dyer Road	4695	22-24-30	50 feet	Partial	99	
Sea Barn Road	205	12	40 feet	No	76	
Sea View Avenue	665	22	40 feet	Yes	97	
Shore Road - 3	4230	13	50 feet	Yes	93	Cold Planed & Overlay
Shore Road - 2	1105	26	50 feet	Yes	01	Maint. Overlay

Shore Road -1	12055	22	50 feet	No	07	Shim & Overlay
Shore Road @ Town Center	200	22	50 feet	Yes	15	Shim & Overlay
Silva Drive	435	22	40 feet	No	87	
Smugglers Cove	445	20		No	00	
Southwell Road	680	22	40 feet	Yes	97	
Spoondrift Lane	985	24	40 feet	Yes	04	
Spruce Lane	505	22	40 feet	Yes	04	
Spurwink Avenue - 1	7000	22-24	50 feet	Partial	14	Shim & Overlay
Spurwink Avenue - 2	3550	24	50 feet	No	91	
Spurwink Avenue - 3	7400	24	50 feet	No	08	Foamed Asphalt
Star Road	625	24	40 feet	Yes	02	
Starboard Drive	1740	24	50 feet	Yes	12	Full Depth Reconstruction
State Avenue	1020	22	50 feet	Yes	03	Shim & Overlay
Steeplebush Road	944	24	50 feet	Yes	01	
Stone Drive	530	24	40 feet	Yes	97	
Street Name	Street Length	Width	ROW	Sewer	Last Overlay	Comments
Stonegate Road	3435	22	50 feet	Yes	10	
Stonybrook Road	3065	20	40 & 45 feet	Yes	00	
Summit Road	320	22	35 feet	Yes	10	
Surf Road	820	18	30 feet	Yes	94	
Susan Road	400	22	Unknown	No	02	
Sweet Fern Road	810	22	50 feet	No	77	
Tall Pine Road	980	22	40 feet	Yes	02	
Thrasher Road	1030	24	40 feet	Yes	97	
Todd Road	350	18	40 feet	No	98	
Tower Drive	450	24		No	00	
Trundy Road	2920	22	50 feet	Yes	14	Shim & Overlay
Two Lights Road	8955	22-24		No	00	
Two Lights Terrace	995	24		No	80	
Valley Road	1160	24	40 feet	Yes	10	
Vernon Road	860	24	50 feet	No	77	
Wabun Road	1080	22	50 feet	Yes	12	Shim & Overlay
Wainwright Drive	1425	24	50 feet	Partial	10	
Warren Avenue	520	28	40 feet	Yes	12	Shim & Overlay
Waterhouse Road	1230	24	50 feet	Yes	90	
Waumbeck Road	1240	18	50 feet	Yes	12	Shim & Overlay
Waverly Road	190	16	40 feet	Yes	81	

Updated: August 12, 2015						
Woodland Road	2415	26	50 feet	Yes	95/12	Shim & Overlay- Westerly End
Woodcrest Road	1000	22	40 feet	Yes	95	<u> </u>
Wood Road	1830	19	30 feet	Yes	04/07	
Windmill Lane	515	22	50 feet	No	88	
Winding Way	515	24	50 feet	Yes	06	
Wilton Lane	165	24	50 feet	Yes	03	Shim & Overlay
Wheeler Road	485	22	Unknown	No	96	
Westfield Road	400	24	40 feet	Yes	05	Shim & Overlay
Wentworth Road	310	22	40 feet	No	99	
Wells Road	4735	22	50 feet	No	00/01	