

# **TECHNICAL MEMORANDUM**

To:	Mr. Delfino Consunji
From:	Robert Ryall
Date:	January 31, 2017
Client:	City of West Covina, California
Project:	Preparation of a Revenue Sufficiency Analysis associated with the Sewer System Management Plan
Subject:	Sewer System Revenue Sufficiency Analysis

# Mr. Consunji,

Willdan Financial Services (Willdan) is pleased to present this Technical Memorandum summarizing our Sewer System Revenue Sufficiency Analysis (the "Analysis") for the City of West Covina, California (the "City") Sewer Maintenance Fund (the "Utility"). Willdan Engineering is in the process of completing a Sewer System Management Plan (SSMP) for the City. As part of the SSMP, Willdan Engineering, in conjunction with the City, identified a series of sewer capital projects that comprise the Sewer Capital Improvement Program. The Analysis summarized herein comprises a series of financial planning options identifying how the Sewer Capital Improvement Program can be funded.

In the preparation of the Analysis, certain assumptions have been made with respect to conditions that may occur in the future. While it is believed that these assumptions are reasonable for the purpose of this update, they are dependent upon future events and actual conditions may differ from those assumed. In addition, the Analysis has used and relied upon certain information that was provided by other parties not associated with Willdan. Such information includes, among other things, the City's audited financial statements, annual operating budgets, periodic reports, and other information and data provided by the City, its independent auditors, and other sources. While the sources are believed to be reliable, there has been no independent verification of the information and no assurances are offered with respect thereto. To the extent that future conditions differ from those assumed herein or provided by others, the actual results may vary from those projected.

#### THE REVENUE SUFFICIENCY PROCESS

In order to develop rates and charges (or assessments as in the case of the City) which generate sufficient revenue to meet the fiscal requirements of the Utility, a determination of the annual assessment revenue required must be completed. This assessment revenue, combined with other sources of funds, is evaluated to determine whether the total revenue is sufficient to meet those fiscal requirements. This process is typically referred to as a Revenue Sufficiency Analysis.

The process employed in the Revenue Sufficiency Analysis results in the identification of revenue requirements of the system, such as operating expenses, capital expenses (minor and major), debt service expense (including a provision for debt service coverage), transfers out, and the maintenance of both restricted and unrestricted



reserves at appropriate levels. These revenue requirements are then compared to the total sources of funds during each year of the forecast period to determine the adequacy of projected revenues to meet projected revenue requirements. To the extent that the existing revenue stream is not sufficient to meet the annual revenue requirements of the system, a series of assessment revenue increases are calculated which would be required in order to provide revenue sufficient to meet those needs.

## **DATA ITEMS AND ASSUMPTIONS**

Key data items reviewed, discussed, and incorporated into the Analysis include the following:

- Financial management goals of the City
- Fiscal year ("FY") 2014-15 Comprehensive Annual Financial Report (CAFR) and preliminary FY 2015-16 results
- FY 2016-17 Operating Budget
- Capital Improvements Plan (CIP)
- General assumptions related to:
  - Customer growth
  - Cost escalation factors
  - New debt

#### **Fund Balances**

To better understand what funds the Utility had on hand to start the forecast period, a detailed review of the City's latest financial statements, the FY 2014-15 CAFR, was conducted and reviewed with staff. In addition to the FY 2014-15 CAFR, the City provided the Preliminary Fourth Quarter Financial Report for FY 2015-16 and Capital Improvement Program Update. The report provided the Utility fund balance for July 1, 2016, and therefore the beginning of FY 2016-17. The City's estimated fund balance is \$2,780,773.

## **Budgeted and Projected Revenue and Expenses**

Willdan obtained the City's FY 2016-17 Operating and Capital Improvement Program Budget and used information from this document as the basis for the projection of financial performance for FY 2016-17. Reported revenue was obtained from the City's financial statements and used as the basis for projecting Utility revenue. FY 2014-15 assessment revenue, as reported in the FY 2014-15 CAFR, is adjusted by 0.5%, the assessment increase for FY 2015-16, in order to estimate base assessment revenue for the Analysis. Projected revenue for FY 2017-2025 was developed assuming no annual growth in customers and, further, by any adopted or projected assessment increases during the forecast period. The increases projected as part of this analysis are in place of "normal" increases by the City. In addition, line-item projected expenses for FY 2017-2025 were developed using cost escalation factors as discussed below under General Assumptions.

Cost escalation factors were reviewed with the City and were used to project line-item costs beyond the FY 2016-17 budget. Those factors were applied based on line-item cost classifications.



A summary of the budgeted and projected revenues are presented below in Table 1. Table 2 presents the budgeted and projected expenses which are the same for the scenarios prepared in this Analysis.

			r	Table 1 nance Operatin	a Rovenue				
D-101-11-	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Description  Special Assessments – Sewer Service	\$ 2,651,478	\$ 2,651,478		\$ 2,651,478	\$ 2,651,478	\$ 2,651,478	\$ 2,651,478	\$ 2,651,478	\$ 2,651,478
Charges (no adjustments) <sup>1</sup> Taxes - Property Tax Revenue (Ad	202,026	202,026	202,026	202,026	202,026	202,026	202,026	202,026	202,026
Valorem)					56	12	- 2	£.	34
Investment Income Revenue from other agencies	-		- 4	- 2		- 2		7.6	
Charges for service	516	516	516	516	516	516	516	516	516
Other revenues	3,000	2,000	2,000	3,000	3,000	4,000	4,000	3,000	3,000
Total	\$ 2,857,020	\$ 2,856,020	\$ 2,856,020	\$ 2,857,020	\$ 2,857,020	\$ 2,858,020	\$ 2,858,020	\$ 2,857,020	\$ 2,857,020

<sup>1 -</sup> Based on reported FY 2015 Assessment revenue of \$2,638,287 and 0.5% increase adopted for EV 2015-16

<sup>2 -</sup> Interest Income is calculated based on the forecasted Sewer Maintenance Fund ending year balance. Interest Income varies for each scenario developed in the Analysis.



								ile 2	E	00185								
Description	FY	2016-17	FY	2017-18	_			Operating 2019-20		2020-21	FY	2021-22	FY	2022-23	FY	2023-24	FY	2024-25
89 - Sewer Maintenance																		
Personnel Services	5	30,273	\$	31,787	5	33,376	5	35,045	5	36,797	\$	38,637	\$	40,569	S	42,597	5	44,727
Materials & Services		100		200		43								- 35				
Capital Assets				**		751		- 8										- 5
Allocations	_	1000		\$	_	*	_	(4)	_	141	_	00.537	Ś	40.569	ė	42,597	ξ.	44,727
ubtotal Community Enhancement 3125)	\$	30,273	\$	31,787	\$	33,376	5	35,045	5	36,797		22,000		,		·		479,184
Personnel Services	\$	324,330	\$	340,547	\$	357,574	\$	375,453	\$	394,226	\$	413,937	5	434,634	5	456,366	>	82,885
Materials & Services		65,430		67,393		69,415		71,497		73,642		75,851		78,127		80,471		62,063
Capital Assets				*								450.750		164,543		169,479		174,563
Allocations	_	137,802	_	141,936	_	146,194	_	150,580	_	155,097	s	159,750 649,538	5		Ś		s	736,632
Subtotal District Engineering (4133)	\$	527,562	\$	549,87 <del>6</del>	\$	573,183	\$	-2.7	\$	622,965	*	-	•					
Personnel Services	\$	-	\$		\$		\$	-	\$		\$	1.0	\$		\$		\$	
Materials & Services		-								-						- 30		
Capital Assets				1.0		92				74		72.470		74,653		76,893		79,200
Allocations	_	62,520	_	64,396	_	66,328	_	68,318	_	70,368	Ś	72,479 72,479	s	74,653	5		s	79,200
Subtotal Street Maintenance (4151)	\$	62,520	\$	64,396	\$	66,32B	\$	68,318	\$	70,368		-	*	,			•	
Personnel Services	\$	1,012,229	\$	1,062,840	\$	_,	\$	1,171,781	\$		\$	1,291,889	\$	1,356,483	\$	-,	\$	1,495,52 187,69
Materials & Services		148,170		152,615		157,193		161,909		166,766		171,769		176,922		182,230		107,03
Capital Assets				35		179		55				1		210 000		221.551		228,19
Allocations	_	180,142		185,546	_	191,112	_	196,845	_	202,750	_	208,833	\$	215,098 1,748,503	\$	1,828,088	\$	1,911,41
Subtotal Sewer Maintenance (4160)	\$	1,340,541	\$	1,401,001	\$	1,464,287	\$	1,530,535	\$	1,599,886	\$	1,672,491						_,,
Personnel Services	\$	4	\$		5		\$		\$	*	\$		\$		\$	24 500	\$	25.33
Materials & Services		20,000		20,600		21,218		21,855		22,511		23,186		23,882		24,598		22,23
Capital Assets												- 5		0		- 9		
Allocations	_	9.5	_	1,140	_	17.	_	20.005	_	22,511	5	23,186	Ś	23.882	Ś	24,598	Ś	25,33
Subtotal NPDES (4189)	\$	20,000	\$	20,600	\$	21,218	\$	21,855	\$	22,511						2.,220	5	
Personnel Services	\$		\$		\$	*	\$	-	\$		\$		\$		\$	- 3	₽	
Materials & Services				10.0				7.5				en con		28,154		28,717		29.29
Capital Assets		25,000		25,500		26,010		26,530		27,061		27,602		28,134		20,717		25,22
Allocations	_	59			_	27.010	-	25.520	Ś	27,061	S	27,602	Ś	28,154	5	28,717	5	29,29
Subtotal General (7003)	\$	25,000	\$	25,500	\$	26,010	\$	26,530								(%	s	•
Personnel Services	\$	11.7	\$		\$		\$		\$		\$		\$	-	\$	- 3	-	
Materials & Services										400.000		125.866		128.383		130,951		133,5
Capital Assets		114,000		116,280		118,606		120,978		123,398		123,600	'	120,303		250,522		
Allocations	_	5.0	_	****	-	110.000	S	120,978	5	123.398	Ś	125,866	5 5	128,383	Ś	130,951	Ś	133,5
Subtotal Vehicles (7008)	\$	114,000				118,606	>	120,978		123,390		123,000		93		700	s	
Transfer Out	_\$				\$	- 2	\$	-	\$		S		5	00.0	\$ - \$	10.5	S	
Subtotal Transfers Out (9500)	\$	25,000	\$	-	\$	- 2	S		\$		- \$		_			4 400 111		3.050.41
Total	Ş	2,144,896	\$	2,209,440	5	2,303,008	\$	2,400,791	\$	2,502,986	; \$	2,609,799	9 \$	2,721,448	\$	2,838,160	\$	2,960,1
Counting Evensor		2,005,896	; ć	2,067,660	Ś	2.158.392	Ś	2.253.283	s	2,352,527	, 5	2,456,33		2,564,911	\$	2,678,492	\$	2,797,3
Operating Expenses	•	139,000		141.780		144.616		147,508	. *	150,459		153,46		156,537	7	159,668	ŀ	162,8
Minor Capital		20000	-	,				,							3 5	2.838.160	) \$	2.960.1

# Capital Improvements Plan (CIP)

As part of the Sewer System Management Plan, Willdan Engineering identified a series of sewer capital projects that comprise the Sewer Capital Improvement Program. A summary table of the sewer CIP for the FY2017 – 2025 forecast period is presented below in Table 3.



				Table 3					
			Maintenance C			eu 2024 22	FY 2022-23	FY 2023-24	FY 2024-25
Project Description	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FT 2023-24	FT 2024-23
	\$ 900,000	\$ -	s =	\$	s ±	\$	\$	\$	\$
ameron Avenue Sewer Rehabilitation									
zusa Lift Stat on Construction	600,000	-		*	*	73		600	
losed Circuit TV Inspection	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
lew Sewer Maintenance Truck and	190,000	-		36		50	55		9.5
amera									
ewer Cured In Place Pipe Lining	152,600	152,600	152,600	152,600	152,600	152,600	152,600	152,600	152,600
	30	1,345,200					+		-
2-1; Sewer Main Replacement Area 82									
OWER, Install Emergency Backup		64,800	25			+		64,800	259,200
ower at City Lift Stations									
SCADA; Install SCADA Controls at City	-	56,700	56,700	20	56,700	56,700		56,700	56,700
ift Stations									
1-1; Sewer Main Replacement Area 4			286,400	15					
80-1; Sewer Main Replacement Area 80			4	- 2					
116-3; Sewer Main Replacement Area	100		254,000				-	-	
62-2: Sewer Main Replacement Area 62			12	191,800	-			-	
116-2; Sewer Main Replacement Area				825,000		-	-	-	
132-1: Sewer Main Replacement Area	- 2	- 9		390,700	- 5				
117-1: Sewer Main Replacement Area	114			2.7	939,100	-			
82-3; Sewer Main Replacement Area 82		- 1	2		12	804,200			
82-4; Sewer Main Replacement Area 82	9+		1.4	1.0	1.5	399,200	-		
62-1; Sewer Main Replacement Area 62						-	1,359,800		
82-2; Sewer Main Replacement Area 82				1.0		0.00	-	1,391,400	
116-1; Sewer Main Replacement Area				- 4	1			. *	666,000
161-1; Sewer Main Replacement Area		10 10							143,90

## **Outstanding Debt Service**

Based on review of the City's financial documents, as well as discussions with the City, it is our understanding that the City does not have any outstanding sewer related debt. For the purpose of this Analysis, any forecasted future debt is assumed to have a 1.50X debt service coverage requirement.

## **General Assumptions**

In order to develop the financial and rate projections, certain assumptions were made with regard to elements of the Analysis. A summary of those assumptions is presented below.

## Growth

Based on discussion with the City, the Utility is mostly built-out. As such, it was assumed that growth in the Utility's customer base, and requisite flows, would be 0.0% per year during the forecast period.

## **Operating Projections**

For the purposes of forecasting Operating requirements of the Utility, the following escalation factors are use for the various budget line-items.

- Personnel Services 5.0%
- Materials & Services 3.0%
- Capital Assets 2.0%
- Allocations 3.0%

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## Minimum Unrestricted Working Capital Balance - Operating Fund

In order to minimize assessment/bill impacts and to have contingency reserves available, Utilities generally maintain an operating reserve. Based on discussions with the City, a working capital balance of 50% to 100% of annual operating expenses is maintained for the Utility. For the purposes of our Analysis, we have assumed the Utility will maintain an unrestricted working capital operating fund reserve amount greater than or equal to approximately 9 months of operating expenses (75% of operating expenses). With exception of Scenario 2, the analysis presented herein projects a minimum unrestricted working capital operating fund reserve of at least 9 months of operating expenses during the forecast period.

## **Future Debt**

In order to fund the capital needs of the Utility, some scenarios developed herein include the use of future debt. Payments associated with this data are assumed to be level annual payments and are forecasted using an interest rate of 5.5%, 30-year term, and issuance costs of 2.0% of the issuance amount.

## **RESULTS OF THE ANALYSIS**

In order to provide the City information needed to make appropriate decisions with regard to the Utility Capital Improvement Program, we have prepared four financial plans for the Utility. Each plan is for the period FY 2017-2025, the same 9-year period as the Capital Improvement Program. Below is a summary of the four scenarios:

Scenario 1 – Cash Fund Capital Improvement Program; 9-Months Working Capital: This scenario considers the full \$13,689,100 Capital Program (approximate \$1.5 million annual average), as presented in Table 3. Based on discussions with the City, the preferred funding approach for the program is to cash fund projects using sewer assessment revenue. This scenario forecasted the annual increases in sewer assessments, over the 9-year period, in order to cash fund the full CIP while maintaining a working capital reserve balance of at least 9 months of operating expenses.

Scenario 2 – Cash Fund Capital Improvement Program; 6-Months Working Capital: Similar to Scenario 1, this scenario also considers the full \$13,689,100 Capital Program. However, in order to reduce the impact of initial assessment increases, the working capital balance is allowed to fall below 9 months of operating expenses. This scenario forecasted the annual increases in sewer assessments, over the 9-year period, in order to cash fund the full CIP while maintaining a working capital reserve balance of at least 6 months of operating expenses.

Scenario 3 – Cash Fund \$1.0 Million Annual Capital Improvement Program: Given the magnitude of sewer assessment increases needed to fund the full CIP, Scenario 3 was developed as an alternative to explore the level of needed increases in sewer assessment revenue to fund \$1.0 million in annual capital projects for FY 2018-2025 (\$8.0 million over the period). Current year (FY 2017) projects are underway and thus this level of spending is not adjusted.

Scenario 4 – Use Debt in Funding Capital Improvement Program: This scenario is developed as an alternative to the full cash funding of the CIP. This alternative scenario is developed to provide the City the results of using debt to fund a portion of the CIP.



Tables providing the results of these scenarios, as well as a discussion of the result of each scenario, are provided below:

# Scenario 1 – Cash Fund Full Capital Improvement Program; 9-Months Working Capital

This scenario considers funding the full \$13,689,100 Capital Program using revenue from the Utility while maintaining at least a 9-month working capital reserve balance. As such, the revenues of the Utility, primarily sewer assessments, will need to increase to provide funding for operating expenses of the systems as well as the CIP. This scenario assumes a minimum Utility working capital balance of 9 months of operating expenses. As such, the analysis utilizes all available Utility funds above 9 months of working capital to fund the CIP before forecasting the need for increases in the sewer assessment.

A detailed schedule showing the results of this scenario is presented below in Table 4. The analysis shows that sewer assessments will need to increase by 56.2% over the 9-year forecast period, including an initial increase of 36.5% in FY 2017-18.

## Scenario 2 – Cash Fund Full Capital Improvement Program; 6-Months Working Capital

Similar to Scenario 1, this scenario considers funding the full \$13,689,100 Capital Program using revenue from the Utility. However, this scenario allows the Utility working capital balance to fall below 9 months of operating expenses, targeting a working capital balance of 6 months of operating expenses.

A detailed schedule showing the results of this scenario is presented below in Table 5. The analysis shows that sewer assessments will need to increase by 71.7% over the 9-year forecast period, including an increase of 20% in FY 2017-18.

#### Scenario 3 – Cash Fund \$1.0 Million Annual Capital Improvement Program

Given the magnitude of sewer assessment increases required to fund the full CIP, Scenario 3 was developed as an alternative to explore the level of needed increases in sewer assessment revenue to fund \$1.0 million in annual capital projects for FY 2018-2025. (\$8.0 million over the period). Utility funds greater than 9 months of operating expenses are used toward the CIP. After these funds are exhausted, increases in sewer assessment revenue are needed to fund the CIP.

A detailed schedule showing the results of this scenario is presented below in Table 6. The analysis shows that sewer assessments will need to increase by 38.6% over the 9-year forecast period. These increases include 11% increases in FY 2017-18 and FY 2018-19.

## Scenario 4 – Use Debt in Funding Capital Improvement Program

As an additional alternative for the City, this scenario uses debt to fund a portion of the CIP. Similar to other scenarios, Utility funds above the assumed 9 month working capital reserve are used to fund the CIP before debt is used. The analysis assumes the Utility will issue debt in 3-year increments, forecasted to begin in FY 2017-18 with approximately \$2.6 million of debt needed. Additional debt is forecasted for FY 2020-21 and FY 2023-24 in the amounts of approximately \$3.6 million, and \$3.0 million, respectively.





In order to maintain an assumed debt service coverage (net revenue divided by annual debt service) of 1.50X, increases in sewer assessment revenue are forecasted. The over all increase in assessment revenue is forecasted to be 39.2% over the period with 4.0% annual increases for the period FY 2018-2025. A detailed schedule showing the results of this scenario is presented in Table 7 below.

Filename: Technical Memo 01-31-2017 V6



								ible 4			-	4 st. 141 - 44		anie al				
Description		recasted Ut 2016-17	_	Operating F Y 2017-18		ults - Scenario Y 2018-19		Cash Fund ( 7 2019-20		tal Program; Y 2020-21		/ 2021-22		apital (2022-23	E	Y 2023-24	FY	2024-25
Description	r r	2016-17	ď	1 2017-18	-	1 2018*15		2013-20	Ė	7 2020-21	Ė							
evenue from Special Assessments/Sev												2 004 470		2,651,478	e	2,651,478		2,651,478
Special Assessments/Sewer Service Charges	5	2,651,478	5	2,651,478	5	2,651,478	5	2,651,478	\$	2,651,478	>	2,651,478						22
Total Sales Revenue	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	5	2,651,478	\$	2,651,478	\$	2,651,478	5	2,651,478
dditional Revenue from Adjustments																45.030	•	45 075
FY 2016-17 @ 1.7%	5	45,075	\$	45,075	5	45,075	\$	45,075	5	45,075	5	45,075	5	45,075	Þ	45,075	9	45,075
FY 2017-18 @ 36.5%				984,242		984,242		984,242		984,242		984,242		984,242		984,242		984,242
FY 2018-19 @ 1.7%						62,574		62,574		62,574		62,574		62,574		62,574		62,574
FY 2019-20 @ 1.7%								63,637		63,637		63,637		63,637		63,637		63,637
FY 2020-21 @ 1.7%										64,719		64,719		64,719		64,719		64,719
FY 2021-22 @ 1,7%												65,819		65,819		65,819		65,819
FY 2022-23 @ 1.7%														66,938		66,938		65,938
FY 2023-24 @ 1.7%																68,076		68,076
FY 2024-25 @ 1.7%																		69,234
otal Additional Revenue	5	45,075	\$	1,029,317	\$	1,091,891	\$	1,155,528	\$	1,220,247	5	1,286,066	\$	1,353,005	\$	1,421,081	\$	1,490,314
Total Revenue	\$	2,696,554	\$	3,680,796	\$	3,743,369	\$	3,807,006	\$	3,871,726	5	3,937,545	\$	4,004,483	\$	4,072,559	5	4,141,793
Other Non Assessment Revenue																		
Other Operating Revenue <sup>1</sup>	\$	202,542	\$	202,542	5	202,542	\$	202,542	\$	202,542	5	202,542	\$	202,542	\$	202,542	5	202,542
interest Earnings	_	3,000		2,000		2,000		3,000		3,000		3,000	_	3,000	_	3,000	_	3,000
Total Operating Revenue	5	2,902,096	\$	3,885,338	\$	3,947,911	\$	4,012,548	\$	4,077,268	\$	4,143,087	\$	4,210,025	5	4,278,101	\$	4,347,335
Expenditures												12 455 221		(2.554.011)		(2.678,492)		(2,797,312
Operating Expenses	<u>\$</u>	(2,005,896				(2,158,392)												
Net Operating Revenue	5	896,200	\$	1,817,678	\$	1,789,519	\$	1,759,265	5	1,724,741	5	1,686,756	\$	1,645,114	5	1,599,609	5	1,550,023
Debt Service															5		5	
Existing Rev. Bond Debt Service	\$		\$		\$		\$		\$		5	•	\$				Þ	100
New Rev. Bond Debt Service  Total Debt Service for Coverage	<u>s</u>		S		S	-	S		Š	-	5		S		s		\$	
Debt Service Coverage - Rate Covenant	•	NA		NA	•	NA		NA		NA		NA		NA		NA		NA
Dent Selaire Chaelale - vare Chaelimir		110		110		140		1111										
Net Cash Flow Net Operating Revenue (restated)	Ś	896,200	S	1,817,678	5	1,789,519	\$	1.759,265		1.724.741		1,686,756	\$	1,645,114	Ś	1.599.609	\$	1,550,02
Less Debt Service		050,200	33	2,027,070	3	. 1,,00,,210	~	2,700,000	. •			,,	. *					3.
Less Cash Funded Capital		(1,942,600	1	(1,719,300	1	(849,700)	1	(1,660,100	1	(1,248,400	11	(1,512,700	1	{1,612,400	1	(1,765,500)		(1,378,400
Less Minor Capital Outlays		(139,000		(141,780		(144,616		(147,508		(150,459		(153,468		(156,537		(159,668)		(162,86
Net Cash Flow	5	(1,185,400	_		•	- 30	_		_		_		_	-	_		\$	8,76
Fund Balances																		
Operating Fund:																		
Beginning Year Balance	S	2.780.773		1.595.373		1,551,970	S	2.347.173		2.298.831	. :	5 2,624,712		2,645,300	) \$	2,521,477	\$	2,195,91
Net Cash Flow	•	(1,185,400		(43,402		795,203		(48,343		325,882		20,588		(123,823		(325,559)		8,76
Ending Balance	-				_	5 2,347,173	-		_	2 624 712	,	5 2 645 300	1 4	2.521.477	7 9	2,195,919	5	2,204,68
Reserve - Months of O&M	,	1(222227		. 1,331,370		13		17		1:		13		12		10		
Capital Program Funding		III. Va																
Annual Capital Needs	\$	1,942,600	) \$	1,719,300	) ;	\$ 849,700	5	1,660,100	) :	5 1,248,400	0 :	\$ 1,512,700	) ;	1,612,400	) ;	1,765,500	\$	1,378,40
Funding Sources:										A 4 3 4 5 4		ê 4 E44 TO		1 613 404		1 766 600	ė	1,378,40
Operating Fund (Cash Funding) New Debt	\$	1,942,600	) 5	1,719,300		\$ 849,700 -	\$	1,660,100		> 1,248,400		\$ 1,512,700		7,612,400		1,765,500	>	1,370,40
Total Capital Program Funding	\$	1,942,600	3 5	1,719,300	) !	\$ 849,700	5	1,660,100	) :	\$ 1,248,400	0	\$ 1,512,700	) :	\$ 1,612,400	0 ;	1,765,500	\$	1,378,40
Notes																		



			1114			de Committee		able 5		tal Program;	6.1	Jonth Works	n a .	Cagital				
Description	_	7 2016-17	_	y Operating 1 Y 2017-18	•	r 2018-19		Y 2019-20	-	Y 2020-21		Y 2021-22		Y 2022-23	F	Y 2023-24	FY	2024-25
																0.112		
levenue from Special Assessments/Se					ļ	2 554 470		2 651 470		2,651,478		2.551.470	e	2 551 478	ć	2,651,478	4	2,651,478
Special Assessments/Sewer Service Charges	-	2,651,478	>	2,651,478	>	2,651,478	?	2,001,478	>	2,031,476	7	2,031,470	2	2,031,470	_			
Total Sales Revenue	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	5	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478
additional Revenue from Adjustments																		
FY 2015-17 @ 1.7%	5	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	5	45,075	5	45,075	5	45,075
FY 2017-18 @ 20%				539,311		539,311		539,311		539,311		539,311		539,311		539,311		539,311
FY 2018-19 @ 5%						161,793		161,793		161,793		161,7 <del>9</del> 3		161,793		161,793		161,793
FY 2019-20 @ 5%								169,883		169,883		169,883		169,883		169,883		169,883
FY 2020-21 @ 5%										178,377		178,377		178,377		178,377		178,377
FY 2021-22 @ 5%												187,296		187,296		187,296		187,296
FY 2022-23 @ 5%														196,661		196,661		196,661
FY 2023-24 @ 5%																205,494		206,494
FY 2024-25 @ 5%																		216,818
otal Additional Revenue	\$	45,075	\$	584,386	\$	746,179	\$	916,062	\$	1,094,439	\$	1,281,735	\$	1,478,395	\$	1,684,889	\$	1,901,708
otal Revenue	\$	2,696,554	\$	3,235,864	\$	3,397,657	\$	3,567,540	\$	3,745,917	5	3,933,213	\$	4,129,874	\$	4,336,368	\$	4,553,186
Other Non Assessment Revenue																		
Other Operating Revenue	S	202,542	5	202,542	s	202,542	s	202,542	Ś	202,542	S	202,542	S	202,542	\$	202,542	\$	202,542
nterest Earnings		3,000	•	2,000	•	1,000	Ť	2,000	•	2,000	•	2,000		2,000		2,000		2,000
Total Operating Revenue	\$		\$	3,440,406	\$	3,601,199	\$	3,772,082	\$		\$	4,137,755	\$		\$	4,540,910	5	4,757,728
is penditures														-				
Operating Expenses	9	12 005 896	1 9	(2.067.660)	S	(2.158.392)	S	(2.253.283)	5	(2,352,527)	5	(2.456.331)	5	(2.564.911)	s	(2,678,492)	\$	(2,797,31
let Operating Revenue	5	896,200	_		_			_		1,597,932	_		_			1,862,418	5	1,960,41
Debt Service				111														
Existing Rev. Bond Debt Service	5		5		s		s		S		S		Ś		s		s	
New Rev. Bond Debt Service	-	8		)-			_		-			•	_	-				
otal Debt Service for Coverage	\$		\$		\$		\$		\$		\$	-	\$	•	\$		\$	
Debt Service Coverage - Rate Covenant		NA		NA		NA		NA		NA		NA		NA		NA		NA
Net Cash Flow																		
Net Operating Revenue (restated)	\$	896,200	5	1,372,746	\$	1,442,807	\$	1,518,799	\$	1,597,932	\$	1,681,424	\$	1,769,505	\$	1,862,418	\$	1,960,41
ess Debt Service							9			4. 0.40 400		11 513 700		41 013 400		(1.765,500)		(1,378,40
Less Cash Funded Capital		(1,942,600		(1,719,300		(849,700)		{1,660,100		{1,248,400		(1,512,700)		(1,612,400)				
Less Minor Capital Outlays	_	(139,000	)	(141,780	)	(144,616)	<u> </u>	(147,508)		(150,459)	)	(153,468)	<u>'</u>	(156,537		(159,668)		(162,86
Net Cash Flow	\$	(1,185,400	) :	(488,334	) \$	448,491	5	(288,809)	) \$	199,073	\$	15,256	5	568	\$	(62,750)	\$	419,15
100000000000000000000000000000000000000															_			4 648
100000000000000000000000000000000000000									- 6	1.266.722	. \$	1,465,795		1,481,051 568		1,481,619 (62,750)		1,418,86 419,15
THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN T	\$	2,780,773 (1,185,400		1,595,373 (488,334		1,107,039 448,491	¢	1,555,530 (288,809		199,073		15,256					_	1 020 02
Operating Fund: Beginning Year Balance Net Cash Flow		(1,185,400	)	(488,334	}	448,491		(288,809	)	199,073			_		_	1.418.869	5	1.030.04
Operating Fund: Beginning Year Balance		(1,185,400	)	(488,334	5	448,491		(288,809	)		\$				\$	1,418,869 6,4	\$	
Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M		(1,185,400 1,595,373	)	(488,334 1,107,039	5	448,491 1,555,530		(288,809 1,266,722	)	199,073 1,465,795	\$	1,481,051		5 1,481,619	\$		\$	
Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M  Capital Program Funding	\$	(1,185,400 1,595,373 9.5	) i (	(488,334 1,107,039	\$	448,491 1,555,530 8 6	\$	(288,809 1,266,722 6.7	\$	199,073 1,465,795	Ş	7.2	•	5 1,481,619 6.9	\$	6,4		7.
Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M  Capital Program Funding  Annual Capital Needs	\$	(1,185,400 1,595,373 9.5	) i (	(488,334 5 1,107,039 6.4	\$	448,491 1,555,530 8 6	\$	(288,809 1,266,722 6.7	\$	199,073 1,465,795 7.5	Ş	7.2	•	5 1,481,619 6.9	\$	6,4		7.
Net Cash Flow Ending Balance Reserve - Months of O&M  Capital Program Funding  Annual Capital Needs  Funding Sources:  Operating Fund (Cash Funding)	\$	(1,185,400 1,595,373 9.5 1,942,600	) i :	(488,334 5 1,107,039 6.4	\$	448,491 1,555,530 8.6 849,700		(288,809 5 1,266,722 5.7 5 1,660,100	\$	199,073 1,465,795 7.5	5	7.2 1,512,700		5 1,481,619 6.9 5 1,612,400	\$	1,765,500	\$	1,838,02 7. 1,378,40
Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M  Capital Program Funding  Annual Capital Needs  Funding Sources:	\$	(1,185,400 1,595,373 9.5 1,942,600 1,942,600	) ; ; ;	(488,334 \$ 1,107,039 6.4 \$ 1,719,300	) S	448,491 1,555,530 8.6 849,700 849,700	4	(288,809 5 1,266,722 5.7 6 1,660,100 5 1,660,100	5	199,073 6 1,465,795 7.5 6 1,248,400	5	5 1,481,051 7.2 5 1,512,700 5 1,512,700		\$ 1,481,619 6.9 \$ 1,612,400 \$ 1,612,400	\$	1,765,500 1,765,500	\$	1,378,40

Filename: Technical Memo 01-31-2017 V6

1 - Property Tax Revenue; Ad Valorem.



			114	III. O		lander Fo		able 6		1.0.8899	na	ual Capital Be	nes	200				
Description	Ð	Forecasted 7 2016-17	_	ility Operation 7 2017-18	_	Results - Scen Y 2018-19		o 1, Cash Fun Y 2019-20	_	1.0 Million A 7 2020-21	_	uai Capital Pr Y 2021-22		am / 2022-23	ļ	FY 2023-24	F	/ 2024-25
levenue from Special Assessments/Sev					¢	2,651,478	c	2,651,478	<	2 651 479	¢	2 551 478	<	2 651 478	5	2,651,478	s	2,651,478
Special Assessments/Sewer Service Charges	9	2,031,476	-	2,031,470	,	2,031,470	*	2,032,770	-	2,032,470	*	2,002,470	•	2,002,	•		•	91 &
Total Sales Revenue	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	5	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478
idditional Revenue from Adjustments																		
FY 2016-17 @ 1.7%	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075	\$	45,075
FY 2017-18 @ 11%				296,621		296,521		296,621		296,621		296,621		296,621		296, <del>6</del> 21		296,621
FY 2018-19 @ 11%						329,249		329,249		329,249		329,249		329,249		329,249		329,249
FY 2019-20 @ 1.7%								56,481		56,481		56,481		55,481		56,481		56,481
FY 2020-21 @ 1.7%										57,441		57,441		57,441		57,441		57,441
FY 2021-22 @ 1.7%												58,418		58,418		58,418		58,418
FY 2022-23 @ 1.7%														59,411		59,411		59,411
FY 2023-24 @ 1.7%																60,421		60,421
FY 2024-25 @ 1.7%	_												_				_	61,448
otal Additional Revenue	\$	45,075	\$	341,696	\$	670,945	5	727,426	\$	784,868	\$	B43,286	\$	902,697	\$	963,118	\$	1,024,566
otal Revenue	\$	2,696,554	\$	2,993,174	\$	3,322,424	\$	3,378,905	\$	3,436,346	\$	3,494,764	\$	3,554,175	\$	3,614,596	\$	3,676,044
Other Non Assessment Revenue																		
Other Operating Revenue <sup>1</sup>	S	202,542	\$	202,542	\$	202,542	5	202,542	5	202,542	\$	202,542	\$	202,542	\$	202,542	\$	202,542
nterest Earnings		3,000		2,000		2,000		2,000		2,000		3,000		3,000		3,000		3,000
otal Operating Revenue	\$	2,902,096	\$	3 197,716	\$	3,526,966	\$	3,583,447	\$	3,640,888	\$	3,700,306	\$	3,759,717	\$	3,820,138	\$	3,881,586
xpenditures																		
Operating Expenses	5	(2,005,896)	\$	(2,067,660)	\$	(2,158,392)	\$	(2,253,283)	\$	(2,352,527)	\$	(2,456,331)	\$	(2,564,911)	\$	(2,678,492)	\$	(2,797,31
Net Operating Revenue	\$	896,200	Ś	1,130,056	\$	1,368,574	\$	1,330,164	\$	1,288,361	\$	1,243,975	\$	1,194,805	\$	1,141,646	\$	1,084,274
Debt Service																		
	\$		\$		\$		\$	- 1	\$	Ÿ	\$		\$	-	\$		\$	
ixisting Rev. Bond Debt Service New Rev. Bond Debt Service	_	:	_	*	Ċ	-				- 1		•	_			25		
Existing Rev. Bond Debt Service New Rev. Bond Debt Service	\$	-	\$	*	5	-	\$		\$	- 1	\$	•	\$		\$	25	\$	<u> </u>
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage	_	- - NA	_	*	Ċ	-				- 1		•	_			25		NA NA
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant	_	- NA	\$	= -	Ċ			•	\$	NA NA	\$	NA NA	5	NA NA	\$	NA NA	\$	
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow	_	- NA	\$	NA	\$	- NA		NA NA		NA NA	\$	NA NA	5	NA NA	\$	NA NA	\$	
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service	\$	NA 896,200	\$	NA	\$	- NA	\$	NA 1,330,164	\$	NA 1,288,361	5	NA NA 1,243,975	\$	NA 1,194,806	\$	NA 1,141,646	\$	1,084,27
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital	\$	NA 896,200 - (1,942,600	\$	NA 1,130,056	\$	NA 1,368,574	5	NA 1,330,164 (1,000,000)	\$	NA 1,288,361 {1,000,000}	\$	NA 1,243,975	5	NA 1,194,806	\$	NA 1,141,646 (1,000,000)	\$	1,084,27
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital	\$	NA 896,200	\$	NA NA 1,130,056	\$	NA 1,368,574	5	NA 1,330,164	\$	NA 1,288,361	\$	NA NA 1,243,975	5	NA 1,194,806	\$	NA 1,141,646	\$	1,084,274 (1,000,004 (162,86
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays	\$	NA 896,200 - (1,942,600	S (S)	NA 1,130,056 41,000,000 (141,780	\$ \$	NA 1,368,574 (1,000,000) (144,616)	\$	NA 1,330,164 (1,000,000) (147,508)	\$	NA 1,288,361 {1,000,000 (150,459)	S (S)	NA 1,243,975 (1,000,000) (153,468)	5	1,194,806 (1,000,000 (156,537	\$	NA 1,141,646 (1,000,000) (159,668)	\$	1,084,27- (1,000,00- (162,86 (78,58
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Total Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances	\$	896,200 - (1,942,600 (139,000	S (S)	NA 1,130,056 41,000,000 (141,780	\$ \$	NA 1,368,574 (1,000,000) (144,616)	\$	NA 1,330,164 (1,000,000) (147,508)	\$	NA 1,288,361 {1,000,000 (150,459)	S (S)	NA 1,243,975 (1,000,000) (153,468)	5	1,194,806 (1,000,000 (156,537	\$	NA 1,141,646 (1,000,000) (159,668)	\$	1,084,274 (1,000,004 (162,86
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances	5	896,200 (1,942,600 (139,000 (1,185,400	\$ ) )	NA 1,130,056 1,000,000 (141,780) 5 (11,724	\$ () () () () ()	NA 1,368,574 (1,000,000) (144,616) 223,958	5	NA 1,330,164 (1,000,000) (147,508) 182,656	\$	NA 1,288,361 {1,000,000} (150,459) 137,902	\$ ) ) \$	1,243,975 (1,000,000) (153,468) 90,507	\$	1,194,806 (1,000,000 (156,537 38,269	\$ \$ ) )	(1,000,000) (159,668) (18,022)	\$	1,084,27 (1,000,00 (162,86 (78,58
Debt Service Existing Rev. Bond Debt Service New Rev. Bond Debt Service Total Debt Service for Coverage  Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow  Fund Balances Operating Fund: Beginning Year Balance Net Cash Flow	5	896,200 (1,942,600 (139,000 (1,185,400	\$ ) ) ) )	NA 1,130,056 1,000,000 (141,780) 5 (11,724	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 (1,000,000) (144,616) 223,958	5	NA 1,330,164 (1,000,000) (147,508)	\$	NA 1,288,361 {1,000,000} (150,459) 137,902	\$ \$	1,243,975 (1,000,000) (153,468) 90,507	\$	1,194,806 (1,000,000 (156,537 38,269	\$ \$	(1,000,000) (159,668) (18,022)	\$	1,084,27 (1,000,00 (162,86 (78,58
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Deparating Fund: Beginning Year Balance Net Cash Flow	\$ \$	896,200 - {1,942,600 {139,000 {1,185,400 2,780,773 {1,185,400	\$ (S)	NA  1,130,056  1,000,000  (141,780  11,724  1,595,373  (11,724	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 1,000,000 (144,616) 223,958 1,583,649 223,958	\$	NA 1,330,164 (1,000,000) (147,508) 182,656 1,807,607 182,656	\$	1,288,361 {1,000,000} (150,459) 137,902	\$	NA 1,243,975 1,000,000 (153,468) 90,507	\$	1,194,806 1,1000,000 (156,537 38,269	\$ \$ }	NA (1,141,646 (1,000,000) (159,668) (18,022) (2,256,941 (18,022)	\$	1,084,27 (1,000,00 (162,86 (78,58
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Operating Fund: Beginning Year Balance	\$ \$	896,200 - {1,942,600 {139,000 {1,185,400 2,780,773 {1,185,400	\$ (S)	NA  1,130,056  1,000,000  (141,780  11,724  1,595,373  (11,724	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 1,000,000 (144,616) 223,958 1,583,649 223,958	\$	NA 1,330,164 (1,000,000) (147,508) 182,656	\$	1,288,361 {1,000,000} (150,459) 137,902	\$ \$ \$ \$ \$ \$	NA 1,243,975 1,000,000 (153,468) 90,507	\$	1,194,806 1,1000,000 (156,537 38,269	\$ \$	NA (1,141,646 (1,000,000) (159,668) (18,022) (2,256,941 (18,022)	\$	1,084,27 (1,000,00 (162,86 (78,58 2,238,91 (78,58 2,160,33
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Deperating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M	\$ \$	896,200 (1,942,600 (139,000 (1,185,400 2,780,773 (1,185,400	\$ (S)	NA  1,130,056  1,000,000  (141,780  1,1724  1,595,373  (11,724  1,583,649	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 (1,000,000) (144,616) 223,958 1,583,649 223,958 1,807,607	\$	NA 1,330,164 (1,000,000) (147,508) 182,656 1,807,607 182,656 1,990,263	\$	1,288,361 {1,000,000} (150,459) 137,902 1,990,263 137,902 5 2,128,165	\$ \$ \$ \$ \$ \$	NA 1,243,975 (1,000,000) (153,468) 90,507 5 2,128,165 90,507 5 2,218,672	\$	1,194,806 (1,000,000 (156,537 38,269 2,218,672 38,265 2,256,941	\$ \$	NA (1,000,000) (159,668) (18,022) (18,022) (18,022) (18,022) (18,022)	\$	1,084,27 (1,000,00 (162,86 (78,58 2,238,91 (78,58 2,160,33
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M Capital Program Funding	\$ \$	896,200 (1,942,600 (139,000 (1,185,400 2,780,773 (1,185,400 1,595,373	\$ () () () () () () () () () () () () ()	NA  1,130,056  (1,000,000 (141,780  (11,724  5 1,595,373 (11,724  5 1,583,649	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 (1,000,000) (144,616) 223,958 5 1,583,649 223,958 5 1,807,607	5	NA 1,330,164 (1,000,000) (147,508) 182,656 1,807,607 182,656 1,990,263	\$ \$	1,288,361 (1,000,000) (150,459) 137,902 1,990,263 137,902 2,128,165	\$ \$	NA 1,243,975 (1,000,000) (153,468) 90,507 5 2,128,165 90,507 5 2,218,672 11	5	1,194,806 (1,000,000 (156,537 38,269 2,218,672 38,265 2,256,941	\$ \$	NA (1,141,646 (1,000,000) (159,668) (18,022) (18,022) (18,022) (18,022) (18,022)	\$ \$	1,084,27 (1,000,00 (162,86 (78,58 2,238,91 (78,58 2,160,33
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Fotal Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M Capital Program Funding Annual Capital Needs	\$ \$	896,200 (1,942,600 (139,000 (1,185,400 2,780,773 (1,185,400 1,595,373	\$ () () () () () () () () () () () () ()	NA  1,130,056  (1,000,000 (141,780  (11,724  5 1,595,373 (11,724  5 1,583,649	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA 1,368,574 (1,000,000) (144,616) 223,958 5 1,583,649 223,958 5 1,807,607	5	NA 1,330,164 - (1,000,000) (147,508) 182,656 1,807,607 182,656 1,990,263 11	\$ \$	1,288,361 (1,000,000) (150,459) 137,902 1,990,263 137,902 2,128,165	\$ \$	NA 1,243,975 (1,000,000) (153,468) 90,507 5 2,128,165 90,507 5 2,218,672 11	5	1,194,806 (1,000,000 (156,537 38,269 2,218,672 38,265 2,256,941	\$ \$	NA (1,141,646 (1,000,000) (159,668) (18,022) (18,022) (18,022) (18,022) (18,022)	\$ \$	1,084,27 (1,000,00 (162,86 (78,58 2,238,91 (78,58 2,160,33
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Total Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Operating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M Capital Program Funding Annual Capital Needs Funding Sources: Operating Fund (Cash Funding)	\$ \$	896,200 (1,942,600 (139,000 (1,185,400 2,780,773 (1,185,400 1,595,373 10 1,942,600	5	NA  1,130,056  1,000,000  (141,780  1,595,373  (11,724  1,583,649  9  1,000,000  1,000,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA  1,368,574  (1,000,000) (144,616) 223,958  1,583,649 223,958  1,807,607 10  1,000,000	5	1,330,164 (1,000,000) (147,508) 5 182,656 5 1,807,607 182,656 5 1,990,263 11 5 1,000,000	\$ \$	1,288,361 {1,000,000} (150,459) 137,902 137,902 1,990,263 137,902 2,128,165 11	\$ 5	NA  1,243,975  (1,000,000) (153,468) 90,507  2,128,165 90,507  2,218,672 11  1,000,000	\$	1,194,806 (1,000,000 (156,597 38,269 5 2,218,672 38,265 5 2,256,941 11	\$ \$	NA (1,141,646 (1,000,000) (159,668) (18,022) (18,022) (18,022) (18,022) (18,022) (18,022) (18,022) (18,022) (18,022)	\$ \$	1,084,27- (1,000,00 (162,86
Existing Rev. Bond Debt Service New Rev. Bond Debt Service Total Debt Service for Coverage Debt Service Coverage - Rate Covenant Net Cash Flow Net Operating Revenue (restated) Less Debt Service Less Cash Funded Capital Less Minor Capital Outlays Net Cash Flow Fund Balances Dperating Fund: Beginning Year Balance Net Cash Flow Ending Balance Reserve - Months of O&M  Capital Program Funding Annual Capital Needs  Funding Sources:	\$ \$ \$	896,200 (1,942,600 (139,000 (1,185,400 1,595,373 10 1,942,600	5	NA  1,130,056  1,000,000  (141,780  1,595,373  (11,724  1,583,649  9  1,000,000  1,000,000	\$ \$ \$	NA  1,368,574  (1,000,000) (144,616) 223,958  1,583,649 223,958  1,807,607 10  1,000,000	5 5 5	1,330,164 (1,000,000) (147,508) 5 182,656 5 1,807,607 182,656 5 1,990,263 11	\$ \$	NA  1,288,361 {1,000,000} (150,459) 137,902  1,990,263 137,902  2,128,165 11  1,000,000	\$	NA  1,243,975  (1,000,000) (153,468)  90,507  2,128,165 90,507  2,218,672 11  1,000,000	\$ \$	NA  1,194,806  (1,000,000 (156,537 38,269  32,218,672 38,265 2,256,941 11 5 1,000,000	\$ \$	NA (1,000,000) (1,000,000) (1,000,000) (1,000,000) (1,000,000) (1,000,000)	\$ \$	1,084,27 (1,000,00 (162,86 (78,58 2,238,91 (78,58 2,160,33

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1 - Property Tax Revenue; Ad Valorem.



				111.10				ole 7				Ital December						
Deveriories	EM	Forecas 2016-17		Utility Opera	_	g Results - 5 / 2018-19	_	iario 4, Use D 7 2019-20	_	t in Funding ( 7 2020-21		ital Program / 2021-22	(3	2022-23	£,	Y 2023-24	FY	2024-25
Description	FY	2016-17	, In	7 2017-18	F	2018-19	-	2019-20	r	2020-21		2021-22	r	2022-23	ť	2023-24	Ü	2024 23
Revenue from Special Assessments/Sev	ver S	iervice Cha	ge:															
Special Assessments/Sewer Service Charges	5 2	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	5	2,651,478	5	2,651,478	\$	2,651,47B	\$	2,651,478	5	2,651,478
Total Sales Revenue	5 2	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478	\$	2,651,478
Additional Revenue from Adjustments																		
FY 2016-17 @ 1.7%	s	45,075	s	45,075	s	45,075	\$	45,075	5	45,075	\$	45,075	\$	45,075	s	45,075	\$	45,075
FY 2017-18 @ 4%	-			107,862		107,862		107,862		107,852		107,862		107,862		107,862		107,862
FY 2018-19 @ 4%				,		112,177		112,177		112,177		112,177		112,177		112,177		112,177
FY 2019-20 @ 4%								116,664		116,664		116,664		116,664		116,664		115,664
FY 2020-21 @ 4%								7.6		121,330		121,330		121,330		121,330		121,330
FY 2021-22 @ 4%												126,183		126,183		126,183		126,183
FY 2022-23 @ 4%												,		131,231		131,231		131,231
FY 2023-24 @ 4%																136,480		136,480
FY 2024-25 @ 4%																		141,939
Total Additional Revenue	\$	45,075	\$	152,937	5	265,114	5	381,778	\$	503,108	\$	629,291	\$	760,522	\$	897,002	\$	1,038,941
	-	2.696.554	_	2 004 415	_	2015 503	5	3,033,256	•	3,154,586	ć	3,280,770	e	3,412,001	5	3,548,481	ς.	3,690,420
Total Revenue	5	2,696,554	\$	2,804,416	\$	2,916,592	5	3,033,256	٥	3,134,380	2	3,280,770	3	3,412,001	3	3,340,401	,	3,030,420
Other Non Assessment Revenue																		
Other Operating Revenue	\$	202,542	5	202,542	\$	202,542	5	202,542	\$	202,542	5	202,542	\$	202,542	\$	202,542	5	202,542
Interest Earnings		3,000		2,000		2,000		2,000		2,000		2,000		2,000		2,000		3,000
Total Operating Revenue	\$	2,902,096	\$	3,008,958	\$	3,121,134	\$	3,237,798	5	3,359,128	\$	3,485,312	\$	3,616,543	\$	3,753,023	\$	3,895,962
Expenditures																193		
Operating Expenses	\$ (	2,005,896)	s	(2,067,660)	5	(2,158,392)	\$	(2,253,283)	\$	(2,352,527)	\$	(2,456,331)	5	(2,564,911)	5	(2,678,492)	\$	(2,797,312
Net Operating Revenue	5	896,200	\$	941,298	\$	962,742	\$	984,515	\$	1,006,601	\$	1,028,981	\$	1,051,632	5	1,074,531	5	1,098,650
Debt Service																		
Existing Rev. Bond Debt Service	5		5		s		5		s		5		5		5		\$	
New Rev. Bond Debt Service	_		_	(182,000)	_	(182,000)	_	(182,000)	Ť	{428,000}		(428,000)	_	(428,000)		(634,000)		(634,000
Total Debt Service for Coverage	5		\$	(182,000)	\$	(182,000)	\$	(182,000)	\$	(428,000)	S	(428,000)	\$		\$	(634,000)	\$	
Debt Service Coverage - Rate Covenant		NA		5 17		5.29		5.41		2.35		2.40		2.46		1.69		1.73
Net Cash Flow																		
Net Operating Revenue (restated)	\$	896,200	\$	941,298	\$	962,742	\$	984,515	\$	1,006,601	\$	1,028,981	\$	1,051,632	\$	1,074,531	\$	1,098,650
Less Debt Service				(182,000)		(182,000)		(182,000)		(428,000)		(428,000)		(428,000)		(634,000)	)	(634,000
Less Cash Funded Capital	i	(1,942,600)	)	(662,146)		(568,078)		(583,840)		(353,710)		(369,660)		(385,660)		(195,677)	)	(212,674
Less Minor Capital Outlays		(139,000)	)	(141,780)		(144,616)		(147,508)		(150,459)		(153,468)		(156,537)		(159,668)	)	(162,861
Net Cash Flow	\$	(1,185,400	5	(44,628)	\$	68,048	\$	71,167	\$	74,432	\$	77,853	\$	81,435	\$	85,185	5	89,115
Fund Balances																		
Operating Fund																		
Beginning Year Balance				1,595,373	\$		\$	1,618,793 71,167	\$	1,689,960 74,432	\$	1,764,392 77,853	\$	1,842,245 81,435	\$	1,923,679 85,185		2,008,865 89,115
Net Cash Flow		(1,185,400)		(44,628)	_	68,048	_		-		_		_		_			
Ending Balance Reserve - Months of O&M	\$	1,595,373 10		1,550,744 9	\$	1,618,793 9	\$	1,689,960 9	5	1,764,392 9	\$	1,842,245 9	>	1,923,679		2,008,865		2,097,979 9
Capital Program Funding																		
Annual Capital Needs	\$	1,942,600	\$	1,719,300	\$	849,700	\$	1,660,100	\$	1,248,400	\$	1,512,700	\$	1,612,400	\$	1,765,500	5	1,378,400
Funding Sources:																		
Operating Fund (Cash Funding)	\$	1,942,600	\$	662,146	\$	568,078	\$	583,840	\$	353,710	\$	369,660	\$	385,660	\$	195,677	, 5	212,67
New Debt		•		1,057,154		281,622		1,076,260		894,690		1,143,040		1,226,740		1,569,823		1,165,72
Total Capital Program Funding	\$	1,942,600	\$	1,719,300	\$	849,700	\$	1,660,100	\$	1,248,400	\$	1,512,700	\$	1,612,400	\$	1,765,500	5	1,378,40
Notes																		

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#### CONCLUSIONS

• Table 8 below provides a summary of the forecasted increases in Sewer Assessment Revenue for each of the four scenarios developed as part of this Analysis.

							1	able 8										
						Forecasted	l As	sessment In	o e	ases								Cumulative/
Description	Pi	2016-17	F	Y 2017-18	F	Y 2018-19	F	Y 2019-20	F	Y 2020-21	F	Y 2021-22	F	Y 2022-23	FY 2023-24	_ F	Y 2024-25	Total
Scenario 1 - Cash Fund CIP; 9-Month	s Work	ing Capital	38							12 L							- 41	
Assessment Increase		1.7%		36.50%		1.7%		1.7%		1.7%		1.7%		1.7%	1.7%		1,7%	56.2%
Capital Improvement Program	5	1,942,600	\$	1,719,300	\$	849,700	\$	1,660,100	\$	1,248,400	\$	1,512,700	\$	1,612,400	\$ 1,765,500	\$	1,378,400	\$13,689,100
Scenario 2 - Cash Fund CIP; 6-Month	ns Work	ing Capital																
Assessment Increase		1.7%		20.0%		5.0%		5.0%		5.0%		5.0%		5.0%	5.0%		5.0%	71.79
Capital Improvement Program	\$	1,942,600	\$	1,719,300	\$	849,700	\$	1,660,100	\$	1,248,400	\$	1,512,700	\$	1,612,400	\$ 1,765,500	\$	1,378,400	\$13,689,100
Scenario 3 - Cash Fund \$1.0 Million	Annual	CIP																
Assessment Increase		1.7%		11.0%		11.0%		1.7%		1.7%		1.7%		1.7%	1,7%		1.7%	38.69
Capital Improvement Program	\$	1,942,600	\$	1,000,000	\$	1,000,000	5	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$ 1,000,000	\$	1,000,000	\$ 9,942,600
Scenario 4 - Debt Fund CIP																		111111111111111111111111111111111111111
Assessment Increase		1.7%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%	4.00%		4.0%	39.29
Capital Improvement Program	5	1,942,600	5	1,719,300	\$	849,700	\$	1,660,100	\$	1,248,400	5	1,512,700	\$	1,612,400	\$ 1,765,500	\$	1,378,400	
Debt Amount			\$	2,645,337					\$	3,575,759					\$ 2,996,260			\$ 9,217,356

- The scenarios developed herein utilize the Capital Improvement Program as developed as part of Willdan Engineering's Sewer System Management Plan. The scenarios are developed to provide funding of this CIP, or alternative CIP's as is the case in Scenario 3. The scenarios are also developed to maintain a minimum Sewer Maintenance Fund working capital balance of 9 months of operating expenses (with exception of Scenario 2), and debt service coverage ratio for forecasted debt of 1.50X.
- The Analysis developed herein is intended to provide a forecast of probable Sewer Assessment Revenue
  increases associated with alternative Capital Improvement Programs developed as part of the Sewer System
  Management Plan. The Analysis has not included the review of Utility Assessments and provides no opinion
  with regard to current or future sewer assessments.