

**Item #14B:**  
**Village Engineer Perry**  
Updated Water Rate Analysis - *Discussion*

Attachment A  
Revenue Requirement - Cash Basis

	Actual FY12	Actual FY13	Actual FY14	Actual FY15	Actual FY16	Actual FY17	Forecasted FY18
<b>OPERATING REVENUES</b>							
Metered Sales							
User Revenues	\$ 54,798	\$ 67,446	\$ 81,716	\$ 80,927	\$ 65,680	\$ 39,778	\$ 38,600
Total Metered Sales	54,798	67,446	81,716	80,927	65,680	39,778	38,600
Other Revenues							
Meter fees	1,620	3,086	2,891	5,124	-	5,105	3,000
Application fees	1,225	300	400	600	-	600	400
Interest income	13	12	56	187	367	390	500
Total Other Revenue	2,858	3,398	3,347	5,911	367	6,095	3,900
<b>TOTAL OPERATING REVENUES</b>	<b>57,656</b>	<b>70,844</b>	<b>85,063</b>	<b>86,838</b>	<b>66,047</b>	<b>45,873</b>	<b>42,500</b>
<b>OPERATING EXPENSES</b>							
Operation and Maintenance Expense							
Operating expenses							
Pumping	10,787	12,424	14,958	16,211	14,630	16,370	15,800
Lab Fees	4,207	3,430	1,218	650	945	3,144	2,300
Permit Fees	143	148	-	153	-	201	150
Repair & maintenance	405	1,408	-	4,728	998	1,307	1,500
Security System	1,652	1,671	1,671	1,725	1,705	1,705	1,700
Supplies	4,565	3,074	3,203	3,493	3,473	5,981	3,900
Water Meter Hardware Expenses	1,620	3,280	2,932	5,124	-	5,100	3,300
Water Meter installation	-	375	150	450	-	75	200
Miscellaneous	413						
Administrative and General							
Management Services	18,435	18,600	19,913	20,625	22,384	28,100	30,000
Professional Services		1,817	-	600	5,914	500	1,500
Telephone	893	941	854	1,381	890	1,160	1,000
Postage	25	56	14	20	-	-	-
Bank Service Charges	182	252	232	300	325	300	250
Total Operating and Maintenance	43,326	47,476	45,143	55,460	51,264	63,943	61,600
Replacement/Capital Budget*	235	895	895	895	895	895	895
Total Other Expense	235	895	895	895	895	895	895
<b>TOTAL OPERATING EXPENSES</b>	<b>43,561</b>	<b>48,370</b>	<b>46,038</b>	<b>56,354</b>	<b>52,159</b>	<b>64,838</b>	<b>62,495</b>
<b>NET CASH FLOW IN</b>	<b>\$ 14,095</b>	<b>\$ 22,474</b>	<b>\$ 39,025</b>	<b>\$ 30,484</b>	<b>\$ 13,888</b>	<b>\$ (18,965)</b>	<b>\$ (19,995)</b>
<b>RATE OR TAX LEVY DECREASE SUGGESTION</b>							<b>52%</b>
*This is based on depreciation expense							
Annual Gallons Sold and Forecasted	3,314,000	4,093,000	4,788,000	4,525,000	2,588,000	2,753,000	2,670,500
Thousand Gallons	3,314	4,093	4,788	4,525	2,588	2,753	2,671
Water Volume Rate	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$10.50	\$10.50
Fixed Fee	\$500	\$500	\$500	\$500	\$500	\$375	\$375

Attachment B  
Scenario Analysis - Existing Well  
Existing Rates

	Scenarios				
	A	B	C	D	E
<b>OPERATING REVENUES</b>					
Metered Sales					
User Revenues	\$ 38,600	\$ 135,000	\$ 251,600	\$ 182,700	\$ 299,300
Total Metered Sales	<u>38,600</u>	<u>135,000</u>	<u>251,600</u>	<u>182,700</u>	<u>299,300</u>
Other Revenues					
Meter fees	3,000	3,000	3,000	3,000	3,000
Application fees	400	400	400	400	400
Interest income	500	500	500	500	500
Total Other Revenue	<u>3,900</u>	<u>3,900</u>	<u>3,900</u>	<u>3,900</u>	<u>3,900</u>
<b>TOTAL OPERATING REVENUES</b>	<u>42,500</u>	<u>138,900</u>	<u>255,500</u>	<u>186,600</u>	<u>303,200</u>
<b>OPERATING EXPENSES</b>					
Operation and Maintenance Expense					
Operating expenses					
Pumping	15,800	69,000	108,000	85,300	124,300
Lab Fees	2,300	2,300	2,300	2,300	2,300
Permit Fees	150	150	150	150	150
Repair & maintenance	1,500	1,500	1,500	1,500	1,500
Security System	1,700	1,700	1,700	1,700	1,700
Supplies	3,900	3,900	3,900	3,900	3,900
Water Meter Hardware Expenses	3,300	3,300	3,300	3,300	3,300
Water Meter installation	200	200	200	200	200
Miscellaneous					
Administrative and General					
Management Services	30,000	30,000	30,000	30,000	30,000
Professional Services	1,500	1,500	1,500	1,500	1,500
Telephone	1,000	1,000	1,000	1,000	1,000
Postage	-	-	-	-	-
Bank Service Charges	250	250	250	250	250
Total Operating and Maintenance	<u>61,600</u>	<u>114,800</u>	<u>153,800</u>	<u>131,100</u>	<u>170,100</u>
Replacement/Capital Budget*	<u>895</u>	<u>895</u>	<u>895</u>	<u>895</u>	<u>895</u>
Total Other Expense	<u>895</u>	<u>895</u>	<u>895</u>	<u>895</u>	<u>895</u>
<b>TOTAL OPERATING EXPENSES</b>	<u>62,495</u>	<u>115,695</u>	<u>154,695</u>	<u>131,995</u>	<u>170,995</u>
<b>NET CASH FLOW IN</b>	<u>\$ (19,995)</u>	<u>\$ 23,205</u>	<u>\$ 100,805</u>	<u>\$ 54,605</u>	<u>\$ 132,205</u>
DECREASE IN CURRENT RATES	52%	-17%	-40%	-30%	-44%

\*This is based on depreciation expense

SCENARIOS

Estimated Annual sales volume

A. Existing customers	2,670,500
B. Existing customers + Harbor Chase	11,850,250
C. Existing customers + Harbor Chase + Downtown	22,732,725
D. Existing customers + Harbor Chase + Archer out lots + triangle properties	16,139,000
E. Existing customers + Harbor Chase + Archer out lots + triangle properties + Downtown	27,021,475

\*\*Harbor Chase is expected to be 25% of the forecasted revenue above in FY18

**Village of Long Grove**  
 Sales Volume and Forecast - Existing rates  
 Schedule 1

**Existing Customers**

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Metered Sales							
User Revenues	\$ 54,798	\$ 67,446	\$ 81,716	\$ 80,927	\$ 65,680	\$ 39,778	\$ 38,600
Total Metered Sales	54,798	67,446	81,716	80,927	65,680	39,778	38,600
Annual Gallons Sold	3,314,000	4,093,000	4,788,000	4,525,000	2,588,000	2,753,000	2,670,500
Thousand Gallons	3,314	4,093	4,788	4,525	2,588	2,753	2,671
Revenue per Thousand Gallons	\$ 16.54	\$ 16.48	\$ 17.07	\$ 17.88	\$ 25.38	\$ 14.45	\$ 14.45
Pumping Cost	10,787	12,424	14,958	16,211	14,630	16,370	15,800
Cost per Thousand Gallons	\$ 3.25	\$ 3.04	\$ 3.12	\$ 3.58	\$ 5.65	\$ 5.95	\$ 5.80

Forecasted Volumes for proposed properties

	GPD*	Annual Volume	Pumping Cost	Revenue Estimate	Revenue Rounded
Harbor Chase**	25,150	9,179.75	\$ 53,200	\$ 96,387	\$ 96,400
Triangle Loading	1,250	456	2,600	7,500	7,500
Archer Outlot	10,500	3,833	13,700	40,241	40,200
Remainder downtown	29,815	10,882	39,000	116,608	116,600

\*Gallons per Day is based on calculated Residential Equivalents used in Connection fee study

\*\*Harbor Chase is expected to be 25% of the forecasted revenue above in FY18

