BDO

APPENDIX I - ASSET INVENTORY

Village of Hilton Beach
Summary - Recent Costs and Net Book Value
As at December 31, 2012

	Total Cost	Total Net Book Value
Water and Sewer	$ 2,812,414	$ 2,161,099
Roads	$ 138,777	$ 107,831
Vehicles	$ 50,677	$ 18,648
Land and Improvements	$ 3,032,900	$ 2,308,082
Buildings and Permanent Structures	$ 2,903,436	$ 2,180,898
Docks	$ 825,533	$ 336,905
Equipment and Furnishings	$ 2,217,216	$ 1,365,811
	$ 8,979,085	$ 6,191,696

Village of Hilton Beach
Water and Sewer
As at December 31, 2012

Asset	Cost	Net Book Value
Wastewater Collection		
Original project	$ 953,566	$ 724,711
Forest St.	75,248	67,223
Park St. Extension	476	427
Hwy 548 & Canoe Pt Rd Extensions	2,350	2,249
Wastewater Treatment		
Outflow/Forcemain/ETC	367,419	279,238
Water Distribution		
Original construction	1,203,200	914,430
Mains 1997	7,265	5,714
Mains 1998	7,737	6,190
Mains 1999	9,381	7,630
Third St.	3,468	2,822
Taylor extension	2,105	1,769
Forest St.	76,866	68,666
Hwy 548 & Canoe Pt Rd Extensions	2,350	2,269
Nelson Extension	1,860	1,785
Financial Management Plan	4,000	3,600
Interest	95,123	72,376
Total	$ 2,812,414	$ 2,161,099

Village of Hilton Beach
Roads
As at December 31, 2012

Asset	Cost	Net Book Value
Roads - Paved		
Sixth St. (base)	$ 20,731	$ 9,949
South St. (asphalt)	8,166	1,631
Bay St. (east section)	12,620	11,610
Canoe Point Rd.	10,295	9,883
Roads - Unpaved		
Mariners' Way (base)	72,092	60,556
Streetlights		
New system (multi year)	14,873	14,202
Total	$ 138,777	$ 107,831

Village of Hilton Beach
Vehicles
As at December 31, 2012

Asset	Cost	Net Book Value
Fire Department		
Fire Tanker	$ 12,645	$ -
Fire Pumper	10,557	1
1995 HUB 1050 GPM	27,475	18,647
Total	$ 50,677	$ 18,648

Village of Hilton Beach
Land and Improvements
As at December 31, 2012

Asset	Cost	Net Book Value
Land		
Parks		
Ball field and shop	$ 400	$ 400
Forbes Community Park	340	340
Hall		
Original portion	100	100
Church lot (Gift)	10,700	10,700
All Season Surface Rink		
Pt Lots 2, 3, 4, 5	38,352	38,352
Library		
Land	25	25
Marina		
Purchased from Werner	73,937	73,937
Federal Property Acquired 10	86,828	86,828
Provincial Property	74,723	74,723
Wastewater Treatment		
Sewage treatment plant	100	100
Sewage treatment plant	5,500	5,500
Sewage treatment plant	100	100
Water Treatment		
Land	25	25
Water Distribution		
Reservoir	750	750
Solid Waste - Landfill		
North half lots 3 and 4 con 3	236	236
Waterfront Centre		
Land	34,748	34,748
General Government		
Land	1,065	1,065
Transportation		
ROW for all streets	3,267	3,267
Land Improvements		
Parks		
FCP Land Improvements	19,062	2

Village of Hilton Beach
Land and Improvements
As at December 31, 2012

Asset	Cost	Net Book Value
FCP Land Improvements	2,714	106
Boardwalk 1992	30,387	4,866
Boardwalk 1993	18,150	3,630
Boardwalk 1994	40,301	9,672
All Season Surface Rink		
All Season Surface	48,447	21,316
Marina		
Site preparation	96,127	72,097
Breakwater	810,858	608,141
Construction of service area	128,512	96,385
Breakwater	860,070	791,263
Wastewater Collection		
Sewage pumping station	36,995	28,118
Wastewater Treatment		
Sitework STP	65,015	49,411
Water Treatment		
Well pumping station	24,942	18,621
Water Distribution		
Reservoir site work	41,446	30,944
Solid Waste - Landfill		
Fire break	7,131	6,418
New trench system	5,133	4,102
Waterfront Centre		
Land improvements	7,997	7,037
General Government		
Landscaping	5,983	5,027
Boardwalks and Landscaping		
Landscaping 1988	1,953	1
Landscaping 1989	8,604	345
Boardwalk construction 1989	25,874	1,035
Landscaping 1990	84,656	6,774
Boardwalk lighting 1990	21,661	-
Servicing 2005	155,363	105,644
Landscaping 2005	130,731	88,898
Boardwalk bollards 2008	18,000	12,000
Signage 2012	5,592	5,033
Total	$ 3,032,900	$ 2,308,082

Village of Hilton Beach
Buildings and Permanent Structures
As at December 31, 2012

Asset	Cost	Net Book Value
Buildings		
Fire Department		
Fire Hall	$ 10,617	$ 1,488
Parks		
Workshop - 2003	60,652	48,522
Workshop - 2004	6,240	5,116
Change house at FCP	14,513	9,869
Toilets at FCP	10,897	5,666
Hall		
Community Hall		
Upper level construction	339,892	235,658
Lower level construction	59,003	35,402
Roof replacement	32,623	27,403
Electrical upgrade	4,247	3,992
Windows	12,193	11,461
Exterior painting	6,612	5,619
All Season Surface Rink		
Rink Shack	1,221	246
Library		
Original Building	1,100	-
Marina		
Marina building	186,344	96,898
Pump house building	3,637	1,890
Building hook-up to water and sewer	5,006	2,004
Mariners' Lounge: Construction	129,154	111,073
Wastewater Collection		
Original building SPS	55,045	41,834
Wastewater Treatment		
Original building	425,115	323,088
Water Treatment		
Well pumping station	249,708	186,451
Water Distribution		
Reservoir	367,863	274,670
Waterfront Centre		
Original building	153,785	86,118
New section	303,439	279,163

Village of Hilton Beach
Buildings and Permanent Structures
As at December 31, 2012

Asset	Cost	Net Book Value
Leasehold improvements	8,532	8,403
General Government		
New section (50% of building)	303,439	279,163
Permanent Structures		
Marina		
Steel retaining wall for service area	41,634	20,815
Launch ramp	48,971	31,356
Concrete holding tank	14,101	7,333
Bridge	47,853	40,197
Total	$ 2,903,436	$ 2,180,898

Village of Hilton Beach
Docks
As at December 31, 2012

Asset	Cost	Net Book Value
Marina		
Docks 1988	$ 124,399	$ 36
Docks installation 1989	11,271	450
Dock pedestals 1989	35,852	-
Electrical and plumbing: docks,bldgs,pump	120,457	4,820
Docks 1990	1,343	106
Docks 1997	1,525	549
Dock servicing 1998	2,200	960
Dock construction 2000	70,523	33,639
Docks 2003	74,413	44,645
Docks 2004	317,806	203,397
Dock pedestals 2006	14,403	7,683
Dock pedestals 2009	34,300	25,152
Docks 10	8,205	7,221
Installation of new pedestals 2012	2,605	2,431
New anchors and mats	6,231	5,816
Total	$ 825,533	$ 336,905

Village of Hilton Beach
Equipment and Furnishings
As at December 31, 2012

Asset	Cost	Net Book Value
Equipment		
Fire Department		
Turnout Gear	$ 7,950	$ 2,385
Parks		
Small playground unit	6,588	-
Large playground unit	12,634	1,518
Pump and trimmer	974	683
Signage	1,783	1,605
Hall		
Mechanical (HVAC)	27,850	-
Mechanical (HVAC)	16,480	-
Mechanical (HVAC) 10	34,400	27,521
Dishwasher	5,406	2,596
Acoustic	30,756	19,685
On-demand hot water system	8,476	6,216
Chair lift 10	15,246	13,416
Stove and fridges 10	42,411	37,323
Flooring	6,881	6,537
Signage	3,741	3,367
Solar project	5,000	5,000
All Season Surface Rink		
Equipment	561	393
Marina		
Fuel tanks & pumps	33,156	-
Aqua genic pumpout system	10,990	-
Transformer to convert power	8,059	324
Mariners' Lounge - Commercial washers	4,270	2,276
Mariners' Lounge - Commercial dryers	6,312	3,365
Mariners' Lounge - Hot water system	8,883	4,739
Fuel pumps	27,493	20,618
Sewage pumpout for boats	9,000	7,200
Fuel tank - above ground	80,024	70,421
Wastewater Collection		
Sewage pumping station	308,633	197,523
Wastewater Treatment		
General and engineering	279,347	212,302
Fifty year equipment	664,730	425,425
Twenty-five year equipment	30,000	8,400
Equipment FIR 96	40,664	13,010

Village of Hilton Beach
Equipment and Furnishings
As at December 31, 2012

Asset	Cost	Net Book Value
Water Treatment		
Water study 1988	13,468	6,736
Water study 1989	59,346	30,860
WPS - 50 year	11,955	8,928
WPS - 50 year	55,348	34,316
WPS - 25 year	46,633	11,194
2001 DWPR	6,461	4,911
2002 DWPR	23,280	18,156
2003 DWPR	44,171	35,339
2004 DWPR	16,723	13,715
2005 DWPR	5,633	4,730
2006 DWPR	7,587	6,524
Water Distribution		
Reservoir	31,297	23,370
WPS	5,703	5,361
Waterfront Centre		
Signage	1,706	1,535
General Government		
Equipment 2008	7,617	-
Equipment 2010	10,088	2,016
Furnishings		
Parks		
Event tables	6,458	5,812
Hall		
Furnishings	13,365	3,135
Library		
Furnishings	77,324	35,134
Wastewater Treatment		
Furnishings	14,021	3,925
General Government		
Furnishings 2010	20,334	16,266
Total	$ 2,217,216	$ 1,365,811

APPENDIX II - CONDITION ASSESSMENT - WATER AND SEWER

VILLAGE OF HILTON BEACH
WATER AND SEWER CAPITAL BUDGET

2014 03 06

SEWAGE CAPITAL BUDGET		Priority	Year	Comments
Main Pump Station New pump #1 **(high efficiency)**	24,565.00	1		50 HP Barnes Pump Installed.
WWTP, pressurized water at the plant	12,000.00	1		Drilled well?
WWTP Blower & Motor **rebuilds**	3,500.00	2		Per blower (all three to be done)
Equalization tank piping and diffusers rebuild	3,500.00	2		Piping and diffusers installed
Spare RBC 5.0 HP motor, new **(high efficiency)**	9,850.00	3		New, Installed
WWTP Blower & Motor **rebuilds**	3,500.00	4		Per blower (all three to be done)
Spare RBC 2.5 HP pump, new **(high efficiency)**	6,440.00	4		New Installed, rebuild is approximately
New Alum Chemical Board (Surefeed) with pumps	18,000.00	4		Metcon Board with flush capabilities and peristaltic pumps
Main Pump Station New pump #2 **(high efficiency)**	24,565.00	5		50 HP Barnes Pump Installed
WWTP Blower & Motor **rebuilds**	3,500.00	6		Per blower (all three to be done)
Verbatim alarming system	8,000.00	6		increase alarming and response capabilities
WWTP SCADASystem	60,000.00	7		Only manual control available
Main Pump Station Pump Controls Upgrade	6,500.00	8		To milltronics from floats
Main Pump Station MCC Upgrades	10,000.00	10		Controls, swirtchs and wiring
WWTP pump control systems upgrades	4,500.00	10		Switches, electrical boxes and wiring
SEWAGE CAPITAL BUDGET	**198,420.00**			

VILLAGE OF HILTON BEACH
WATER AND SEWER CAPITAL BUDGET

2014 03 06

WATER CAPITAL BUDGET		**Priority Year**	**Comments**
Seimens HMI control Center for Autocon	20,000.00	1	Installed by Millenium controls, gives
Spare Fire hydrant & components/main valve stem	4,500.00	2	For emergency replacement/repair
15 HP grundfos well pump and motor (primary well)	5,200.00	2	Spare motor and poump
Chlorine Analyzer	4,800.00	3	Nearing lifespan, should be on the shelf
Turbidity Analyzer	4,600.00	3	Nearing lifespan, should be on the shelf
Reservoir inspection	5,400.00	5	Five year cycle
Surefeed chlorine chemical board	14,500.00	8	with peristaltic pumps
Reservoir MCC Panel rebuild	7,500.00	9	Replace existing Panel and controls
Singer Valves	8,500.00	9	replace singer control valves
ATER CAPITAL BUDGET	**75,000.00**		

VILLAGE OF HILTON BEACH
WATER AND SEWER CAPITAL BUDGET 2014 03 06

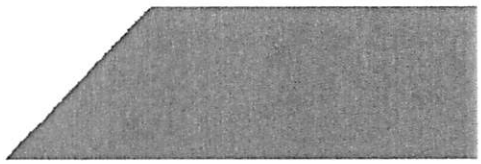
SEWAGE MAINTENANCE BUDGET		Priority	Year	Comments
Emergency lighting - pump station	275.00		1	New batteries
Plant Lighting	400.00		1	Ballasts
Service entrance Breaker	460.00		1	New breaker required
Main Pump Station Add a phase Upgrade/Rebuild	1,000.00		1	Require redundancy
Main Pump Station Add a phase Upgrade/Rebuild	1,000.00		1	Require redundancy
Generator Louvers	1,725.00		1	Three defective motors
Plant HVAC	270.00		1	Replacement needed
Emergency lighting wwtp	270.00		1	Replacement needed
Active eyewash station (permanent)	1,950.00		2	if permanent watersource is attained
RBC #1-#3, bearings, gear reducers, chain drive	2,800.00		3	Per RBC (all three to be dione)
RBC #1-#3, bearings, gear reducers, chain drive	2,800.00		5	Per RBC (all three to be dione)
RBC Pumps	1,000.00		5	Back up system required
RBC #1-#3, bearings, gear reducers, chain drive	2,800.00		7	Per RBC (all three to be dione)
	16,750.00			

VILLAGE OF HILTON BEACH
WATER AND SEWER CAPITAL BUDGET 2014 03 06

WATER MAINTENANCE BUDGET

Main Pump Station Add a phase Upgrade/Rebuild	1,000.00	1	Red star to quote
Emergency lighting	270.00	1	Replacement needed
UPS fpr SCADA System	620.00	1	
Wall heater	525.00	1	replacement required
WTP / reservoir valves (2)	1,000.00	6	Valves need replacing
	3,415.00		

APPENDIX III - CONDITION ASSESSMENT - ROADS



10 YEAR ROADS IMPROVEMENT PLAN

VILLAGE OF HILTON BEACH

PROJECT NO. 13-2065

PREPARED BY:

TULLOCH
ENGINEERING

1 INTRODUCTION

The following document was prepared by Tulloch Engineering in conjunction with the Village of Hilton Beach in support of the preparation of their Municipal Asset Management Plan. This plan addresses the following components:

- Inventory of the approximately 6.5 kilometres of road system.
- Identification of road sections in need of improvements and estimated costs.
- Preparation of a 10 year recommended roads improvement program.

These components will aid in the long range financial planning for the Town and outline needs for special project funding. This plan is intended to serve as a guide only. Decisions regarding the completion of actual improvement projects are to be made by the Municipality with consideration of its financial capacity, desired levels of service and remaining commitments to its taxpayers. The timing of improvements were determined based upon current and anticipated condition of the road alone and did not consider projects or requirements outside the realm of the road network. The actual timing of road improvements should be coordinated with any anticipated sewer and water projects to avoid duplication of work causing unnecessary expenditures and inconveniences to the public.

2 ROAD CONDITION EVALUATION

Determination of the existing condition of the roads under the Village's jurisdiction was completed based on practices outlined in the MTO Methods and Inventory Manual. The road condition appraisals were completed on September 18, 2013 with assistance provided by Village of Hilton Beach government representatives.

Each road section has been given a subjective evaluation from 1 to 10 based on current surface condition, surface type and drainage conditions. The Village's road network includes road surface types of, gravel, surface treatment or Low Cost Bituminous (L.C.B.) and hot mix asphalt or High Class Bituminous (H.C.B.). Condition ratings greater than five are considered acceptable and are expected to require only normal maintenance. A condition rating less than five is considered unacceptable and a road improvement was costed where traffic volume and road function warranted it. Annual Average Daily Traffic counts measured in Vehicles per Day (V.P.D.) were estimated from field observations and discussions with Village representatives. A summary of information collected during the road appraisals can be found in Appendix A along

with a Road Section Location and Condition Rating map. For comparison purposes average condition ratings, based on weighted road section lengths, were calculated for each of the existing surface types and estimated daily traffic volumes. This information is presented in Tables 1 and 2 following.

Table 1 - Road Lengths and Condition Rating by Surface Type

Surface Type	Length	Condition Rating
GRAVEL	1.4 km	4.7
L.C.B.	4.8 km	7.2
H.C.B.	0.3 km	7.0
Total	**6.5 km**	**6.7**

Table 2 - Road Lengths and Condition Rating by Traffic Volume

Traffic Volume	Length	Condition Rating
0-49 V.P.D.	2.5 km	5.3
50-199 V.P.D.	2.3 km	7.4
200-399 V.P.D.	1.7 km	7.7
Total	**6.5 km**	**6.7**

The MTO Methods and Inventory Manual suggests that road systems such as this with average condition ratings between 5 to 7 represent a system defined as, "average structural condition; continued improvement needed. Overall the condition of the Village's hard surfaced and higher trafficked roads are quite good. The lower volume (0-49 V.P.D.) and gravel roads show overall condition ratings of fair to poor structural conditions but this is not viewed as a concern as these roads see little traffic and a significant portion are seasonal. These roads are generally considered to be adequate for their purpose. Conditions of much of the gravel roads could be improved with typical maintenance and minor gravel resurfacing projects if it were deemed necessary by the municipality. The resurfacing of lower volume surface treated roads was considered and outlined within this study.

Once the existing condition ratings were established the anticipated road condition for each section was then projected over the 10 year study period considering deterioration and allowing for the forecasting of required improvements. This method of evaluating road surface deterioration relies on estimating the life cycle of various road surfaces.

Surface treated or L.C.B. treated roads typically have a 6 to 10 year life cycle before their condition rating drops below five. This is dependent on their use, the structural condition of the road and routine maintenance. After discussions with Village representatives and through

review of existing surface treatment performance, a 10 year life cycle was assumed as per the Municipality's PSAB protocols. Based on this assumption the condition rating for each section of surface treated road would typically drop 0.5 per year. This value was used to determine the year in which the condition rating will drop below five and require resurfacing.

Hot mix asphalt or H.C.B. treated rural and local urban roads with low traffic volumes typically have a life cycle of 20 years or more. Discussions with Village representatives indicated a desired assumed life cycle of 25 years as per the Municipality's PSAB protocols. This would result in a typical condition rating drop of 0.2 per year. This value was used to determine the year in which the condition rating will drop below five and require resurfacing.

The Methods and Inventory Manual suggests that the condition rating for gravel roads will not change with continued routine loose top maintenance. The forecasted future condition ratings will then be the same as the study year, although severe spring breakup may affect the condition rating and require localized base repairs that cannot be anticipated. Road Section No. 105 which is made up of Bay Street from Marks Street to its west end was originally a surface treated road but has deteriorate to the point that it is nearing an essentially gravel surface. Village's representatives have indicated that this is short laneway with a low traffic volume (0-49 V.P.D.) that will receive only minor maintenance and is an unlikely candidate for resurfacing. Due to this fact, this road section was considered to be a gravel surface for the 10 year study period of this plan.

Using the assumed surface life cycles and accounting for anticipated surface improvements, the condition ratings for the Villages roads were projected over the next 10 years and are summarized in Appendix B. The detailed road inventory and condition projections are also included on the attached CD-ROM containing the applicable Excel spreadsheets.

3 ROAD IMPROVEMENTS AND COSTING

Required road improvements were assessed based on the projected condition ratings throughout the 10 year study period and following input from Village representatives regarding desired improvements. Improvements were costed using bench mark costs established from industry knowledge and review of recent construction projects. Bench mark costs used for improvements noted within this plan are shown in Appendix C. Costing of improvements for sections of roads shared with the Township of Hilton (i.e. an 800m portion of Canoe Point

Road) were assessed at 50 percent of the total costs as it was assumed that these costs would be shared between the municipalities. It should be noted that the Methods and Inventory Manual directs that only roads with 50 V.P.D. or greater shall have costed improvements. Roads with less than 50 V.P.D. are considered to be maintained with regular spot maintenance work. However, as these low volume roads make up a significant portion of the Municipality's road network it was decided to continue a program of road upgrades on sections with less than 50 V.P.D. if the improvements proved to aid in the operational safety and general functioning of the road section. Maintenance operations such as brushing, ditch cleanout and minor gravel resurfacing are to be continued on a regular basis as required and were excluded from the recommended improvements.

3.1 GENERAL ROAD IMPROVEMENTS AND ADDITIONS

This section of the report deals with road improvements outside of the typical resurfacing projects that were assessed because of an indicated desire from Municipal representatives or a possible need to address safety and functionality concerns. A summary of these improvements is shown in Table 3 following with estimated construction costs including Engineering and Contract Administration fees. It should be noted that estimated costs were based on preliminary desktop calculations and assumptions and did not involve detailed on site surface and subsurface investigations. Actual costs may vary due to unanticipated site and subsurface conditions. Decisions on the timing and implementation of these general road improvements are to be made by the Municipality and will require consideration of improvement priorities and other fiscal responsibilities.

Table 3 - Summary of General Road Improvements

Section No.	Road Name	Improvement Description	Costs
N/A	Maple Street Extension	Extension from Third Street to Sixth Street	$230,000*
185	South Street	Embankment Slope Stabilization & Guiderail	$ 25,000
215	Ash Street	Construct Snow Plow Turnaround	$ 15,000**
230	Pine Street	Grade Raise at Highway 548 Approach	$ 5,000

* Based on Construction Cost Estimate Completed by Tulloch Engineering for the Municipality
** Excludes Property Acquisition Costs

3.2 10 YEAR RECOMMENDED RESURFACING PLAN

This section of the report outlines the anticipated road resurfacing projects based on the assumed deterioration of the hard surfaced roads. Where possible the timing of improvements were positioned in an attempt to better balance yearly expenditures. It should be noted that inflation of construction costs from the 2013 bench mark dollar figures to the actual improvement year was not considered. Dollar amounts were rounded to the nearest $100 for simplicity. The following table summarizes the proposed activities by year.

Table 4 – 10 Year Road Resurfacing Plan

Year	Section No.	Road Name	Improvement Description	Costs
2014	100	Bowker Street	Surface Treatment - Single Course	$1,400.00
	135	Canoe Point Road	Surface Treatment - Single Course	$5,500.00
			Yearly Total	**$6,900.00**
2015	120	Park Street	Surface Treatment - Single Course	$1,300.00
	175	First Street	Surface Treatment - Single Course	$2,900.00
	225	Cherry Street	Surface Treatment - Single Course	$800.00
	245	Third Street	Surface Treatment - Single Course	$1,300.00
			Yearly Total	**$6,300.00**
2016	150	Ringham Street	Surface Treatment - Single Course	$6,700.00
	170	Second Street	Surface Treatment - Single Course	$2,400.00
			Yearly Total	**$9,100.00**
2017	145	Boundary Road	Surface Treatment - Single Course	$2,100.00
	155	East Street	Surface Treatment - Single Course	$2,400.00
	180	South Street	Surface Treatment - Single Course	$2,800.00
	205	Birch Street	Surface Treatment - Single Course	$1,600.00
			Yearly Total	**$8,900.00**
2018	115	Bowker Street	Surface Treatment - Single Course	$1,400.00
	185	South Street	Surface Treatment - Single Course	$6,500.00
			Yearly Total	**$7,900.00**
2019	130	Canoe Point Road	Surface Treatment - Single Course	$1,400.00
	215	Ash Street	Surface Treatment - Single Course	$2,200.00
	250	Bay Street	Surface Treatment - Single Course	$2,000.00
			Yearly Total	**$5,600.00**
2020	195	Sixth Street	Surface Treatment - Single Course	$5,700.00
			Yearly Total	**$5,700.00**
2021	255	Bay Street	Surface Treatment - Single Course	$2,900.00
	260	Marina Road	Surface Treatment - Single Course	$2,900.00
			Yearly Total	**$5,800.00**
2022	140	Canoe Point Road	Surface Treatment - Single Course	$6,300.00
			Yearly Total	**$6,300.00**
2023	No resurfacing scheduled			$0.00
			Yearly Total	**$0.00**

4 SUMMARY

As identified in this report the average condition rating of the road system is defined as, 'average with continued improvement needed'. By following the outlined plan and continuing the same level of maintenance the Village will be able to improve the overall condition of the road system. This plan is intended to serve as a guide only. Decisions regarding the completion and timing of improvements are to be made by the Municipality with consideration of its financial capacity, desired levels of service, remaining commitments to its taxpayers and any external utility projects (i.e sewer and watermain upgrades). This plan shall be updated and adjusted regularly based on observed depreciations to ensure the accuracy of recommended improvement timing.

Respectively Submitted,

Drew MacDonald, E.I.T.
Tulloch Engineering Inc.

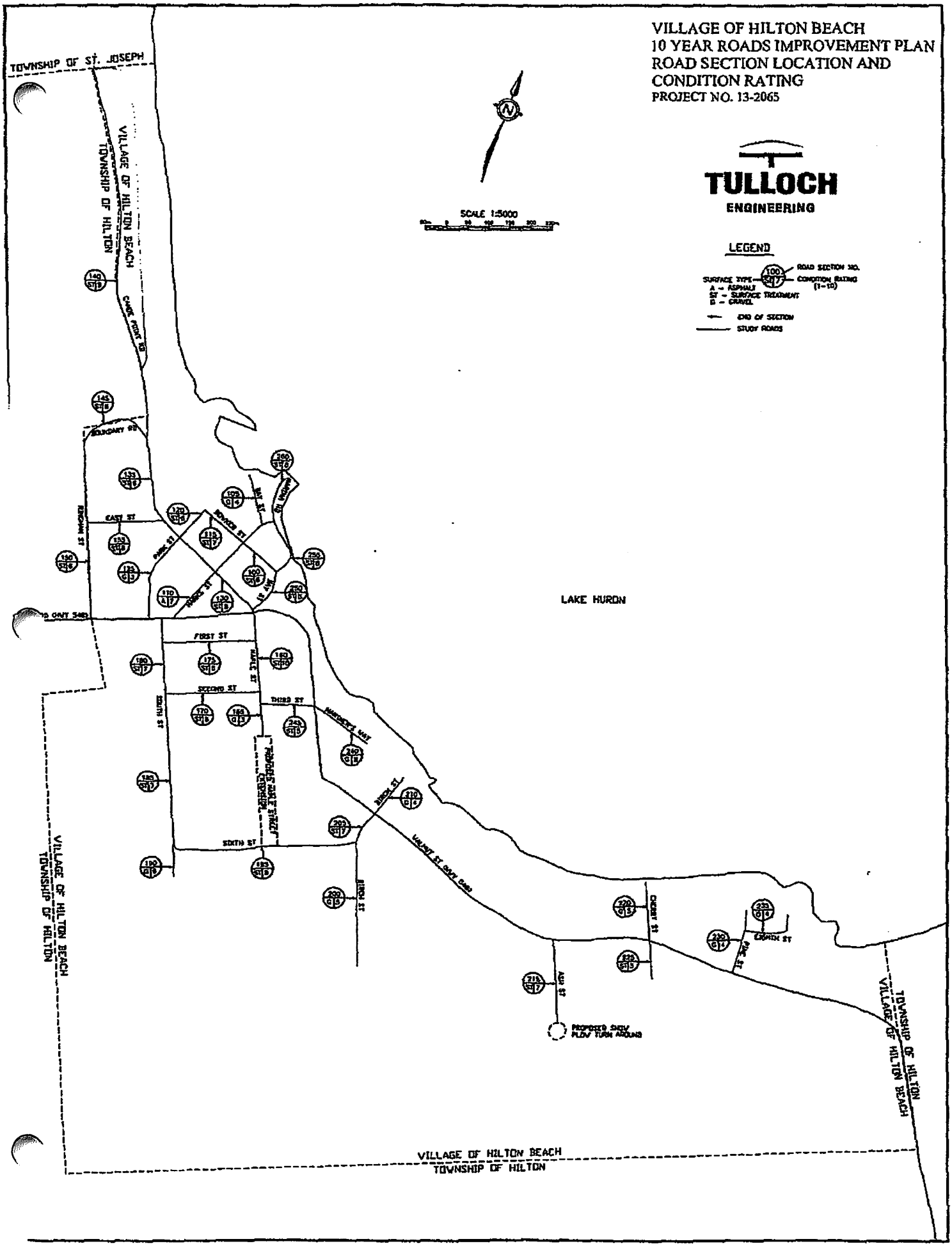
LIST OF APPENDICIES

APPENDIX A

SUMMARY OF ROAD APPRAISALS &
ROAD SECTION LOCATION AND CONDITION RATING PLAN

Summary of Road Appraisals							
SECTION NO.	ROAD NAME	FROM	TO	SURFACE TYPE	YEAR ROUND OR SEASONAL	LENGTH (km)	CONDITION RATING
100	Bowker Street	Bay Street	Mark Street	L.C.B.	YR	0.1	6
105	Bay Street	Marks Street	End	GRAVEL	YR	0.1	4
110	Marks Street	Marina Road	Hilton Rod (Hwy 548)	H.C.B.	YR	0.3	7
115	Bowker Street	Mark Street	Park Street	L.C.B.	YR	0.1	7
120	Park Street	Bowker Street	Canoe Point Road	L.C.B.	YR	0.1	6
125	Park Street	Canoe Point Road	Hilton Road (Hwy 548)	GRAVEL	S	0.2	3
130	Canoe Point Road	Hilton Road (Hwy 548)	Marks Street	L.C.B.	YR	0.1	8
135	Canoe Point Road	Marks Street	Boundary Road	L.C.B.	YR	0.4	6
140	Canoe Point Road	Boundary Road	Soo Mill Road / Village Boundary	L.C.B.	YR	0.8	9
145	Boundary Road	Canoe Point Road	Ringham Street	L.C.B.	YR	0.15	6
150	Ringham Street	Boundary Road	Hilton Road	L.C.B.	YR	0.4	6
155	East Street	Ringham Street	Canoe Point Road	L.C.B.	YR	0.16	6
160	Maple Street	Hilton Road (Hwy 548)	Third Street	L.C.B.	YR	0.2	10
165	Maple Street	Third Street	South End	GRAVEL	YR	0.08	3
170	Second Street	Maple Street	South Street	L.C.B.	YR	0.2	6
175	First Street	Maple Street	South Street	L.C.B.	YR	0.2	6
180	South Street	Hilton Road (Hwy 548)	Second Street	L.C.B.	YR	0.18	7
185	South Street	Second Street	Sixth Street	L.C.B.	YR	0.4	7
190	South Street	Sixth Street	South End	GRAVEL	YR	0.08	6
195	Sixth Street	South Street	Birch Street	L.C.B.	YR	0.4	8
200	Birch Street	Water Treatment Plant (South End)	Sixth Street	GRAVEL	YR	0.3	5
205	Birch Street	Sixth Street	Walnut Street (Hwy 548)	L.C.B.	YR	0.1	7
210	Birch Street	Walnut Street (Hwy 548)	North End	GRAVEL	S	0.1	4
215	Ash Street	Walnut Street (Hwy 548)	South End	L.C.B.	YR	0.2	7
220	Cherry Street	Walnut Street (Hwy 548)	South End	GRAVEL	S	0.1	5
225	Cherry Street	Walnut Street (Hwy 548)	North End	L.C.B.	S	0.1	5
230	Pine Street	Walnut Street (Hwy 548)	North End	GRAVEL	S	0.15	4
235	Eighth Street	Pine Street	End	GRAVEL	S	0.1	4
240	Mariner's Way	Walnut Street (Hwy 548)	End	GRAVEL	YR	0.15	8
245	Third Street	Walnut Street (Hwy 548)	Maple Street	L.C.B.	YR	0.1	5
250	Bay Street	Hilton Road (Hwy 548)	Bowker Street	L.C.B.	YR	0.1	8
255	Bay Street	Bowker Street	Marks Street	L.C.B.	YR	0.15	8
260	Marina Road	Marks Street	End	L.C.B.	YR	0.15	8

VILLAGE OF HILTON BEACH
10 YEAR ROADS IMPROVEMENT PLAN
ROAD SECTION LOCATION AND CONDITION RATING
PROJECT NO. 13-2065



APPENDIX B

PROJECTED CONDITION RATINGS

Projected Condition Ratings														
SECTION NO.	ROAD NAME	FROM	TO	LENGTH (km)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
100	Bowker Street	Bay Street	Mark Street	0.1	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00	5.50
105	Bay Street	Marks Street	End	0.1	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
110	Marks Street	Marina Road	Hilton Rod (Hwy 548)	0.3	6.80	6.60	6.40	6.20	6.00	5.80	5.60	5.40	5.20	5.00
115	Bowker Street	Mark Street	Park Street	0.1	6.50	6.00	5.50	5.00	10.00	9.50	9.00	8.50	8.00	7.50
120	Park Street	Bowker Street	Canoe Point Road	0.1	5.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00
125	Park Street	Canoe Point Road	Hilton Road (Hwy 548)	0.2	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
130	Canoe Point Road	Hilton Road (Hwy 548)	Marks Street	0.1	7.50	7.00	6.50	6.00	5.50	10.00	9.50	9.00	8.50	8.00
135	Canoe Point Road	Marks Street	Boundary Road	0.4	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00	5.50
140	Canoe Point Road	Boundary Road	Soo Mill Road / Village Boundary	0.8	8.50	8.00	7.50	7.00	6.50	6.00	5.50	5.00	10.00	9.50
145	Boundary Road	Canoe Point Road	Ringham Street	0.15	5.50	5.00	4.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00
150	Ringham Street	Boundary Road	Hilton Road	0.4	5.50	5.00	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50
155	East Street	Ringham Street	Canoe Point Road	0.16	5.50	5.00	4.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00
160	Maple Street	Hilton Road (Hwy 548)	Third Street	0.2	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00	5.50	5.00
165	Maple Street	Third Street	South End	0.08	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
170	Second Street	Maple Street	South Street	0.2	5.50	5.00	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50
175	First Street	Maple Street	South Street	0.2	5.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00
180	South Street	Hilton Road (Hwy 548)	Second Street	0.18	6.50	6.00	5.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00
185	South Street	Second Street	Sixth Street	0.4	6.50	6.00	5.50	5.00	10.00	9.50	9.00	8.50	8.00	7.50
190	South Street	Sixth Street	South End	0.08	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
195	Sixth Street	South Street	Birch Street	0.4	7.50	7.00	6.50	6.00	5.50	5.00	10.00	9.50	9.00	8.50
200	Birch Street	Water Treatment Plant (South End)	Sixth Street	0.3	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
205	Birch Street	Sixth Street	Walnut Street (Hwy 548)	0.1	6.50	6.00	5.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00
210	Birch Street	Walnut Street (Hwy 548)	North End	0.1	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
215	Ash Street	Walnut Street (Hwy 548)	South End	0.2	6.50	6.00	5.50	5.00	4.50	10.00	9.50	9.00	8.50	8.00
220	Cherry Street	Walnut Street (Hwy 548)	South End	0.1	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
225	Cherry Street	Walnut Street (Hwy 548)	North End	0.1	4.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00
230	Pine Street	Walnut Street (Hwy 548)	North End	0.15	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
235	Eighth Street	Pine Street	End	0.1	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
240	Mariner's Way	Walnut Street (Hwy 548)	End	0.15	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
245	Third Street	Walnut Street (Hwy 548)	Maple Street	0.1	4.50	10.00	9.50	9.00	8.50	8.00	7.50	7.00	6.50	6.00
250	Bay Street	Hilton Road (Hwy 548)	Bowker Street	0.1	7.50	7.00	6.50	6.00	5.50	10.00	9.50	9.00	8.50	8.00
255	Bay Street	Bowker Street	Marks Street	0.15	7.50	7.00	6.50	6.00	5.50	5.00	4.50	10.00	9.50	9.00
260	Marina Road	Marks Street	End	0.15	7.50	7.00	6.50	6.00	5.50	5.00	4.50	10.00	9.50	9.00

APPENDIX C

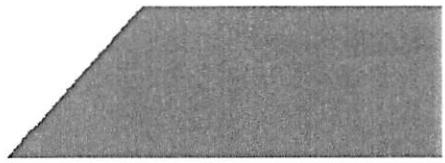
BENCH MARK COSTS

APPENDIX C

ROAD IMPROVEMENTS BENCH MARK COSTS

#	ITEM	UNIT	UNIT COST
1	Asphalt		
	a) Double Lift	sq. m.	$30.00
	b) Single Lift	sq. m.	$15.00
2	Surface Treatment (Includes Aggregates)		
	a) Single Course	sq. m.	$2.50
	b) Double Course	sq. m.	$5.00
3	Full Depth in-Place Reclamation	sq. m.	$2.00
4	Earth Excavation	.	$10.00
5	Rock Excavation		
	a) <500 cu.m	cu. m.	$120.00
	b) >500 cu.m	cu. m.	$60.00
6	Granular "B" (in place)	cu. m.	$20.00
7	Granular "A" (in place)	cu. m.	$30.00
8	Guide Rails		
	a) Cable	m.	$50.00
	b) Steel Beam	m.	$250.00
9	Ditching		
	a) New Ditch	m.	$20.00
	b) Reditching	m.	$10.00
10	Culverts – HDPE (Installed)		
	a) 450 mm	m.	$200.00
	b) 600 mm	m.	$250.00
	c) 750 mm	m.	$300.00
	d) 900 mm	m.	$350.00

APPENDIX IV - CONDITION ASSESSMENT - VEHICLES



1 INTRODUCTION

The following document was prepared by Tulloch Engineering in conjunction with Township of Hilton to provide direction on the Fire Department Vehicles. The information contained within this document was provided by municipal representatives and the Fire Chief. The Township of Hilton operates a shared fire department with the Village of Hilton Beach known as the Hilton Union Fire Department. Both municipalities own a 50% share of the fire department assets.

2 FIRE DEPARTMENT VEHICLES

2.1 FIRE INVENTORY AND REPLACEMENTS

An inventory of the major fire department vehicles was obtained using the PSAB 3150 list of municipal vehicle assets. Anticipated equipment replacements were based on in-service year and the respective depreciable life of the equipment as indicated by the Township. An inventory of the major fire equipment is presented in the following Table with anticipated replacement years.

Municipal ID	Year & Make	Year Purchased	Depreciable Life	Anticipated Replacement Year
Fire Pumper Truck	1995 HUB 1050	2011	30 Years	2025
Fire Tanker Truck	1987 Ford	1997	35 Years	2018 to 2022
Fire Utility Truck	1995 GMC	2005	30 Years	2015

2.2 VEHICLE REPLACEMENTS AND COSTING

Replacement of Fire Department Vehicles is dependent on a number of factors including age, asset condition, maintenance costs and changing needs. The Fire Chief Jerry Shields recently prepared a Five Year Plan that was approved by the Fire Board. The following sections are direct excerpts from this plan as it outlines each fire department vehicle and the timing for replacement.

2.2.1 PUMPER TRUCK

A 1995 Hub Pumper was purchased in 2011. This truck is in excellent condition and should serve the Fire Department for many years to come. The truck is 18 years old and has no known mechanical issues. Ideally this truck should be able to operate beyond 30 years of age. This estimate would suggest that 2025 would be a reasonable target date to look at replacing this truck. Assuming that the department has nearly 15 years to replace this truck, and that a

replacement truck would likely cost $75,000 – it would be reasonable to suggest that $5,000 a year would have to be allocated to have sufficient funding to replace this truck at the end of its useful life.

2.2.2 TANKER TRUCK

The current tanker is near 30 years old. In what it lacks in modern convenience it makes up for in the simplicity of its design. No known major defects currently exist but constant maintenance and inspection is key to its ability to be ready for any emergency call. It would not be unreasonable to expect a major malfunction of this truck in the next 4-6 years, but it could occur any time. Aside from a major structural flaw, a major engine failure or major transmission failure there is little else that couldn't be repaired to keep this truck useful for the department. The useful life of a tanker should be 30-40 years. Replacement value would be $25,000-$40,000 – for a newer used tanker. With the increased water capacity of the new Pumper it could be conceivable to replace this tanker with a slightly smaller version. Increased co-operation amongst the island fire departments also reduces the need for a tanker with such a high water capacity. Funding should be available to replace this old truck in case is does have a catastrophic failure but the need to have a planned replacement time seems unnecessary at this time.

2.2.3 UTILITY TRUCK

This truck has been with the department for 8 years and was purchased used. This truck has become a key part in the fire departments operations. This truck is multifaceted and is able to transport fire fighters for emergency calls, to do routine public business, to act as a first strike wildfire vehicle and also serves as the first strike ice rescue vehicle in the winter months. This truck has allowed for the larger fire trucks to be used only for emergency calls and extends their useful life. It allows firefighters to reach rural locations on the island without risking harm to the more expensive larger trucks. Its replacement is critical to ongoing operations and should be considered in the next couple years. Its replacement should be equipped with 4-wheel drive to better serve the department in the role that it serves. Replacement costs would be $5-10,000 and the life expectancy of its replacement would be dependent on the age of the vehicle purchased and the ability to store the vehicle inside the fire hall. The useful life of the current Suburban has expired and replacement of this vehicle is required in the next year or two.

3 RECOMMENDED REPLACEMENT PLAN

The fire department vehicles replacement plan was based on recommended improvements, the year of improvements and associated costs. This information was derived from the Fire Departments Five Year Plan. The following table summarizes the proposed activities by year. This is only an estimate of the year of replacement and will be subject to actual requirements by the fire department and the approval of both the Village of Hilton Beach and Township of Hilton.

Year 2015			
Vehicles			
Municipal ID	**Description**		**Costs**
Utility Truck	Replace Suburban with Four Wheel Drive Vehicle	$	10,000.00
	Township of Hilton Share (50%)	**$**	**5,000.00**
Year 2020			
Vehicles			
Municipal ID	**Description**		**Costs**
Tanker Truck	Replace Tanker with a good condition Used Tanker Truck	$	40,000.00
	Township of Hilton Share (50%)	**$**	**20,000.00**
Year 2025			
Vehicles			
Municipal ID	**Description**		**Costs**
Pumper Truck	Replace Tanker with a good condition Used Pumper Truck	$	75,000.00
	Township of Hilton Share (50%)	**$**	**37,500.00**

APPENDIX V - FINANCIAL MODEL INSTRUCTIONS

The following steps, which should be performed in the updating process each year:

General Considerations

- Input cells are identified within the model by being "grayed out". Cells which are not grayed out are calculated cells and should not be adjusted, unless absolutely necessary. Manually inputting values in calculated cells can often have unintended consequences on future iterations of the model;
- Worksheets may have "grouped" rows or columns (denoted by a + sign). This is for presentation purposes only. It is important the user ungroup these rows/columns as in some cases, annual user input is required.
- The summary schedule 1 is calculated and does not require adjustment.

Step 1 - Review the "Input" tab to ensure necessary changes, given current conditions are made. The following questions must be answered:

- Enter current year;
    - Current year means the fiscal year which is either just underway, or immediately upcoming.
- Discount rate:
    - Does the discount rate require adjustment?
    - A 1% discount rate is reflective of the Village's current policy of investing reserve funds in extremely low risk investments such as short term GIC's. Should this policy be altered in the future, the discount rate must be adjusted.
    - A good practice may be to consider the average return on reserve funds for the past 3 fiscal years, each year in which the model is updated.
- Inflation rates:
    - Have expected inflation rates changed during the year, either generally, or specific to one asset grouping?
    - The general rate of inflation, based on current monetary policy, usually falls within the controlled range of 1% to 3% (2% selected). Should circumstances change in the future, this input must be adjusted;
        - Cost associated with certain capital items (roads, buildings etc.) may escalate at a rate above that of the general rate of inflation. When

adjusting inflation rates, consideration must be given to the specific asset grouping and expected future cost increases.

- Inflation rates associated with buildings and roads were based upon construction price indices as at the date of this AMP. These indices are intended to reflect anticipated short term price increases and are adjusted on an annual basis. Should these indices diverge from current rates, this input must be adjusted.

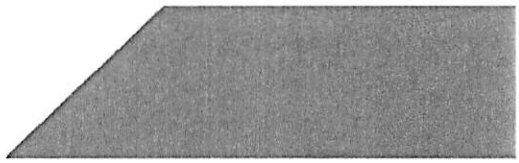
Step 2 - Each asset grouping spreadsheet (Schedules 2 to 8) should be updated, as follows:

- Enter data in all input cells:
  - Asset name
  - Project
  - Comment
  - Replacement Year
  - Replacement Cost - Current Years $
- Consider Available Funding/Grants:
  - Is a funding agreement in place for an asset or group of assets?
  - Is funding generally available for the replacement of a specific asset, or generally for a certain asset grouping (i.e. roads)?
  - This can be reflected an adjustment to the funding % noted for each asset grouping. If an actual $ value for funding is known, simply adjust the percentage until the desired $ value is deducted from the cost of the asset
- If a completely new asset was added during the year, place this asset in the "Asset Addition" rows at the bottom of the spreadsheets and input all applicable information fields for the new asset.

Step 3 - Each capital replacement spreadsheet (Schedules 2A to 8A) should be updated, as follows:

- Future replacement costs do not require manual linking, as they are updated automatically within the model;

APPENDIX V - FINANCIAL MODEL



Current Year	2014
Present Value Discount Rate	
Estimated return on selected investments	1.0%
Long Term Inflation rates:	
- Roads	3.0%
- Water and Sewer	3.0%
- Vehicles/Equipment/Furnishings	2.0%
- Building Construction	4.0%
- Land and Improvements	2.0%
- Docks	3.0%

Village of Hilton Beach
Summary of Replacement Schedules
As at December 31, 2013

Schedule 1

Year	Summary of Future Capital Replacement Cost							
	Water and Sewer	Roads	Vehicles	Land and Improvements	Buildings and Permanent Structures	Docks	Equipment and Furnishings	Total
	Sch. 2A	Sch. 3A	Sch. 4A	Sch. 5A	Sch. 6A	Sch. 7A	Sch. 8A	
2014	$ 18,853	$ 6,900	$ -	$ -	$ -	$ -	$ -	$ 25,753
2015	5,733	32,239	5,100	-	-	-	-	43,072
2016	6,807	9,654	-	-	-	-	-	16,461
2017	10,176	9,725	-	-	-	-	-	19,901
2018	11,241	95,172	-	-	-	-	-	106,413
2019	4,443	12,288	-	-	-	-	-	16,732
2020	23,879	6,806	22,523	-	-	-	-	53,208
2021	8,608	7,133	-	-	-	-	-	15,742
2022	13,934	7,981	-	-	-	-	-	21,915
2023	6,306	-	-	-	-	-	-	6,306
2024	-	-	-	-	-	-	-	-
2025	-	-	46,627	-	-	-	-	46,627
2026	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-
2030	-	-	-	-	-	-	-	-
2031	-	-	-	-	-	-	-	-
2032	-	-	-	-	-	-	-	-
2033	-	-	-	-	-	-	-	-
	$ 109,980	$ 187,899	$ 74,250	$ -	$ -	$ -	$ -	$ 372,128
Present Value of Future Capital Replacement Costs	$ 105,266	$ 181,308	$ 68,060	$ -	$ -	$ -	$ -	$ 354,634
Required Annual Capital Reserve Contribution	11,100	21,200	6,000	-	-	$ -	$ -	$ 38,300

Village of Hilton Beach
Gap Analysis
As at December 31, 2013

Schedule 1A

Historical Capital Allocations (purchases and reserves):	Balance 12-31-12	2012	2011	2010
Net Transfers to Reserve for Capital Items				
Recreation Capital	-	-	-	-
Jail Restoration	356	35	-	321
Marina/Waterfront	-	-	-	-
Federal Gas Tax	8,123	(529)	8,652	-
Water and Sewer	12,574	3,607	4,949	4,018
	21,053	3,113	13,601	4,339
Average (2010 to 2012)		**$ 7,000**		
Ideal Annual Capital Allocation - Per Schedule 1		**$ 38,300**		
Gap		**$ (31,300)**		

Village of Hilton Beach

Schedule 2

Water and Sewer - Summary of Projected Replacement Cost

As at December 31, 2013

Project	Comment	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
Water Projects:						
Seimens HMI control Center for Autocon	Installed by Millennium controls, gives remote access	2014	$ 20,000	$ 20,000	67%	$ 6,666
Spare Fire hydrant & components/main valve stem	For emergency replacement/repair	2015	4,500	4,635	67%	1,545
15 HP grundfos well pump and motor (primary well)	Spare motor and pump	2015	5,200	5,356	67%	1,785
Chlorine Analyzer	Nearing lifespan, should be on the shelf	2016	4,800	5,092	67%	1,697
Turbidity Analyzer	Nearing lifespan, should be on the shelf	2016	4,600	4,880	67%	1,627
Reservoir inspection	Five year cycle	2018	5,400	6,078	67%	2,026
Surefeed chlorine chemical board	with peristaltic pumps	2021	14,500	17,833	67%	5,944
Reservoir MCC Panel rebuild	Replace existing Panel and controls	2022	7,500	9,501	67%	3,167
Singer Valves	replace singer control valves	2022	8,500	10,768	0%	10,768
Water Additions:						
Water Addition #1			-	-	0%	-
Water Addition #2			-	-	0%	-
Water Addition #3			-	-	0%	-
Water Addition #4			-	-	0%	-
Water Addition #5			-	-	0%	-
Water Addition #6			-	-	0%	-

Village of Hilton Beach
Water and Sewer - Summary of Projected Replacement Cost
As at December 31, 2013

Schedule 2

Project	Comment	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
Sewer Projects:						
Main Pump Station New pump #1 (high efficiency)	50 HP Barnes Pump Installed.	2014	24,565	24,565	67%	8,188
WWTP, pressurized water at the plant	Drilled well?	2014	12,000	12,000	67%	4,000
WWTP Blower & Motor rebuilds	Per blower (all three to be done)	2015	3,500	3,605	67%	1,202
Equalization tank piping and diffusers rebuild	Piping and diffusers installed	2015	3,500	3,605	67%	1,202
Spare RBC 5.0 HP motor, new (high efficiency)	New, Installed	2016	9,850	10,450	67%	3,483
WWTP Blower & Motor rebuilds	Per blower (all three to be done)	2017	3,500	3,825	67%	1,275
Spare RBC 2.5 HP pump, new (high efficiency)	New Installed, rebuild is approximately $4680	2017	6,440	7,037	67%	2,345
New Alum Chemical Board (Surefeed) with pumps	Metcon Board with flush capabilities and peristaltic pumps	2017	18,000	19,669	67%	6,556
Main Pump Station New pump #2 (high efficiency)	50 HP Barnes Pump Installed	2018	24,565	27,648	67%	9,215
WWTP Blower & Motor rebuilds	Per blower (all three to be done)	2019	3,500	4,057	67%	1,352
Verbatim alarming system	increase alarming and response capabilities	2019	8,000	9,274	67%	3,091
WWTP SCADASystem	Only manual control available	2020	60,000	71,643	67%	23,879
Main Pump Station Pump Controls Upgrade	To milltronics from floats	2021	6,500	7,994	67%	2,664
ain Pump Station MCC Upgrades	Controls, switches and wiring	2023	10,000	13,048	67%	4,349
WTP pump control systems upgrades	Switches, electrical boxes and wiring	2023	4,500	5,871	67%	1,957
						-
Sewer Additions:						
Sewer Addition #1				-	0%	-
Sewer Addition #2				-	0%	-
Sewer Addition #3				-	0%	-
Sewer Addition #4				-	0%	-
Sewer Addition #5				-	0%	-
		Totals	$ 273,420	$ 308,435		$ 109,980

Village of Hilton Beach Schedule 2A

Water and Sewer - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ 18,853	$ 18,853
2015	5,733	5,676
2016	6,807	6,673
2017	10,176	9,877
2018	11,241	10,802
2019	4,443	4,228
2020	23,879	22,495
2021	8,608	8,029
2022	13,934	12,868
2023	6,306	5,766
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ 109,980	$ 105,266

Required Annual Capital Reserve Contribution (rounded) **$ 11,100**

Village of Hilton Beach
Roads - Summary of Projected Replacement Cost
As at December 31, 2013

Schedule 3

Road Section	Road Name	Improvement Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
Major Projects:							
185	South Street	Embankment Slope Stabilization & Guiderail	2015	$ 25,000	$ 25,750	0%	$ 25,750
215	Maple Street (extension)	Extension from Third Street to Sixth Street	2018	230,000	258,867	67%	86,280
230	Pine Street	Grade Raise at Highway 548 Approach	2019	5,000	5,796	0%	5,796
					-	0%	-
					-	0%	-
					-	0%	-
Resurfacing:							
100	Bowker Street	Surface Treatment - Single Course	2014	1,400	1,400	0%	1,400
135	Canoe Point Road	Surface Treatment - Single Course	2014	5,500	5,500	0%	5,500
120	Park Street	Surface Treatment - Single Course	2015	1,300	1,339	0%	1,339
175	First Street	Surface Treatment - Single Course	2015	2,900	2,987	0%	2,987
225	Cherry Street	Surface Treatment - Single Course	2015	800	824	0%	824
245	Third Street	Surface Treatment - Single Course	2015	1,300	1,339	0%	1,339
150	Ringham Street	Surface Treatment - Single Course	2016	6,700	7,108	0%	7,108
170	Second Street	Surface Treatment - Single Course	2016	2,400	2,546	0%	2,546
145	Boundary Road	Surface Treatment - Single Course	2017	2,100	2,295	0%	2,295
155	East Street	Surface Treatment - Single Course	2017	2,400	2,623	0%	2,623
180	South Street	Surface Treatment - Single Course	2017	2,800	3,060	0%	3,060
205	Birch Street	Surface Treatment - Single Course	2017	1,600	1,748	0%	1,748
115	Bowker Street	Surface Treatment - Single Course	2018	1,400	1,576	0%	1,576
185	South Street	Surface Treatment - Single Course	2018	6,500	7,316	0%	7,316
130	Canoe Point Road	Surface Treatment - Single Course	2019	1,400	1,623	0%	1,623
215	Ash Street	Surface Treatment - Single Course	2019	2,200	2,550	0%	2,550
250	Bay Street	Surface Treatment - Single Course	2019	2,000	2,319	0%	2,319
195	Sixth Street	Surface Treatment - Single Course	2020	5,700	6,806	0%	6,806
255	Bay Street	Surface Treatment - Single Course	2021	2,900	3,567	0%	3,567
260	Marina Road	Surface Treatment - Single Course	2021	2,900	3,567	0%	3,567
140	Canoe Point Road	Surface Treatment - Single Course	2022	6,300	7,981	0%	7,981
					-	0%	-
					-	0%	-
					-	0%	-
Road Additions:							
Road Addition #1					-	0%	-
Road Addition #2					-	0%	-

Village of Hilton Beach
Roads - Summary of Projected Replacement Cost
As at December 31, 2013

Schedule 3

Road Section	Road Name	Improvement Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
Road Addition #3					-	0%	-
Road Addition #4					-	0%	-
Road Addition #5					-	0%	-
Road Addition #6					-	0%	-
			Totals	$ 322,500	$ 360,485		$ 187,899

Village of Hilton Beach
Roads - Capital Replacement Schedule
As at December 31, 2013

Schedule 3A

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ 6,900	$ 6,900
2015	32,239	31,920
2016	9,654	9,464
2017	9,725	9,439
2018	95,172	91,458
2019	12,288	11,692
2020	6,806	6,412
2021	7,133	6,653
2022	7,981	7,370
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ 187,899	$ 181,308

Required Annual Capital Reserve Contribution (rounded) $ **21,200**

Village of Hilton Beach
Vehicles - Summary of Projected Replacement Cost
As at December 31, 2013

Schedule 4

Vehicle	Year Purchased	Actual Age	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Less: Expected Proceeds from Disposition (%)	Replacement Cost Replacement Date (net)
Fire Utility Truck	2005	1995	2015	$ 5,000	$ 5,100	0%	0%	$ 5,100
Fire Tanker Truck	1997	1987	2020	20,000	22,523	0%	0%	22,523
Fire Pumper Truck	2011	1995	2025	37,500	46,627	0%	0%	46,627
Asset Addition #1					-	0%	0%	-
Asset Addition #2					-	0%	0%	-
Asset Addition #3					-	0%	0%	-
Asset Addition #4					-	0%	0%	-
Asset Addition #5					-	0%	0%	-
Asset Addition #6					-	0%	0%	-
Asset Addition #7					-	0%	0%	-
Asset Addition #8					-	0%	0%	-
Asset Addition #9					-	0%	0%	-
Asset Addition #10					-	0%	0%	-
Asset Addition #11					-	0%	0%	-
Asset Addition #12					-	0%	0%	-
Asset Addition #13					-	0%	0%	-
Asset Addition #14					-	0%	0%	-
Asset Addition #15					-	0%	0%	-
Asset Addition #16					-	0%	0%	-
Asset Addition #17					-	0%	0%	-
Asset Addition #18					-	0%	0%	-
Asset Addition #19					-	0%	0%	-
Asset Addition #20					-	0%	0%	-
Asset Addition #21					-	0%	0%	-
Asset Addition #22					-	0%	0%	-
			Totals	$ 62,500	$ 74,250			$ 74,250

Village of Hilton Beach Schedule 4A

Vehicles - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ -	$ -
2015	5,100	5,050
2016	-	-
2017	-	-
2018	-	-
2019	-	-
2020	22,523	21,218
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	46,627	41,792
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ 74,250	$ 68,060

Required Annual Capital Reserve Contribution (rounded) **$ 6,000**

Village of Hilton Beach
Land and Land Improvements - Summary of Projected Replacement Cost
As at December 31, 2013

Schedule 5

Land Description	Improvement Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
			$ -	$ -	0%	$ -
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
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			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
		Totals	$ -	$ -		$ -

Village of Hilton Beach

Schedule 5A

Land and Land Improvements - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ -	$ -
2015	-	-
2016	-	-
2017	-	-
2018	-	-
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ -	$ -

Required Annual Capital Reserve Contribution (rounded) $ -

Village of Hilton Beach

Schedule 6

Buildings and Permanent Structures - Summary of Projected Replacement Cost

As at December 31, 2013

Building/Structure Description	Project Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
			$ -	$ -	0%	$ -
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
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			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
		Totals	$ -	$ -		$ -

Village of Hilton Beach

Schedule 6A

Buildings and Permanent Structures - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ -	$ -
2015	-	-
2016	-	-
2017	-	-
2018	-	-
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ -	$ -

Required Annual Capital Reserve Contribution (rounded) $ -

Village of Hilton Beach

Docks - Summary of Projected Replacement Cost

As at December 31, 2013

Schedule 7

Asset Description	Project Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
			$ -	$ -	0%	$ -
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
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			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
		Totals	$ -	$ -		$ -

Village of Hilton Beach

Schedule 7A

Docks - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ -	$ -
2015	-	-
2016	-	-
2017	-	-
2018	-	-
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ -	$ -

Required Annual Capital Reserve Contribution (rounded) $ -

Village of Hilton Beach

Schedule 8

Equipment and Furnishings - Summary of Projected Replacement Cost

As at December 31, 2013

Asset Description	Project Description	Replacement Year	Replacement Cost Current Date	Replacement Cost Replacement Date	Less: Expected Available Funding (%)	Replacement Cost Replacement Date (Net)
			$ -	$ -	0%	$ -
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
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			-	-	0%	-
			-	-	0%	-
			-	-	0%	-
		Totals	$ -	$ -		$ -

Village of Hilton Beach

Schedule 8A

Equipment and Furnishings - Capital Replacement Schedule

As at December 31, 2013

Year	Future Capital Replacement Cost	Present Value of Net Future Replacement Cost
2014	$ -	$ -
2015	-	-
2016	-	-
2017	-	-
2018	-	-
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-
	$ -	$ -

Required Annual Capital Reserve Contribution (rounded) $ -

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