

Analysis of Assessment vs. Construction Costs  
Proposed Rates  
 Warwick Sewer Authority

*Schedule IV-1a*  
 Revised 8/12/10

YEAR	PROJECT	Accounts	ASSESSMENT PRINCIPAL & INTEREST	CONSTRUCTION COSTS	ASSESSMENT VS CONST.COSTS
2010	Governor Francis Farms II	345		4,055,863	
	Sandy Lane/Cedar Swamp.	123		1,260,278	
<b>TOTAL 2010</b>		<u>468</u>	<u>6,033,246</u>	<u>5,316,141</u>	717,105
2011	Bayside/Longmeadow IV.	320		4,150,153	
<b>TOTAL 2011</b>		<u>320</u>	<u>2,853,662</u>	<u>4,150,153</u>	(1,296,491)
<b>TOTAL</b>		<u>\$ 788</u>	<u>\$ 8,886,908</u>	<u>\$ 9,466,294</u>	<u>\$ (579,386)</u>

2009	Frontage rate	\$ 82.00	already assessed
2010	Frontage rate	\$ 82.00	
2011	Frontage rate	\$ 82.00	

**Leaving 2010 & 2011 Frontage at \$82 would generate a \$579,386 shortfall over the life of the loan**

Construction Cost Details

	Governor Francis Farms II.	Sandy Lane/Cedar Swamp.	Bayside/Longmea dow IV.
Construction	4,092,249	1,065,332	3,564,843
Inspections	525,927	-	385,310
Design	163,982	142,413	200,000
Archaeological	105,954	28,134	-
Traffic	123,448	24,099	-
Misc	21,303	300	-
Less EPA Grant	(477,000)	-	-
Less Interceptor Bond Func	(500,000)	-	-
	<u>4,055,863</u>	<u>1,260,278</u>	<u>4,150,153</u>

ANALYSIS OF SEWER USE CONTRIBUTIONS  
TO SEWER ASSESSMENT FUND  
 Warwick Sewer Authority

Schedule IV-3  
 Revised 8/12/10

DESCRIPTION	ISSUE DATE	PAY DATES	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>ASSESSABLE PRINCIPAL SEWER TOTALS</b>			6,556,282	6,752,725	6,895,210	7,040,495	7,194,405
<i><u>LESS</u></i>							
<b>SEWER ASSESSMENT ADVANCED PAYMENTS</b>			1,094,038	957,635	896,813	587,059	381,433
<b>SEWER ASSESSMENT CURRENT PAYMENTS</b>			4,448,987	4,675,738	4,738,559	4,658,090	4,604,644
<b>REQUIRED SEWER USE CONTRIBUTION</b>			1,013,257	1,119,352	1,259,839	1,795,346	2,208,328

DESCRIPTION	ISSUE DATE	PAY DATES	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
<b>ASSESSABLE PRINCIPAL SEWER TOTALS</b>			7,177,558	7,338,667	7,283,636	6,723,986	6,894,229
<i><u>LESS</u></i>							
<b>SEWER ASSESSMENT ADVANCED PAYMENTS</b>			294,061	208,360	152,378	93,648	64,556
<b>SEWER ASSESSMENT CURRENT PAYMENTS</b>			4,567,447	4,540,053	4,151,736	3,879,622	3,600,879
<b>REQUIRED SEWER USE CONTRIBUTION</b>			2,316,049	2,590,254	2,979,522	2,750,716	3,228,793

Determination of Sewer Rates  
Warwick Sewer Authority

Schedule VI-3  
Revised 8-12-10

**B&E Recommended**

**Retail Use Rate**

Net Required Retail	\$	9,259,592	See Schedule VI-1 page 2 of 2
Residential	64% \$	5,919,416	
Commercial	36% \$	3,340,176	

		Residential		Commercial	
Net Required Retail	\$	5,919,416		\$ 3,340,176	
Retail Sales		177,872,586		65,239,840	See Schedule VI-2
Rate per 1000 cf	\$	<u>33.28</u>		<u>51.20</u>	

**Connect Capable Charge**

Net Required	\$	1,076,087	See Schedule VI-1 page 2 of 2
Accounts		3,437	See Schedule III-1
Annual Charge per Account	\$	<u>313.09</u>	

Connect Capable Rate is charges to any assessment account  
with is not also connected thus not being billed for a Use rate.

**Renewal & Replacement Rate**

Net Required	\$	141,069	See Schedule VI-1 page 2 of 2
Total Consumption		243,112,426	See Schedule VI-2
Rate per 1000 cf	\$	<u>0.58</u>	

The Renewal & Replacement Rate is applied to  
both Residential & Commercial Accounts

Recommendations & Alternatives  
Warwick Sewer Authority

**Schedule VIII-1**  
**Revised 8-12-10**

	<u>Current Rates</u>	<u>B&amp;E Consulting Proposed Rates</u>	<u>Alternative #1 NO Connect Capable Rates</u>	<u>Alternative #2 NO CC &amp; Pay Go Capital Rates</u>
<b><u>Retail Use Rate</u></b>				
Residential	\$ 43.34	\$ 33.28	\$ 36.43	\$ 39.12
<i>Percent billed</i>	85%	100%	100%	100%
Commercial	\$ 57.40	\$ 51.20	\$ 56.04	\$ 60.19
<i>Percent billed</i>	100%	100%	100%	100%
<b><u>Connect Capable Charge</u></b>				
Annual per account	\$ -	\$ 313.09	\$ -	\$ -
<b><u>Renewal &amp; Replacement Rate</u></b>				
Residential & Comm	\$ -	\$ 0.58	\$ 0.68	\$ 0.67
<b><u>Customer Charge</u></b>				
Residential per Unit	\$ 103.01	\$ 122.63	\$ 127.22	\$ 133.55
Meter Size				
Commercial per Unit	\$ 103.01			
5/8		\$ 308.09	\$ 320.67	\$ 338.14
3/4		\$ 447.54	\$ 466.36	\$ 492.52
1		\$ 727.94	\$ 759.28	\$ 802.94
1 1/2		\$ 1,432.65	\$ 1,495.45	\$ 1,583.08
2		\$ 2,273.85	\$ 2,374.21	\$ 2,514.33
3		\$ 4,236.65	\$ 4,424.64	\$ 4,687.23
4		\$ 7,042.88	\$ 7,356.16	\$ 7,793.84
6		\$ 14,065.49	\$ 14,692.32	\$ 15,568.18
8		\$ 22,488.61	\$ 23,491.53	\$ 24,892.94
10		\$ 32,316.70	\$ 33,758.43	\$ 35,773.07
<b>Total FY 2011 Sewer Revenues</b>	\$ 13,835,225	\$ 15,648,252	\$ 15,648,252	\$ 16,642,752
<b>Overall Increase</b>		<b>13%</b>	<b>13%</b>	<b>20%</b>
<b>Impact on 97.6 HCF 5/8" meter Residential User</b>		<b>-2.05%</b>	<b>5.79%</b>	<b>12.84%</b>
<b>Impact on 244 HCF 5/8" meter Commercial User</b>		<b>4.36%</b>	<b>13.20%</b>	<b>21.08%</b>
<b>Impact on 2440 HCF 2" meter Commercial User</b>		<b>5.50%</b>	<b>14.74%</b>	<b>22.89%</b>

**Proforma Cash Flow Projections with Proposed Rate Increases  
Warwick Sewer Authority**

**Schedule VIII-2  
Revised 8-12-10**

**B&E Recommended**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
<b>Sewer Revenues</b>						
Use	\$ 9,259,592	\$ 9,423,032	\$ 9,586,556	\$ 9,750,163	\$ 9,913,855	\$ 10,077,632
Connect Capable	1,076,087	929,875	979,343	782,097	584,850	387,604
Renewal/Replacement	141,069	143,816	146,565	149,315	152,066	154,817
Minimum Service Charge	4,446,073	4,516,111	4,593,368	4,670,624	4,747,881	4,825,137
Other	725,431	725,431	725,431	725,431	725,431	725,431
Assessments **	-	-	-	-	-	-
<b>Total Sewer Revenues</b>	<b>\$ 15,648,252</b>	<b>\$ 15,738,265</b>	<b>\$ 16,031,262</b>	<b>\$ 16,077,630</b>	<b>\$ 16,124,083</b>	<b>\$ 16,170,622</b>
<b>Sewer Expenses</b>						
Personnel	\$ 2,669,362	\$ 2,776,136	\$ 2,887,182	\$ 3,002,669	\$ 3,122,776	\$ 3,247,687
Commodities	1,252,877	1,275,021	1,297,194	1,319,399	1,341,635	1,363,902
Services	1,461,356	1,482,883	1,504,488	1,526,172	1,547,935	1,569,779
Misc Capital Exp	364,700	243,000	200,000	200,000	200,000	200,000
Capital Reserve	1,025,000	1,025,000	-	-	-	-
Renew Replace	150,000	150,000	150,000	150,000	150,000	150,000
Debt Service	6,996,559	6,904,993	8,188,786	8,379,540	8,264,372	8,302,427
Net Operating Reserve	278,397	277,141	284,553	291,556	292,534	296,676
Debt Service Sinking Fund	-	-	-	-	986,276	1,040,150
General Fund Repayment	1,450,000	1,604,091	1,519,059	1,208,295	218,555	-
<b>Total Sewer Expenses</b>	<b>\$ 15,648,252</b>	<b>\$ 15,738,265</b>	<b>\$ 16,031,262</b>	<b>\$ 16,077,631</b>	<b>\$ 16,124,084</b>	<b>\$ 16,170,622</b>
<b>Net Revenue before GO Debt</b>	<b>\$ (0)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 0</b>
<b>Sewer Net</b>	<b>\$ (0)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 0</b>
General Fund Repayment	\$ 1,450,000	\$ 1,604,091	\$ 1,519,059	\$ 1,208,295	\$ 218,555	\$ -
\$ 6,000,000	\$ 4,550,000	\$ 2,945,909	\$ 1,426,850	\$ 218,555	\$ -	\$ -

\*\* Sewer Assessment revenue is netted against debt expense

Accumulation of Debt Service Sink	\$ -	\$ -	\$ -	\$ -	\$ 986,276	\$ 2,026,426
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**Proforma Cash Flow Projections with Proposed Rate Increases  
Warwick Sewer Authority**

**Schedule VIII-2  
Revised 8-12-10**

**Alternative #1**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
<b>Sewer Revenues</b>						
Use	\$ 10,135,122	\$ 10,314,016	\$ 10,493,002	\$ 10,672,079	\$ 10,851,249	\$ 11,030,511
Connect Capable	-	-	-	-	-	-
Renewal/Replacement	164,768	167,978	171,189	174,400	177,613	180,827
Minimum Service Charge	4,622,930	4,695,863	4,776,015	4,856,166	4,936,318	5,016,470
Other	725,431	725,431	725,431	725,431	725,431	725,431
Assessments **	-	-	-	-	-	-
<b>Total Sewer Revenues</b>	<b>\$ 15,648,252</b>	<b>\$ 15,903,289</b>	<b>\$ 16,165,636</b>	<b>\$ 16,428,077</b>	<b>\$ 16,690,611</b>	<b>\$ 16,953,239</b>
<b>Sewer Expenses</b>						
Personnel	\$ 2,669,362	\$ 2,776,136	\$ 2,887,182	\$ 3,002,669	\$ 3,122,776	\$ 3,247,687
Commodities	1,252,877	1,275,021	1,297,194	1,319,399	1,341,635	1,363,902
Services	1,461,356	1,482,883	1,504,488	1,526,172	1,547,935	1,569,779
Misc Capital Exp	364,700	243,000	200,000	200,000	200,000	200,000
Capital Reserve	1,025,000	1,025,000	-	-	-	-
Renew Replace	150,000	150,000	150,000	150,000	150,000	150,000
Debt Service	6,996,559	6,904,993	8,188,786	8,379,540	8,264,372	8,302,427
Net Operating Reserve	278,397	277,141	284,553	291,556	292,534	296,676
Debt Service Sinking Fund	-	-	-	431,289	1,771,358	1,822,767
General Fund Repayment	1,450,000	1,769,115	1,653,433	1,127,452	-	-
<b>Total Sewer Expenses</b>	<b>\$ 15,648,252</b>	<b>\$ 15,903,289</b>	<b>\$ 16,165,636</b>	<b>\$ 16,428,077</b>	<b>\$ 16,690,611</b>	<b>\$ 16,953,239</b>
<b>Net Revenue before GO Debt</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Sewer Net</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
General Fund Repayment	\$ 1,450,000	\$ 1,769,115	\$ 1,653,433	\$ 1,127,452	\$ -	\$ -
\$ 6,000,000	\$ 4,550,000	\$ 2,780,885	\$ 1,127,452	\$ -	\$ -	\$ -

\*\* Sewer Assessment revenue is netted against debt expense

Accumulation of Debt Service Sink	\$	-	\$	-	\$	-	\$	431,289	\$	2,202,647	\$	4,025,414
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**Proforma Cash Flow Projections with Proposed Rate Increases**  
**Warwick Sewer Authority**

**Schedule VIII-2**  
**Revised 8-12-10**

**Alternative #2**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
<b>Sewer Revenues</b>						
Use	\$ 10,885,510	\$ 11,077,649	\$ 11,269,886	\$ 11,462,222	\$ 11,654,657	\$ 11,847,191
Connect Capable	-	-	-	-	-	-
Renewal/Replacement	163,998	167,193	170,388	173,585	176,783	179,982
Minimum Service Charge	4,867,813	4,944,496	5,028,635	5,112,774	5,196,913	5,281,053
Other	725,431	725,431	725,431	725,431	725,431	725,431
Assessments **	-	-	-	-	-	-
<b>Total Sewer Revenues</b>	\$ 16,642,752	\$ 16,914,768	\$ 17,194,340	\$ 17,474,012	\$ 17,753,784	\$ 18,033,657
<b>Sewer Expenses</b>						
Personnel	\$ 2,669,362	\$ 2,776,136	\$ 2,887,182	\$ 3,002,669	\$ 3,122,776	\$ 3,247,687
Commodities	1,252,877	1,275,021	1,297,194	1,319,399	1,341,635	1,363,902
Services	1,461,356	1,482,883	1,504,488	1,526,172	1,547,935	1,569,779
Misc Capital Exp	364,700	1,168,000	1,982,000	2,579,000	2,619,500	2,786,500
Capital Reserve	2,000,000	1,200,000	400,000	-	-	-
Renew Replace	150,000	150,000	150,000	150,000	150,000	150,000
Debt Service	6,996,559	6,904,993	7,238,786	7,429,540	7,314,372	7,352,427
Net Operating Reserve	297,897	299,141	309,193	320,136	321,924	329,406
Debt Service Sinking Fund	-	-	-	-	1,016,828	1,233,955
General Fund Repayment	1,450,000	1,658,594	1,425,497	1,147,096	318,813	-
<b>Total Sewer Expenses</b>	\$ 16,642,752	\$ 16,914,768	\$ 17,194,340	\$ 17,474,012	\$ 17,753,784	\$ 18,033,657
<b>Net Revenue before GO Debt</b>	\$ 0	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ 0
<b>Sewer Net</b>	\$ 0	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ 0
General Fund Repayment	\$ 1,450,000	\$ 1,658,594	\$ 1,425,497	\$ 1,147,096	\$ 318,813	\$ -
\$ 6,000,000	\$ 4,550,000	\$ 2,891,406	\$ 1,465,909	\$ 318,813	\$ -	\$ -

\*\* Sewer Assessment revenue is netted against debt expense

Accumulation of Debt Service Sink	\$ -	\$ -	\$ -	\$ -	\$ 1,016,828	\$ 2,250,783
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