RESOLUTION NO. 16 - 2375

A RESOLUTION OF THE TOWN COMMISSION OF THE TOWN OF SURFSIDE, FLORIDA, AUTHORIZING THE EXPENDITURE OF FUNDS IN THE AMOUNT OF \$9,625.00 FROM THE FISCAL YEAR 2015/2016 WATER AND SEWER FUND, ACCOUNT NO. 401-9900-536-3110 TO CONTRACT WITH BLACK & **VEATCH** MANAGEMENT CONSULTING, LLC; TO REVISE AND UPDATE THE 2010 COMPREHENSIVE WATER AND SEWER COST OF SERVICE AND RATE DESIGN STUDY, EXEMPT FROM THE COMPETITIVE BID PROCEDURE PURSUANT TO SECTION 3-13(2) OF THE TOWN OF SURFSIDE CODE OF ORDINANCES; **PROVIDING** FOR APPROVAL AND **AUTHORIZATION: PROVIDING FOR** IMPLEMENTATION: AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on March 9, 2010 the Town Commission approved by Resolution No. 10-1926 a comprehensive water and sewer cost of service and rate design study; and

WHEREAS, the original study conducted by TischlerBise, Inc. in 2010 has projections up to 2016; and

WHEREAS, an updated comprehensive study is needed to review the current rate structure for water and sewer services; and

WHEREAS, an updated study will allow the Town staff to make rate change recommendations; and

WHEREAS, the updated study will take into account the increases from Miami-Dade County for water and the City of Miami Beach for sewer charges; and

WHEREAS, in accordance with the Surfside procurement process and pursuant to Section 3-13(2) of the Town of Surfside Code of Ordinances, contracts for professional services are exempt from competitive bidding procedures as outlined in Chapter 3 of the Town of Surfside Code; and

WHEREAS, it is in the best interest of the Town to authorize the expenditure of funds in the amount of \$9,625.00 from the Fiscal Year 2015/2016 Water and Sewer Fund, Account No. 401-9900-536-3110 to contract with Black & Veatch Management Consulting, LLC to revise and update the 2010 comprehensive water and sewer cost of service and rate design study.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COMMISSION OF THE TOWN OF SURFSIDE, FLORIDA AS FOLLOWS:

<u>Section 1. Recitals.</u> That the above and foregoing recitals are true and correct and are incorporated herein by reference.

<u>Section 2.</u> <u>Approval and Authorization to Expend Funds.</u> The Town Commission hereby approves and authorizes the Town Manager and/or designee to expend funds in the amount of \$9,625.00 from the Fiscal Year 2015/2016 Water and Sewer Fund, Account No. 401-9900-536-3110.

<u>Section 3. Implementation.</u> The Town Manager and/or designee are hereby authorized to take any and all action necessary to implement this Resolution.

<u>Section 4. Effective Date.</u> This Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED	thisday of May 2016.
Motion by Commissioner	Harukin,
Second by Commissioner	Paul
FINAL VOTE ON ADOPTION	
Commissioner Daniel Gielchinsky	yes
Commissioner Michael Karukin	ues
Commissioner Tina Paul	yes
Vice Mayor Barry Cohen	yes
Mayor Daniel Dietch	yes
[m	are
ATTEST:	Daniel Dietch, Mayor
Sandra Novoa MMCYTown Clerk	

LEGAL SUFFICIENCY FOR THE TOWN OF SURFSIDE ONLY:

APPROVED AS TO FORM AND

Linda Miller, Town Attorney



4/5/2016

Joseph Kroll Public Works Director Town of Surfside 9293 Harding Avenue Surfside, FL 33154

Dear Joseph:

Black & Veatch Corporation (Black & Veatch) is pleased to have the opportunity to present this letter proposal describing our services and fee related to updating the financial analyses of the Town of Surfside's (Town) Water and Sewer Enterprise Funds.

Proposed Scope of Services:

The Town asks that Black & Veatch perform the following services related to this project:

- Data Collection and Review. This task will involve collecting and reviewing basic data
 to be provided by the Town, including current and proposed debt structures, reports
 by others, the Town's current rate models, historical and current financial
 information, and operating and capital budgets. Black & Veatch will furnish Town staff
 with a list of basic data needed to conduct the study. We will review all data received
 to confirm its completeness and our understanding of historical utility operations and
 requirements reflected therein.
- 2. Review and Analysis of Revenue Requirements for Each Utility. The development of revenue requirements for each utility will be based on an examination of historical financial reports, current operating budgets, and the proposed capital improvement and replacement program. Detailed utility analyses will provide an indication of the magnitude of overall adjustments in respective annual revenue levels needed to meet the projected revenue requirements of each utility and what the proposed rates need to be to match financing requirements.

Black & Veatch will project operation and maintenance expenses based on a review of historical financial records and trends, and available utility budget estimates of future operation and maintenance expense. Projections will recognize estimated increases in the number of customers served and potential effects of continued inflation in cost levels, the addition of new system facilities, anticipated changes in operation and staffing, and other factors which may influence future expense levels. Projections of principal and interest payments on outstanding debt obligations and any projected future bonds or state revolving fund loans for major capital improvements will be developed for the forecast study period. Existing reserve fund requirements and balances will be reviewed for adequacy. Applicable bond ordinance requirements will be reviewed along with any relevant utility policies. We will recommend adequate



reserve levels based on our review of both reserve funding requirements and industry standards.

Black & Veatch will prepare a cash flow analysis summarizing the above projections of revenues and revenue requirements for each utility to determine the adequacy of revenues under proposed rate levels to meet operating and capital needs for the study period. We will develop different rate adjustment scenarios for the Town to determine the best mix of revenues from rate increases while balancing customer impact of such adjustments.

3. Project Deliverables. Black and Veatch will prepare a preliminary report with text and tables supporting the selected rate adjustment scenarios. This report will be presented to appropriate Town staff via telephone conference call. Based on review comments of the preliminary report, a final report will be prepared and delivered electronically to Town Staff. The deliverable to the City will be a technical memorandum summarizing Black & Veatch's financial impact review and analysis.

Project Schedule:

Black & Veatch will begin the project as soon as the notice to proceed is issued by the Town. Once notice to proceed has been issued, the planned project execution should last 8 weeks, assuming quick turnaround by Town staff on data requests and review and comment of work product submitted to the Town.

Fees for Service:

For this project, we propose the following Black & Veatch personnel and related hourly billing rates:

Brian Jewett, Principal, \$275.00/hour (35 hours on project)

We propose a lump sum amount of \$9,625 for tasks outlined above, including: analysis, calculations, conclusions, preparation of the deliverable, and telephone conference calls related to the project. The following table lists the breakdown of hours by task:

If you have any questions regarding our submittal, please do not hesitate to contact Brian Jewett at (951) 575-5249. We appreciate your consideration of our proposal and welcome the opportunity to assist the City of Fountain Valley in this matter.

Very truly yours,

BLACK & VEATCH CORPORATION

Ann Bui Managing Director, Black & Veatch Management Consulting



MEMORANDUM

Town of Surfside Utility Rate Feasibility Analysis Final Analysis

May 3, 2012

To:

Roger Carlton

From:

Brian Jewett

The purpose of this memorandum is to present the third evolution of the utility feasibility analysis based on direction from the Town.

Executive Summary

Black & Veatch was engaged by the Town of Surfside to review and analyze the Town's current water, sewer and storm water rates and to conduct a feasibility study to determine the status of future rate levels for each utility over the next five fiscal years. The resulting rate level recommendations are compared to the rate levels and recommendations from the Town's prior rate studies which occurred in 2010 and 2011. The first rate analysis was conducted prior to bonds being issued for needed utility capital projects. The second rate analysis conducted in 2011 incorporated improved assumptions related to long range operating and capital costs coupled with projected operational savings due to implementation of the new capital projects. The suggested rate levels in the original report were utilized in the 2011 revised analysis. This current analysis (2012) presents the impact on current utility rate levels should the Town decide to re-structure their current debt obligations. This restructuring would benefit the Town in several ways including 1) lower financing costs for long-term debt, 2) operational savings from reduced sewer inflow/infiltration and water loss issues, and 3) completion of the scope of work for the planned capital improvements for each utility system, e.g. water main improvements, sewer lining and repair, drainage improvements and the Surfside/Bal Harbour Force Main Project.

ASSUMPTIONS

The following table (Table 1) lists the assumptions utilized for this analysis. The largest operational expense for the water and sewer utilities are water purchases from Miami-Dade Water and Sewer District (MDWASD) and sewage disposal costs per agreement with the City of Miami Beach (Miami Beach's costs are initially established by MDWASD). For Fiscal Year 11/12, water purchase costs were held at rates similar to FY 10/11 while sewage disposal costs for FY 11/12 were 5.25 percent higher than the previous year due to a 5 percent County increase and 5 percent added by the City of Miami Beach (COMB). Based on representations from Town staff, Fiscal Year 12/13 rates for water purchases will be approximately 7 percent higher while sewage disposal costs for this year are estimated to be held at the same rate as FY 11/12 costs. Subsequent years' increases are projected to be nominal at approximately 3 percent per year. Operating and Personnel escalators are assumed at 1 percent per year and 1.50 percent, respectively, for the study period. These percentages are reflected in Table 1.

Reserve funding targets are important to Town officials to help ensure there are enough funds (restricted and unrestricted net assets) available to address contingencies in the day-to-day operations, short and long term replacement needs of each utility and a rate stabilization reserve to smooth large increases in wholesale costs. These target level approaches were first introduced to Town officials in the initial 2010 rate analysis. To date, the Town has sufficient reserve levels approaching or at these targeted figures. This is a positive finding in this analysis, as the restricted and unrestricted net assets are proposed to be utilized to meet operational and capital needs, thus ensuring future customer rate levels are minimally impacted. Recent announcements regarding the



Federal EPA's proposed consent decree with Miami-Dade County may impact this analysis, however, there is no definitive rate information to justify any adjustments at this time.

Table 1. Feasibility Analysis Assumptions

	Annual	
Description	Figure	Notes
Escalators		
Customer Growth FY 11/12 & 12/13	0.25%	Annual Rate
Customer Growth FY 13/14 and beyond	0.50%	Annual Rate
Personnel Costs	1.50%	Annual Rate
Water Purchases FY 11/12	0.00%	Annual Rate
Water Purchases FY 12/13	7.00%	Annual Rate
Water Purchases FY 13/14	3.00%	Annual Rate
Water Purchases FY 14/15	3.00%	Annual Rate
Water Purchases FY 15/16	3.00%	Annual Rate
Sewage Disposal Costs FY 11/12	5.50%	Annual Rate
Sewage Disposal Costs FY 12/13	0.00%	Annual Rate
Sewage Disposal Costs FY 13/14	3.00%	Annual Rate
Sewage Disposal Costs FY 14/15	3.00%	Annual Rate
Sewage Disposal Costs FY 15/16	3.00%	Annual Rate
Operating Costs	1.00%	Annual Rate
Fund Equity Targets		
O&M Reserves	25.0%	25% of current year O&M
Water Renewal & Replacement Reserves	\$ 788,970	50% of annualized costs of FY12-FY16 CIP
Sewer Renewal& Replacement Reserves	\$ 987,855	50% of annualized costs of FY12-FY16 CIP
Stormwater Capital Reserves	\$ 423,292	50% of annualized costs of FY12-FY16 CIP
Rate Stabilization Reserves	10.0%	10% of annual projected rate revenues
Financial Ratios and Inputs	2000000000	
Debt Service Coverage Ratio w/ Partial Re-financing	115%	1.15x (net operating income/annual debt service)

Sources: Town of Surfside; Black & Veatch.

The next two tables illustrate the projected debt obligations and coverage ratios assuming the re-financing approach is implemented by the Town. Table 2 lists the various debt structures proposed including a new State Revolving Fund (SRF) loan at a significantly lower interest rate than the current utility bonds. A portion of the funds from the SRF loan (approximately \$4,150,000) would be applied to the outstanding balance on the current utility bonds to lower the Town's overall annual debt service payments. One-time costs of issuance and a prepayment penalty would apply, however the issuance costs and small prepayment penalty are more than overcome by the reduced interest costs over the life of the debt. Table 3 demonstrates the coverage ratios achieved assuming the proposed financing plan included in this document. As the table shows, required coverage ratios are exceeded based on the assumptions and recommendations of this analysis.



Table 2. Proposed Debt Structure

Description	Amounts	Description	Amounts
\$9.3 Million SRF Loan ¹		Paraining Parism Park Laur (Parana	1\
■ 0 P-00F BM 00 D 00 PM 00 MP 0 PM 00 PM		Remaining Regions Bank Loan (Propos	ea)
Loan Amount plus \$125K COI 2	\$ 9,425,000	Loan Amount ³ \$	11,350,000
Term (years)	20	Term (years) 4	20
Interest Rate	2.50%	Interest Rate 5	4.72%
Estimated Annual Debt Service	\$589,840.67	Estimated Annual Debt Service	\$849,175.57
Debt Service Allocation (begin FY 10/11):		Debt Service Allocation (begin FY 10/11):	
Water (35%)	206,444	Water (35%)	297,211
Sewer (49%)	289,022	Sewer (49%)	416,096
Stormwater (16%)	94,375	Stormwater (16%)	135,868
Prepayment Penalty Allocation (FY 11/12	Only):		
Water (35%)	10,500		
Sewer (49%)	14,700		
Stormwater (16%)	4,800		

- 1. \$4,150,000 of this loan is targeted toward reducing outstanding Regions Bank. \$4 million of the repayment is not subject to pre-payment penalties, however the remaining \$150,000 is subject to a 1.2% penalty. The penalty amount is \$30,000 and is allocated to each utility for FY 11/12 expenses.
- 2. COI is 1% of loan amount plus an additional \$32K for bond counsel and other financing assistance.
- 3. \$15.5 million less \$4.15 million loan reduction.
- 4. Regions Bank Loan is amortized for a 20-year term, however includes a 15-year payoff period requirement.
- 5. Interest rate reflects current bond issue interest rate of 4.72%.

Source: Town of Surfside; Black & Veatch.

Table 3. Estimated Debt Service Coverage Ratios Next 5 Fiscal Years

FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16
1,508,195	1,661,248	1,828,527	1,908,482	2,000,730
1,439,016	1,439,016	1,439,016	1,439,016	1,439,016
105%	115%	127%	133%	139%
115%	115%	115%	115%	115%
	1,508,195 1,439,016 105%	1,508,195 1,661,248 1,439,016 1,439,016 105% 115%	1,508,195	1,508,195

Note: The small shortfall in coverage ratio in FY 11/12 will be paid from available reserves.

1. Assume 115% (1.15x) for purposes of this analysis. Actual debt service coverage requirements are 115% for SRF Loan and 110% for Regions Bank Loan.



SUMMARY OF RESULTS

This report is structured to compare projected rates prior to going forward with the proposed debt financing structure with projected rates and reserve accumulation if the proposed re-financing goes forward. Lower interest rates are proposed as part of this re-financing. Based on the results of the analysis for each utility, this re-structuring can be accomplished with nominal impacts on customer rates. This analysis demonstrates that the proposed refinancing effort is feasible and, if assumptions prove correct, will allow flexibility to Town Commissioners to adjust utility rates, absorb all or part of reasonable future MDWASD and COMB increases, and/or replenish reserves to targeted levels within the next five fiscal years. Finally, the analysis shows that the Town will meet or exceed minimum debt service coverage requirements per the Town's bond and loan covenants from FY 2012/13 through FY 2015/16 which is the end of the study.



Water System Analysis

Based on input from the Town's utility engineering consultant Calvin, Giordano & Associates, Inc., the following table (Table 4) displays the Water Utility Capital Improvement Program and related funding sources. The CIP costs include an estimate to cover the cost of projected claims, change orders and general condition expenses. Each utility is allocated its share of current utility bond proceeds. The recommended rate levels found in this report are designed to replenish reserve funds at the end of the study period (FY 15/16). The bottom line of this table shows the remaining amount of CIP costs, adjusted as needed from knowledge gained by completing the first 50 percent of the project, to be met by increased customer rates. In this case, the water project is fully funded from existing rates.

Table 4. Water CIP, Sources and Uses of Funds

Project	1	FY 11/12	 FY 12/13	FY	13/14	F	Y 14/15	F	Y 15/16
General Items - Water Portion	\$	289,643	\$ 200,000	\$		\$	-	\$	
Water Main Replacement		2,287,011	-		-				
Connections to Existing Meters on Private Property		2,325,701	2		_		-		-
Contingency - Water Portion		179,439	-		-		-		
Allowances - Water Portion		20,000			-		-		
Additional Quantities Items - Water Portion		276,000	-		-		-		-
Design/Studies/Permitting/Soft Costs - Water Portion		444,470	-		-		-		-
Change Orders - Water System		1,000,000	500,763		-		-		
Change Orders - General Conditions - Water Portion	_	-	366,670						
Total Water Capital Projects	\$	6,822,264	\$ 1,067,433	\$	-	\$		\$	-
Less: Outside Funding Sources									
Water Impact Fees	\$	381	\$ 500	\$	500	\$	750	\$	750
Restricted Net Assets - R&R			1.5		-		-		-
Unrestricted Assets		-	0.00						
BBC Reimbursement		859,000	1(4)				-		-
Bonds & Loans Proceeds		5,962,883	1,066,933		-		-		-
Carry-over from Prior FY		-		40000	-		500		1,250
Total Outside Funding	\$	6,822,264	\$ 1,067,433	\$	500	\$	1,250	\$	2,000
Balance to Carry Over to Next FY or Amount to be Funded by Rates	\$	(0)	\$ -	\$	500	\$	1,250	\$	2,000
Net CIP Projects Funded from Rates	\$	0	\$	\$		\$		\$	

Source: Town of Surfside; Black & Veatch.

The table on the next page (Table 5) illustrates the revenue requirements or pro forma of the water utility based on budgeted and anticipated revenues and expenditures of the utility. Note the transfer of funds from the water utility to the sewer utility is necessary to help meet some of the operating and capital expenditure items of the sewer utility. In FY 13/14, the Water Sales revenue increases by an additional 3 percent to account for two new major properties connecting and utilizing the water system: Beach House property and Best Western property. Water purchase costs are also assumed to increase by 3 percent to account for the additional demand incurred by these two properties. This pro forma analysis assumes modest water rate increases in each fiscal year beginning in FY 2012/13. Should the Town Commission desire, the amount of these rate increases could be absorbed from the Rate Stabilization Fund which at the end of FY 10/11, consisted of a balance of \$227,900.



Table 5. Water Utility Revenue Requirement Analysis

Description			Es	timated FY 11/12	Fo	recast FY 12/13	Fo	recast FY 13/14	Fo	recast FY 14/15	Fo	recast FY 15/16
Operating Revenue												
Water Sales (before increase)			\$	1,465,721	\$	1,469,386	\$	1,521,034	\$	1,528,640	\$	1,536,28
Tapping Fees				2,750		12,500		12,500		5,000		5,00
Penalties			_	2,965		2,965	_	2,965	_	2,965		2,96
Total Operating Revenue				1,471,436		1,484,851		1,536,500		1,536,605		1,544,24
Additional Rate Re	venue Require	ed	_									
Year	Revenue Increase	Months Effective										
2011/12	0.00%	12		_		2						
2012/13	5.00%	12		_		73,469		76,052		76,432		76,81
2013/14	3.00%	12		_		-		47,913		48,152		48,39
2014/15	2.00%	12		-				-		33,064		33,23
2015/16	2.00%	12						-				33,89
Total Additional Water Sales Re	evenue			-		73,469		123,964		157,649		192,33
Total Operating Revenue				1,471,436		1,558,320		1,660,464		1,694,253		1,736,57
O&M Expenses												
Personnel				139,428		141,519		142,310		144,445		146,61
Operations				115,602		113,922		115,061		116,211		117,37
Water Purchases (MDWSD)				436,385		466,932		495,368	_	510,229		525,53
Total O&M Expenses				691,414		722,373		752,739		770,886		789,52
Net Operating Income				780,022		835,947		907,724		923,368		947,05
Debt Service												
Annual Debt Service (Estimated	1)			503,656		503,656		503,656		503,656		503,65
Total Debt Service				503,656		503,656		503,656		503,656		503,65
Calculated Debt Coverage Ratio				155%		166%		180%		183%		188
Targeted Debt Coverage Ratio				115%		115%		115%		115%		115
Non-Operating Revenue												
Interest Income			-	5,490		2,745		2,500	-	3,000		3,50
Total Non-Operating Revenue				5,490		2,745		2,500		3,000		3,50
Non-Operating Expenses												
Capital Outlay (excl Improvement				-		-		-		-		
Regions Bank Prepayment Pena	alty			10,500				-		-		
Transfer to Sewer Revenues				200,000		200,000		100,000		100,000		100,00
Rate Funded Capital Project Ex	penses			0								
Total Non-Operating Expenses				210,500		200,000		100,000		100,000		100,000
Net Income (Loss) 1			\$	71,356	\$	135,037	\$	306,569	\$	322,712	\$	346,902
Positive net income to be applie	ed to fund bala	ances.										
ource: Town of Surfside; Black 8												
carde. Town of Guilside, Black of	x veators.		-									



Table 6 presents the fund balance information for the water utility system. Note that the water utility and sewer utility are part of the same enterprise fund. Based on assumptions and data provided for this analysis, reserve fund targets are projected to be exceeded by FY 15/16. As mentioned earlier in this report, because Rate Stabilization funds exceed target, these funds could be used to absorb the rate increases presented in this report.

Table 6. Water Utility Reserve Fund Analysis

Description	Es	timated FY 11/12	Fo	recast FY 12/13	Fo	recast FY 13/14	Fo	recast FY 14/15	Fo	recast FY 15/16
Total Fund Equity - Water Only Beginning FY 11/12 Balance ¹	\$	1,062,117	See	e below for fu	ınd b	alance alloca	tion	(dependent o	n To	wn approval)
Restricted Net Assets - Renewal & Replacement	Reserves									
Beginning Balance	\$	410,100	\$	481,456	\$	616,492	\$	923,061	\$	1,245,773
Restricted Net Assets to Fund Water CIP Projects		-		-		-		-		-
Surplus from CIP Program (after bond issue)		-		-		-		-		-
Deposit from Positive Net Income		71,356		135,037		306,569		322,712		-
Ending Balance	\$	481,456	\$	616,492	\$	923,061	\$	1,245,773	\$	1,245,773
Target Balance: 50% of 5-Year Annualized CIP		788,970		788,970		788,970		788,970		788,970
Restricted Net Assets - Rate Stabilization Reserve	es									
Beginning Balance	\$	227,900	\$	227,900	\$	227,900	\$	227,900	\$	227,900
Transfer to Operating Reserves		-		-				-		-
Ending Balance	\$	227,900	\$	227,900	\$	227,900	\$	227,900	\$	227,900
Target Balance: Up to 10% of Rate Revenues		146,572		154,285		164,500		168,629		172,861
Unrestricted Net Assets - Operating Reserves										
Beginning Balance	\$	424,116	\$	424,116	\$	424,116	\$	424,116	\$	424,116
Deposit from Net Income		-		-				-		346,902
Transfer from Rate Stabilization Reserves				-		-			_	-
Ending Balance	\$	424,116	\$	424,116	\$	424,116	\$	424,116	\$	771,018
Target Balance: Up to 25% of Current Year O&M		172,854		180,593		188,185		192,721		197,380

^{1.} The Water Utility's share of total fund equity balance is equal to 35 percent. This figure is based on the Water Utility's proportion of capital projects to all utility capital projects.

Source: Town of Surfside; Black & Veatch.

To conclude the analysis for the water utility, the following tables illustrate the fixed bi-monthly water charges and the variable-based consumption rates. For a comparative analysis, we list two tables for each component of a customer's water bill: 1) the proposed rates incorporating the lower interest rate analysis, and 2) the water rates derived from the original and revised rate analyses conducted in 2010 and 2011, respectively.



Table 7. Water Bi-Monthly Base Charges (Lower Interest Rate Analysis)1

recast F` 15/10	ecast FY 14/15	For	ecast FY 13/14	For	ecast FY 12/13	For	11/12	Add	Meter Size
32.69	\$ 32.05	\$	31.42	\$	29.62	\$	27.81	\$	5/8"
47.88	46.94		46.02		43.38		40.45		1"
73.20	71.76		70.36		66.32		61.52		1 1/2"
103.58	101.55		99.56		93.84		86.80		2"
174.46	171.04		167.69		158.06		145.79		3"
275.73	270.33		265.02		249.81		230.06		4"
528.90	518.53		508.36		479.18		440.75		6"
832.70	816.37		800.37		754.42		693.57		8"

Sources: Town of Surfside; Black & Veatch.

Table 8. Water Bi-Monthly Base Charges [Original (2010) and Revised (2011) Analyses]

	Add	pted FY	F	orecast FY	For	ecast FY	Foi	recast FY
Meter Size		11/12		12/13		13/14		14/15 ¹
5/8"	\$	27.81	\$	30.66	\$	31.88	\$	33.16
1"		40.45		44.59		46.38		48.23
1 1/2"		61.52		67.82		70.54		73.36
2"		86.80		95.70		99.52		103.50
3"		145.79		160.73		167.16		173.85
4"		230.06		253.65		263.79		274.34
6"		440.75		485.92		505.36		525.57
8"		693.57		764.66		795.24		827.05

1. Rates for FY 15/16 were not covered in the original and revised anlayses.

¹ The proposed base charges in the Lower Interest Rate Analysis are lower than the forecasted charges in the Original and Revised Analyses which were completed in 2010 and 2011, respectively. The same result occurs for the Water Consumption Charges as well as for the Sewer and Storm Water forecasted charges shown later in this report.



Table 9. Residential Customers - Water Consumption Charges (Lower Interest Rate Analysis)

Description	Adopted FY 11/12	Forecast FY 12/13	Forecast FY 13/14	Forecast FY 14/15	Forecast FY 15/16
		R	late per 1,000 g	gal	
Block 1 (0 - 12,000 gal)	2.97	3.11	3.30	3.37	3.44
Block 2 (12,001 - 24,000 gal)	3.56	3.73	3.96	4.04	4.12
Block 3 (above 24,000 gal)	5.94	6.22	6.60	6.74	6.87

Sources: Town of Surfside; Black & Veatch.

Table 10. Residential Customers - Water Consumption Charges [Original (2010) and Revised (2011) Rate Analyses]

Description	Adopted FY 11/12		Forecast FY 13/14	Forecast FY 14/15 ¹
		Rate per	1,000 gal	
Block 1 (0 - 12,000 gal) Block 2 (12,001 - 24,000 gal)	2.97 3.56	3.27 3.93	3.40 4.09	3.54 4.25
Block 3 (above 24,000 gal)	5.94	6.55	6.81	7.0

^{1.} Rates for FY 15/16 were not covered in the original and revised anlayses.



Table 11. All Other Customers - Water Consumption Charges (Lower Interest Rate Analysis)

Description	•	ted FY 1/12	Forecast FY 12/13		Forecast FY 13/14		Forecast FY 14/15		recast 15/16
				R	ate pe	er 1,000 g	al		
Uniform Rate	\$	3.54	\$	3.89	\$	4.13	\$	4.21	\$ 4.30

Table 12. All Other Customers - Water Consumption Charges [Original (2010) and Revised (2011) Rate Analyses]

Description	Ado	pted FY 11/12	For	ecast FY 12/13	Fore	cast FY 13/14	Foi	recast FY 14/15 ¹
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Rate per	1,000	gal		
Uniform Rate	\$	3.54	\$	4.05	\$	4.21	\$	4.38

^{1.} Rates for FY 15/16 were not covered in the original and revised anlayses.



Sewer System Analysis

Based on input from the Town's utility engineering consultant Calvin, Giordano & Associates, Inc., the following table (Table 13) displays the Sewer Utility Capital Improvement Program and related funding sources. The CIP costs include an estimate to cover the cost of projected claims, change orders and general condition expenses. Each utility is allocated its share of utility bond proceeds. The rate levels found in this report are designed to replenish reserve funds at the end of the study period (FY 15/16). The bottom line of this table shows the remaining amount of CIP costs to be met by increased customer rates. In this case, the sewer project is fully funded from existing rates.

Table 13. Sewer CIP, Sources and Uses of Funds

Project		FY 11/12	F	Y 12/13	F	Y 13/14	FY 14/15	FY	15/16
General Items - Sewer Portion	\$	1,000,000	\$	233,651	\$	-	\$ -	\$	-
Sewer Lining & Repair		3,089,576	\$	200,000					
Sewer Pump Station and Force Main		665,224							
Contingency - Sewer Portion		152,095	\$	300,000					
Additional Quantities Items - Sewer Portion		1,857,300							
Bal Harbour/Surfside FM Project		1,650,000		5		-	1.77		-
Design/Studies/Permitting/Soft Costs - Sewer Portion		464,035		-		1.4	-		-
Change Orders - General Conditions - Sewer Portion		100,000		166,670	_				
Total Water Capital Projects	\$	8,978,230	\$	900,321	\$		\$ -	\$	-
Less: Outside Funding Sources									
Sewer Impact Fees	\$	381	\$	500	\$	500	\$ 750	\$	750
Restricted Net Assets - R&R		-		-		-	-		-
Unrestricted Assets		-		-		-	-		-
Bonds & Loans Proceeds		8,977,850		899,821		-	-		-
Carry-over from Prior FY	_	-			_		500		1,250
Total Outside Funding	\$	8,978,230	\$	900,321	\$	500	\$ 1,250	\$	2,000
Balance to Carry Over to Next FY or Amount to be Funded by Rates	\$	2	\$	-	\$	500	\$ 1,250	\$	2,000
Net CIP Projects Funded from Rates	\$	-	\$	-	\$		\$ -	\$	1

Source: Town of Surfside; Black & Veatch.

The table on the next page (Table 14) illustrates the revenue requirements or pro forma of the sewer utility based on budgeted and anticipated revenues and expenditures of the utility. Note the transfer of funds from the water utility to the sewer utility help mitigate larger sewer rate increases. In FY 13/14, the Sewer Service revenues increase by an additional 3 percent to account for two new major properties connecting to and utilizing the sewer system: Beach House property and Best Western property. Sewage disposal costs are also assumed to increase by 3 percent to account for the additional demand incurred by these two properties. This pro forma analysis assumes sewer rate increases in each fiscal year beginning in FY 2012/13. Should the Town Commission desire, the amount of these rate increases could be absorbed from the Rate Stabilization Fund which at the end of FY 10/11, consisted of a balance of \$319,601 and Operating Reserves which at the end of FY 10/11, consisted of a balance of \$593,763.



Table 14. Sewer Utility Revenue Requirements

Description			Estimated FY 11/12	Forecast FY 12/13	Forecast FY 13/14	Forecast FY 14/15	Forecast F 15/16
Operating Revenue							
Service Revenues and Interest			\$ 1,415,323	\$ 1,418,861	\$ 1,468,734	\$ 1,476,078	\$ 1,483,4
Total Operating Revenue			1,415,323	1,418,861	1,468,734	1,476,078	1,483,4
Additional Rate Re	venue Require	d	_				
Year	Revenue Increase	Months Effective					
2011/12	0.00%	6					
2012/13	6.00%	12		85, 132	00.124	00 565	20.00
2013/14	5.00%	12	-	65, 132		88,565	89,00
2014/15			-	-	77,843	78,232	78,6
2015/16	5.00% 5.00%	12	-	-	-	82,144	82,5
		12					86,68
Total Additional Sewer Charge F	Revenue			85, 132	165,967	248,940	336,86
Total Required Revenue			1,415,323	1,503,993	1,634,701	1,725,018	1,820,32
O&M Expenses							
Personnel			159,735	162, 131	163,037	165,483	167,9
Operations			126,934	124,954	126,203	127,465	128,7
Sewage Disposal (City of Miami	Beach)		712,914	712,914	756,330	779,020	802,3
Total O&M Expenses			999,582	999,998	1,045,571	1,071,968	1,099,09
Net Operating Income			415,741	503,994	589,130	653,050	721,22
Debt Service							
Annual Debt Service (Estimated)		705,118	705,118	705,118	705, 118	705,11
Total Debt Service			705,118	705,118	705,118	705,118	705,11
Calculated Debt Coverage Ratio			59%	71%	84%	93%	102
Targeted Debt Coverage Ratio			115%	115%	115%	115%	115
Non-Operating Revenue							
Interest Income			5,490	5,490	5,490	5,490	5,49
Transfer from Water Revenues			200,000	200,000	100,000	100,000	100,00
Total Non-Operating Revenue			205,490	205,490	105,490	105,490	105,49
Non-Operating Expenses							
Capital Outlay (excl Improvemen	its)		-	-	-	9	
Regions Bank Prepayment Pena	alty		14,700		43	2	
Rate Funded Capital Projects			2	2		-	
Total Non-Operating Expenses			14,700	-	-	-	
Net Income (Loss) 1			\$ (98,588)	\$ 4,366	\$ (10,498)	\$ 53,421	\$ 121,60
Positive net income to be applie	ed to fund bala	nces.					
The state of the s		- 					



Table 15 presents the fund balance information for the sewer utility system. Note that the water utility and sewer utility are part of the same enterprise fund. Based on assumptions and data provided for this analysis, reserve fund targets are projected to be met or exceeded by FY 15/16. As mentioned earlier in this report, because Rate Stabilization and Operating Reserve funds exceed target, these funds could be used to absorb the rate increases presented in this report.

Table 15. Sewer Utility Reserve Fund Analysis

Description		Estimated FY Forecast FY 11/12 12/13		Fo	13/14	Fo	recast FY 14/15	Forecast FY 15/16		
Total Fund Equity - Sewer Only Beginning FY 11/12 Balance 1	\$	1,486,963	See	e below for fu	ınd b	alance alloca	tion	(dependent o	n Tov	wn approval)
Restricted Net Assets - Renewal & Replacement Reser	ves									
Beginning Balance	\$	574,140	\$	574,140	\$	578,506	\$	579,006	\$	633,677
Restricted Net Assets to Fund Sewer CIP Projects		-		-		-		-		
Surplus from CIP Program (after bond issue)		-		-		500		1,250		2,000
Deposit from Positive Net Income	-			4,366				53,421		121,601
Ending Balance	\$	574,140	\$	578,506	\$	579,006	\$	633,677	\$	757,279
Target Balance: 50% of 5-Year Annualized CIP		987,855		987,855		987,855		987,855		987,855
Restricted Net Assets - Rate Stabilization Reserves										
Beginning Balance	\$	319,061	\$	319,061	\$	319,061	\$	319,061	\$	319,061
Transfer to Operating Reserves	_	-						-		
Ending Balance	\$	319,061	\$	319,061	\$	319,061	\$	319,061	\$	319,061
Target Balance: Up to 10% of Rate Revenues		141,532		150,399		163,470		172,502		182,033
Unrestricted Net Assets - Operating Reserves										
Beginning Balance	\$	593,763	\$	495,175	\$	495,175	\$	484,677	\$	484,677
Unrestricted Net Assets to Fund Negative Net Income Transfer from Rate Stabilization Reserves		(98,588)		-		(10,498)				-
Ending Balance	\$	495,175	\$	495,175	\$	484,677	\$	484,677	\$	484,677
Target Balance: Up to 25% of Current Year O&M		249,896		250,000		261,393		267,992		274,774

^{1.} The Sewer Utility's share of total fund equity balance is equal to 49 percent. This figure is based on the Sewer Utility's proportion of capital projects to all utility capital projects.



To conclude the analysis for the sewer utility, the following tables illustrate the uniform flow rate and bimonthly base charge for all sewer customers. For a comparative analysis, we list tables for each component of a customer's sewer bill: 1) the proposed rates incorporating the lower interest rate analysis, and 2) the sewer rates derived from the original and revised rate analyses conducted in 2010 and 2011, respectively. Similar to the results for the water utility, proposed sewer rates in the Lower Interest Rate Analysis approach are lower than those projected in the original and revised analyses in each corresponding year.

Table 16. All Customers - Sewer Uniform Flow Rate and Bi-Monthly Base Charge (Lower Interest Rate Analysis)

Ado									2ast FY 15/16
			D		- 1 000 -				
			Ra	ate pe	r 1,000 g	jai			
\$	5.41	\$	5.82	\$	6.29	\$	6.61	\$	6.94
			Ra	ate pe	r 1,000 g	jal			
\$	6.88	\$	7.16	\$	7.75	\$	8.14	\$	8.54
	\$	\$ 5.41	\$ 5.41 \$	\$ 5.41 \$ 5.82 Ra \$ 6.88 \$ 7.16	11/12 12/13 Rate pe \$ 5.41 \$ 5.82 \$ Rate pe \$ 6.88 \$ 7.16 \$	11/12 12/13 13/14 Rate per 1,000 g \$ 5.41 \$ 5.82 \$ 6.29 Rate per 1,000 g \$ 6.88 \$ 7.16 \$ 7.75	11/12 12/13 13/14 Rate per 1,000 gal \$ 5.41 \$ 5.82 \$ 6.29 \$ Rate per 1,000 gal \$ 6.88 \$ 7.16 \$ 7.75 \$	11/12 12/13 13/14 14/15 Rate per 1,000 gal \$ 5.41 \$ 5.82 \$ 6.29 \$ 6.61 Rate per 1,000 gal \$ 6.88 \$ 7.16 \$ 7.75 \$ 8.14	Rate per 1,000 gal \$ 5.41 \$ 5.82 \$ 6.29 \$ 6.61 \$ Rate per 1,000 gal \$ 6.88 \$ 7.16 \$ 7.75 \$ 8.14 \$

Table 17. All Customers – Sewer Uniform Flow Rate and Bi-Monthly Base Charge [Original (2010) and Revised (2011) Rate Analyses]

Description	Ado	11/12	12/13		13/14	For	14/15 ¹
			Rate per	1,000) gal		
Uniform Flow Rate	\$	5.41	\$ 6.31	\$	6.62	\$	6.95
	-		Rate per	1,000	gal gal		
Bi-Monthly Fixed Charge	\$	6.88	\$ 8.01	\$	8.41	\$	8.83

^{1.} Rates for FY 15/16 were not covered in the original and revised anlayses.



Storm Water System Analysis

Based on input from the Town's utility engineering consultant Calvin, Giordano & Associates, Inc., the following table (Table 18) displays the Storm Water Utility Capital Improvement Program and related funding sources. The CIP costs include an estimate to cover the cost of projected claims, change orders and general condition expenses. Each utility is allocated its share of utility bond proceeds. The rate levels found in this report are designed to replenish reserve funds at the end of the study period (FY 15/16). The bottom line of this table shows the remaining amount of CIP costs to be met by increased customer rates. In this case, the storm water project is fully funded from existing rates.

Table 18. Storm Water CIP, Sources and Uses of Funds

Project		FY 11/12	F	Y 12/13	F	Y 13/14	FY 14/15	FY 1	5/16
General Items - Stormwater Portion Drainage Improvements	\$	359,698 1,947,135	\$	100,000	\$	-	\$ -	\$	
Contingency - Stormwater Portion		68,466		100,000		-	-		-
Allowances - Stormwater Portion		105,000		-		-	-		-
Additional Quantities Items - Stormwater Portion		50,000		-		-	-		-
Design/Studies/Permitting/Soft Costs - Stormwater Portion		933,840		-		-	-) = 0
Change Orders - Drainage System		-		69,876		-	-		-
Change Orders - General Conditions - Stormwater Portion		100,000	_	198,905	_				
Total Stormwater Capital Projects	\$	3,564,139	\$	668,781	\$	-	\$ -	\$	
Less: Outside Funding Sources Restricted Net Assets - R&R		-		_		-	-		-
Unrestricted Assets				-			-		
FDEP Grants		986,000		=		-	-		-
Bonds & Loans Proceeds		2,578,139		668,781		-	-		-
Carry-over from Prior FY	_	-	_	0		0	0		0
Total Outside Funding	\$	3,564,139	\$	668,781	\$	0	\$ 0	\$	0
Balance to Carry Over to Next FY or Amount to be Funded by Rates	\$	0	\$	0	\$	0	\$ 0	\$	0
Net CIP Projects Funded from Rates	\$	1-	\$		\$	-	\$ -	\$	÷
Source: Town of Surfside; Black & Veatch.					-				

The table on the next page (Table 19) illustrates the revenue requirements or pro forma of the storm water utility based on budgeted and anticipated revenues and expenditures of the utility. This pro forma analysis assumes modest rate increases in FY 2012/13 and FY 2013/14. Should the Town Commission desire, the amount of these rate increases could be absorbed from the Rate Stabilization Fund, which at the end of FY 10/11 consisted of a balance of \$104,183.



Table 19. Storm Water Utility Revenue Requirements

Description			nated FY 11/12	Fo	recast FY 12/13	ecast FY 13/14	Forecast F 14/15	Υ	e cast FY 15/16
Operating Revenue Stormwater Revenue			\$ 487,000	\$	488,218	\$ 490,659	\$ 493,11	2	\$ 495,577
Total Operating Revenue			487,000		488,218	490,659	493,11	2	495,577
Additional Rate	Revenue Require	d							
Year	Revenue Increase	Months Effective							
2011/12	0.00%	6	~			-		-	(=)
2012/13	2.00%	12	-		9,764	9,813	9,86	2	9,912
2013/14	2.00%	12	-		-	10,009	10,05	9	10,110
2014/15	0.00%	12	. *		-	-		•	-
2015/16	0.00%	12	 				ş	-	 -
Total Additional Stormwater	Rate Revenue		-		9,764	19,823	19,92	2	20,021
Total Required Revenue			487,000		497,982	510,481	513,03	4	515,599
O&M Expenses									
Personnel			72,241		73,325	74,424	75,54		76,674
Operations			 102,327		103,350	 104,384	105,42		 106,482
Total O&M Expenses			174,568		176,675	178,808	180,96	8	183,156
Net Operating Income			312,432		321,307	331,673	332,06	5	332,443
Debt Service									
Annual Debt Service (Estima	ated)		 230,243		230,243	 230,243	230,24	3	 230,243
Total Debt Service			230,243		230,243	230,243	230,24	3	230,243
Calculated Debt Coverage R	atio		136%		140%	144%	144	%	144%
Targeted Debt Coverage Rat	io		115%		115%	115%	115	%	115%
Non-Operating Expenses									
Capital Outlay (excl Improve	ments)					-		-	-
Regions Bank Prepayment F	Penalty		4,800		-	-		-	-
Rate Funded Capital Project	S .		 	_		 	-	_	
Total Non-Operating Expens	es		4,800		-	-		-	ā
Net Income (Loss) 1			\$ 77,389	\$	91,064	\$ 101,430	\$ 101,82	3	\$ 102,200

^{1.} Positive net income to be applied to fund balances.



Table 20 presents the fund balance information for the storm water utility system. Based on assumptions and data provided for this analysis, reserve fund levels are projected to be above target by FY 15/16. As mentioned earlier in this report, because Rate Stabilization funds exceed target, these funds could be used to absorb the rate increases presented in this report.

Table 20. Storm Water Utility Reserve Fund Analysis

Description	Est	imated FY 11/12	For	recast FY 12/13	Fo	recast FY 13/14	Fo	recast FY 14/15	For	recast FY 15/16
Total Fund Equity Beginning FY 11/12 Balance 1	\$	485,539	See	below for fu	nd ba	alance alloca	tion	(dependent o	n Tov	vn approval)
Restricted Net Assets - Renewal & Replacement Reserv	es									
Beginning Balance	\$	187,474	\$	187,474	\$	278,539	\$	379,969	\$	481,791
Restricted Net Assets to Fund Storm Water CIP Projects		-		-		-				
Transfer from W/S Fund				-		-		-		-
Surplus from CIP Program (after bond issue)				-				-		400,000
Deposit from Positive Net Income				91,064	_	101,430	_	101,823	_	102,200
Ending Balance	\$	187,474	\$	278,539	\$	379,969	\$	481,791	\$	583,992
Target Balance: 50% of 5-Year Annualized CIP		423,292		423,292		423,292		423,292		423,292
Restricted Net Assets - Rate Stabilization Reserves										
Beginning Balance	\$	104,183	\$	104,183	\$	104,183	\$	104,183	\$	104,183
Deposit from Positive Net Income							_		_	
Ending Balance	\$	104,183	\$	104,183	\$	104,183	\$	104,183	\$	104,183
Target Balance: Up to 10% of Rate Revenues		48,700		49,798		51,048		51,303		51,560
Unrestricted Net Assets - Operating Reserves										
Beginning Balance	\$	193,882	\$	193,882	\$	193,882	\$	193,882	\$	193,882
Unrestricted Net Assets to Fund Storm Water CIP Projects		-		-		-		-		-
Deposit from Positive Net Income			_		9	-				
Ending Balance	\$	193,882	\$	193,882	\$	193,882	\$	193,882	\$	193,882
Target Balance: Up to 25% of Current Year O&M		43,642		44,169		44,702		45,242		45,789

^{1.} The Storm Water Utility's share of total fund equity balance is equal to 16 percent. This figure is based on the Storm Water Utility's proportion of capital projects to all utility capital projects.



The table below (Table 21) presents the FY 2011/12 adopted monthly storm water rates as well as projected rates for the remainder of the study period.

Table 21. Storm Water Utility Rates

	Add	pted FY	For	ecast FY	Forec	ast FY	Fore	ecast FY	Ford	ecast FY
Service Type		11/12		12/13		13/14		14/15		15/16
Single Family Residential (1.0 ERU)	\$	10.70	\$	10.91	\$	11.13	\$	11.13	\$	11.13
Multi Family Residential (1.0 ERU per dwelling unit)	\$	10.70	\$	10.91	\$	11.13	\$	11.13	\$	11.13
Place of Worship (0.5 ERU per 1,300 sq. ft. of impervious area)	\$	5.35	\$	5.46	\$	5.57	\$	5.57	\$	5.57
Non Residential Developed Property excluding Places of Worship										
(1.25 ERU per 1,300 sq. ft. of impervious area)	\$	13.38	\$	13.65	\$	13.92	\$	13.92	\$	13.92